1994 PHILIPPINE YEARBOOK

Republic of the Philippines
NATIONAL STATISTICS OFFICE
Manila

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REPUBLIC OF THE PHILIPPINES

HIS EXCELLENCY
PRESIDENT FIDEL V. RAMOS

NATIONAL STATISTICS OFFICE

TOMAS P. AFRICA
Administrator

NELIA R. MARQUEZ
Deputy Administrator

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FOREWORD

The 1994 Philippine Yearbook is the most recent edition published by the National Statistics Office. It is the 12th in a series of yearbooks published by the Office with the objective of providing readers, both local and foreign, a detailed socioeconomic picture of the country.

This edition has 24 chapters with tables, graphs and textual analyses that may help the readers grasp the latest developments and information about the country.

The Special Feature focuses on human development, an important aspect of the Medium-Term Philippine Development Plan 1993-1998.

We express our sincerest gratitude to various public and private agencies for their cooperation in completing this Yearbook.

TOMAS P. AFRICA
Administrator

Manila, Philippines
April 1995

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Special thanks is extended to the Philippine Overseas Employment Administration and the Philippine Tourism Authority for providing the pictures on the front and back cover of this book, respectively.

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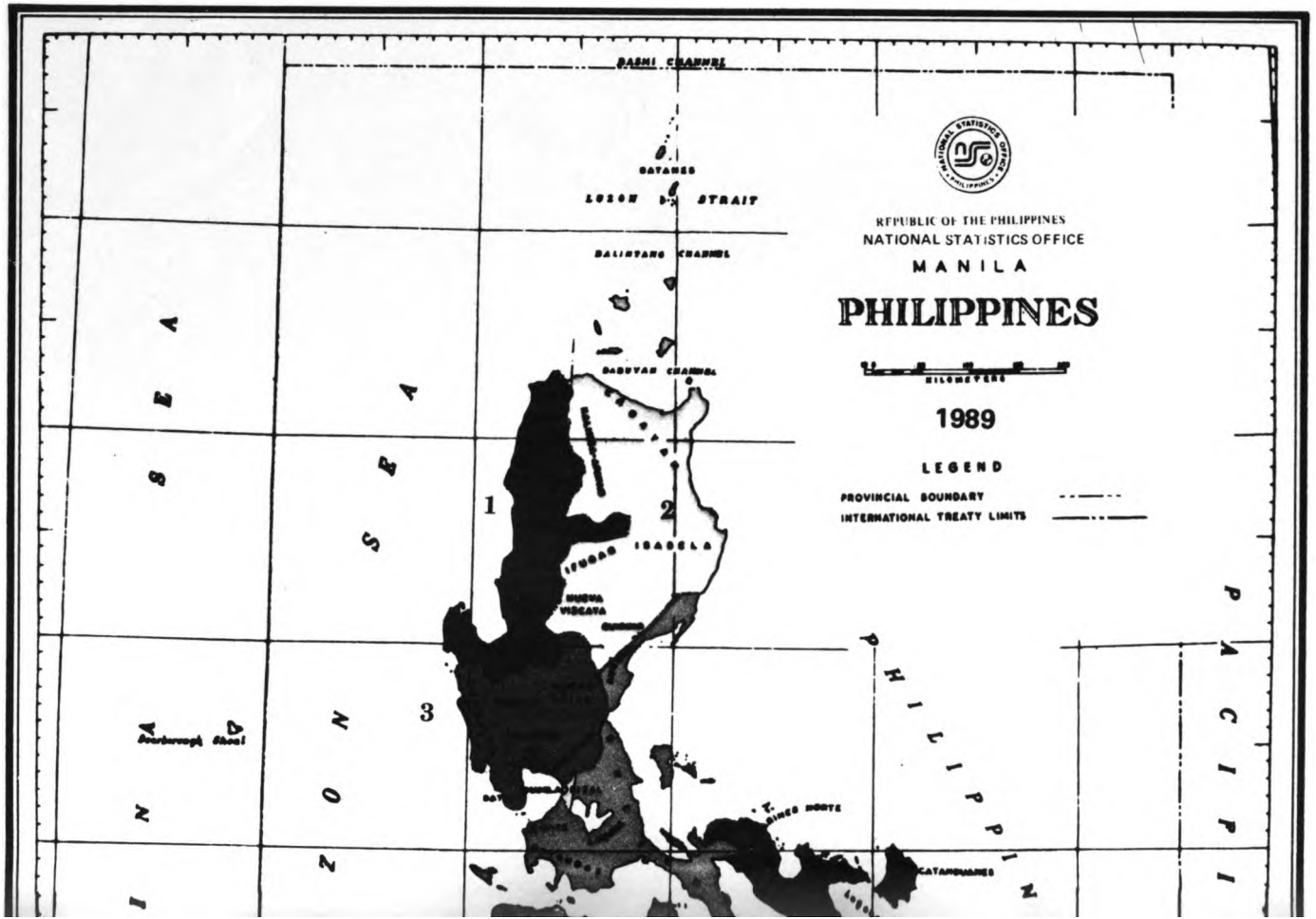

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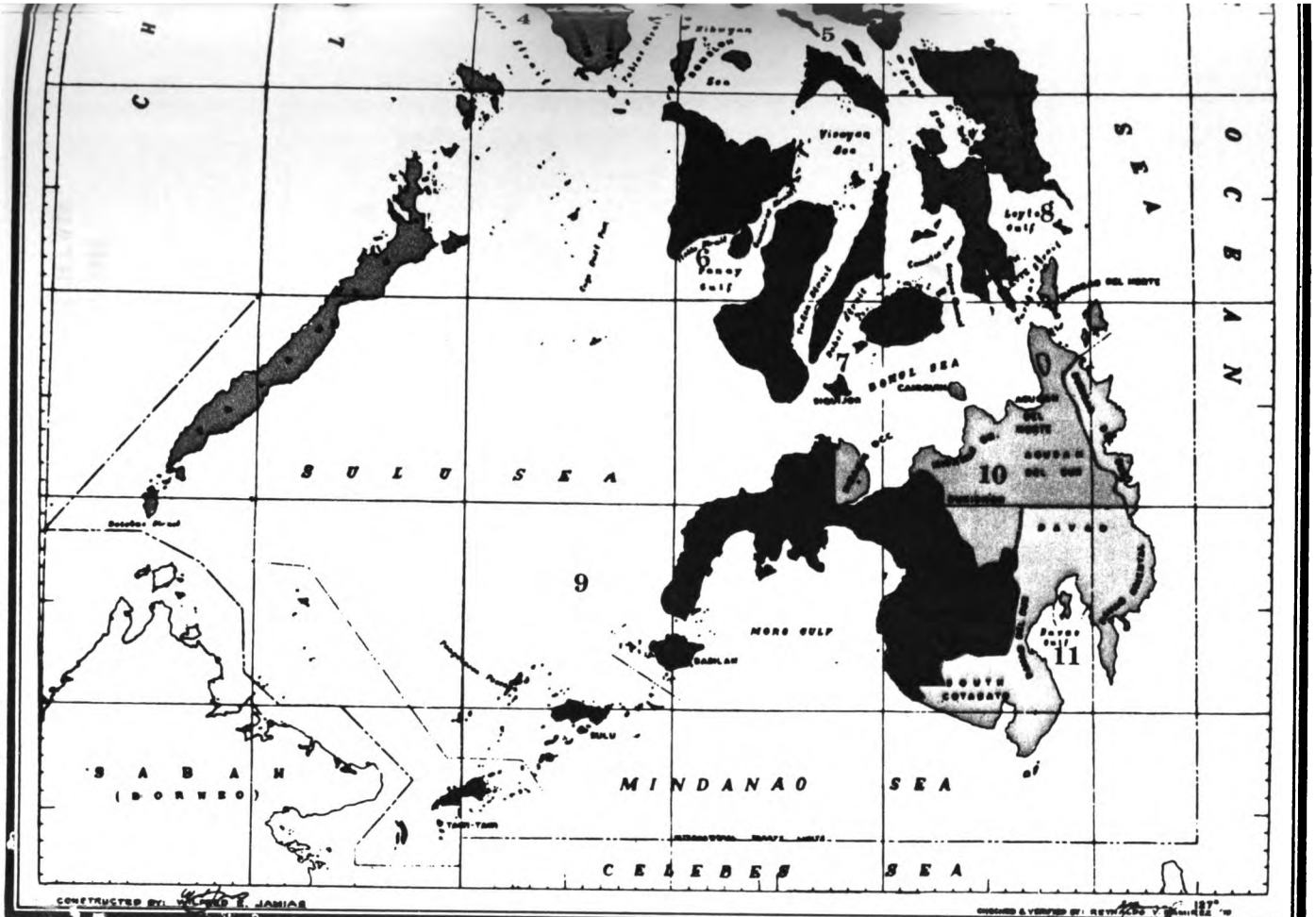

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METRIC UNITS AND CONVERSION FACTORS

Quantity	Imperial unit	Metric unit	Conversion factors (approximate) Imperial to metric units		Metric to imperial units	
Length	inch (in)	millimetre (mm) or centimetre (cm)	1 inch	= 25.4 mm	1 cm	= 0.394 in
	foot (ft)	centimetre (cm) or metre (m)	1 foot	= 30.5 cm	1 m	= 3.28 ft
	yard (yd)	metre (m)	1 yard	= 0.914 m	1 m	= 1.094 yd
	furlong (fur)	metre (m) or kilometre (km)	1 fur	= 201 m	1 km	= 4.97 fur
	mile	kilometre (km)	1 mile	= 1.61 km	1 km	= 0.621 mile
	(for navigation)	international nautical mile (n mile)	1 n mile	= 1852 m		
Mass	ounce (oz)	gram (g)	1 ounce	= 28.3 g	1 g	= 0.0353 oz
	pound (lb)	gram (g) or kilogram (kg)	1 pound	= 454 g	1 kg	= 2.204 lb
	stone	kilogram (kg)	1 stone	= 6.35 kg	1 kg	= 0.157 stone
	ton	tonne (t)	1 ton	= 1.02 t	1 t	= 0.9842 ton
Area	square inch (in^2)	square centimetre (cm^2)	1 $inch^2$	= 6.45 cm^2	1 cm^2	= 0.155 in^2
	square foot (ft^2)	square centimetre (cm^2) or square metre (m^2)	1 $foot^2$	= 929 cm^2	1 m^2	= 10.76 ft^2
	square yard (yd^2)	square metre (m^2)	1 $yard^2$	= 0.836 m^2	1 m^2	= 1.20 yd^2
	perch (p)	square metre (m^2)	1 perch	= 25.3 m^2	1 m^2	= 0.0395 p
	rood (rd)	hectare (ha)	1 rood	= 0.101 ha	1 ha	= 9.88 rd
	acre (ac)	hectare (ha)	1 acre	= 0.405 ha	1 ha	= 2.47 ac
	square mile	square kilometre (km^2)	1 square mile	= 2.59 km^2	1 km^2	= 0.386 square mile

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METRIC UNITS AND CONVERSION FACTORS (continued)

Volume	cubic inch (in^3)	cubic centimetre (cm^3)	1 $inch^3$	= 16.4 cm^3	1 cm^3	= 0.0610 in^3
	cubic foot (ft^3)	cubic metre (m^3)	1 $foot^3$	= 0.0283 m^3	1 m^3	= 35.31 ft^3
	cubic yard (yd^3)	cubic metre (m^3)	1 $yard^3$	= 0.765 m^3	1 m^3	= 1.31 yd^3
	bushel (bus)	cubic metre (m^3)	1 bus	= 0.0364 m^3	1 m^3	= 27.5 bus
Volume (fluids)	fluid ounce (fl oz)	millilitre (mL)	1 fl oz	= 28.4 mL	1 mL	= 0.0352 fl oz
	pint (pt)	millilitre (mL) or litre (L)	1 pint	= 568 mL	1 litre	= 1.76 pt
	gallon (gal)	litre (L) or cubic metre (m^3)	1 gallon	= 4.55 L	1 m^3	= 220 gal
	acre foot	cubic metre (m^3) or megalitre (ML)	1 acre foot	= 1230 m^3 = 1.23 ML	1 ML	= 0.811 acre foot
Force	pound-force (lbf)	newton (N)	1 lbf	= 4.45 N	1 N	= 0.225 lbf
	ton-force (tonf)	kilonewton (kN)	1 tonf	= 9.96 kN	1 kN	= 0.100 tonf
Pressure	pound per square inch (psi)	kilopascal (kPa)	1 psi	= 6.89 kPa	1 kPa	= 0.145 psi
	atmosphere (atm)	kilopascal (kPa) or megapascal (MPa)	1 atm	= 101 kPa	1 MPa	= 9.87 atm
	ton per square inch (ton/in^2) (for meteorology)	megapascal (MPa)	1 ton/in^2	= 15.4 MPa	1 MPa	= 0.0647 ton/in^2
	inch of mercury (in Hg)	millibar (mb)	1 in Hg 1 mb	= 33.9 mb = 100 Pa	1 mb	= 0.0295 in Hg
Velocity	mile per hour (mph) (for navigation)	kilometre per hour (km/h) knot (kn)	1 mph 1 kn	= 1.61 km/h = 1.85 km/h	1 km/h	= 0.621 mph

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METRIC UNITS AND CONVERSION FACTORS (concluded)

Temperature	degree Fahrenheit (°F)	degree Celsius (°C)	°C = (5/9) (°F - 32)	°F = (9/5) °C + 32
Density	pound per cubic inch (lb/in^3)	gram per cubic centimetre (g/cm^3)	1 lb/in^3 = 27.7 g/cm^3	1 g/cm^3 = 0.0361 lb/in^3
	ton per cubic yard (ton/yd^3)	tonne per cubic metre (t/m^3)	1 ton/yd^3 = 1.33 t/m^3	1 t/m^3 = 0.752 ton/yd^3
Energy	British thermal unit (BTU)	kilojoule (kJ)	1 BTU = 1.06 kJ	1 kJ = 0.948 BTU
	therm	megajoule (MJ)	1 therm = 106 MJ	1 MJ = 9.48×10^{-3} therm
	(for electrical energy)	kilowatt hour (kWh)	1 kWh = 3.60 MJ	
Power	horsepower (hp)	kilowatt (kW)	1 hp = 0.746 kW	1 kW = 1.34 hp
Time		second (s)	1 min = 60 s	
		minute (min)	1 h = 3,600 s	
		houf (h)		
Frequency	cycle per second (c/s)	hertz (Hz)	1 c/s = 1 Hz	1 Hz = 1 c/s
Angular	revolution per minute	radian per second (rad/s)	1 rpm = 0.105 rad/s	1 rad/s = 9.55 rpm
Velocity	(rpm)	revolution per minute (rpm)		
Metric prefixes	mega (M) means million	milli (m) means thousandth		
	kilo (k) means thousand	micro (μ) means millionth		
	centi (c) means hundredth.			

Source: Department of Trade and Industry.

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ABBREVIATIONS OR SYMBOLS USED

-	zero or nil
e	estimate
p	preliminary
r	revised
s	suppressed
n.a.	not available
n.e.c.	not elsewhere classified
n.e.s.	not elsewhere stated
CY	Calendar Year (January 1 - December 31)
SY	School Year (June - April)
FY	Fiscal Year (July 1 - June 30)
NCR	National Capital Region (refers to Metropolitan Manila Area)
CAR	Cordillera Administrative Region
ARMM	Autonomous Region in Muslim Mindanao

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HUMAN DEVELOPMENT
At the Heart of the Medium-Term Philippine Development Plan 1993-1998

Introduction

The Medium-Term Philippine Development Plan for 1993-1998 was approved by the Cabinet * on December 15, 1992. It outlines the vision and goal of development for the next six years as the previous plan expires. It spells out socioeconomic development policies and programs to be carried out for the duration of the Ramos administration, serving as the framework by which development will proceed toward lifting the country's economy and launching it as a newly industrializing nation.

The past six years (1987-1992) of recovering from political and socioeconomic setbacks left by the previous regime have witnessed lasting gains in the restoration of political freedoms and institutions. But this is only the first step. While building on these firm democratic foundations, the country faces today the two-fold challenge of *economic development* and *improved quality of life* for the majority of the Filipinos now and in the future.

The Plan's new approach to development emerged out of the realization that the true measure of progress of all economic development efforts eventually lies in the promotion of human well-being. It means enabling the Filipino people to have wider scope of choices and expanding their capabilities to live life to the fullest as human beings. In view of this, the priorities, resources and strategies of the Plan are aimed at the so-called human development.

Human development is regarded as synonymous with the attainment of the most basic needs. The new Plan, therefore, continues to address the fundamental problems of the people: persistent poverty, income inequality, surging unemployment rate, illiteracy and disease. From these concerns arises the urgency of instituting structural reforms within the economy along the following national development goals: alleviation of poverty, reduction of unemployment and underemployment and the corresponding generation of more productive employment, promotion of equity and social justice, and attainment of sustainable growth.

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* The Cabinet is composed of the President of the Philippines, assisted by the Vice-President, and the secretaries and heads of the various departments.

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Understood in the Filipino context, the most important dimensions of human development are the person's political freedom; security in such areas as jobs and income; level of knowledge; and physical survival, health, and environment. Improvements in all these areas indicate furtherance of human development efforts which would viably have powerful impact on economic growth.

People Empowerment and International Competitiveness

The main task of human development is to reduce and ultimately eradicate poverty. The fight against poverty proceeds from the commitment to the principle of upholding the right of every person to a decent life. It should be pursued through a broad-based total human development strategy anchored on people empowerment and international competitiveness.

As the Plan's key strategy to carry out its major objectives, *people empowerment* means the transformation of the poor into self-reliant and productive citizens capable of actively participating in the total development effort. It is based on the premise that human development and poverty alleviation are best achieved through the direct exercise and combined efforts of the people themselves -- people who are conscious of their rights and responsibilities to manage their resources, promote their own welfare, and further their own development. Ordinary Filipinos should therefore take control over every aspect of their lives -- their livelihood, their politics and their culture.

International competitiveness or *global excellence* is the other strategy for attaining the vision of human development. It should be noted that people empowerment does not end with providing a policy environment that encourages social initiatives and facilitates the attainment of political, economic, cultural and spiritual aspirations under a system of governance that guarantees mutual tolerance and democratic dialogue. It should also bring forth a productive, innovative and inspired work force that is ready to compete globally.

Human development, in this sense, requires the formation of a skilled and disciplined work force, coupled with a strong drive for entrepreneurship and private enterprise. Efforts will be exerted to provide basic services and raise incomes, savings, and investments that will translate into increasing productivity and employment. As this process gears the country toward world competitiveness, it will open itself to international trade, seek new markets, and produce world-class products and services for both the domestic and international markets on an even footing.

People empowerment and international competitiveness -- the twin strategies for human development -- are extricably intertwined. The success of human resources development is validated only if it permits the country to pass the test of competitiveness. Expanding markets for the country's products would require new labor skills and more efficient technologies and processes, guided by more effective marketing techniques, managerial expertise, and other innovations that would create modern-sector jobs and higher incomes. Society

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must therefore invest a great deal in human capital and technology upgrading. Education, on-the-job training, research, health and nutrition -- to name only a few -- are all known to enhance human capital and facilitate the diffusion of technology.

Scope and Limitation of the Article

The new Medium-Term Plan encompasses the various sectors of development. This short article, however, focuses mainly on human development and better quality of life as the overriding goals of all development efforts -- as has been in the past, at present, and in the future -- whether relating to agri-industrial strategies, infrastructure, development administration, or macroeconomic planning.

This specifically presents a brief report on the country's performance in raising incomes and employment opportunities as well as in meeting the targets to improve the social services sectors which principally included education and manpower development; health, nutrition, and family planning; and social welfare and community development. Housing -- also a social service concern -- was not thoroughly discussed since it is substantially covered in Chapter 14 of the Yearbook. The government's approach to delivering these basic social services, with the support of the citizenry, reflects how far the country has gone in terms of truly promoting the vision of human development.

The Human Development Index

The United Nations Development Programme (UNDP) released in 1990 the first Human Development Report (HDR). It introduced a new way of measuring human development -- not by merely employing the traditional yardstick of income but by combining the three basic components or indicators of human development, namely, longevity, knowledge, and standard of living or access to resources into a comprehensive *human development index* (HDI).

Longevity in HDI is measured by life expectancy. Knowledge is measured by a combination of adult literacy (two-thirds weight), and mean years of schooling or educational attainment (one-third weight). Standard of living is measured by purchasing power based on real Gross Domestic Product per capita, or the average share of the population to the country's total value of goods and services produced in a given year, adjusted for the local cost of living (purchasing power parity, or PPP, the basis for comparing living standards among countries by looking at how much goods and services can be bought by a certain amount of currency).

A formula is used in computing the HDI of a country. The HDI sets a minimum and a maximum for each dimension or component of human development and then shows where each country stands in relation to these scales -- expressed as a value between zero (0) and one (1). For instance, the minimum for life expectancy is 25 years and the maximum is 85 years, so the longevity component for a country where life expectancy is 55 years would be 0.5.

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Similarly, the literacy component of knowledge for a country where literacy rate is 75 percent (with zero percent as the minimum and 100 percent as maximum) is 0.75. For income, the minimum is $200 (PPP) and the maximum is $40,000 (PPP). Income above the average world income is adjusted using a progressively higher discount rate. The scores for the above-mentioned three dimensions are then averaged for the overall index or HDI.

The HDR categorizes the Philippines as medium in human development, with an HDI value of 0.6 in 1990. This means that the country then is more than halfway between the best and worst performers in the world. Analysts believe, however, that its rank would probably improve if a fourth dimension, i.e., political freedom, would be included in computing its HDI.

The HDI, therefore, offers an alternative to Gross National Product (or GNP, the total value of goods and services produced by a country in a year plus incomes from abroad) for measuring the socioeconomic progress over time, and to determine priorities for policy intervention. It also permits instructive comparisons of the experiences in different countries.

1 Goals and Objectives of the New Medium-Term Plan

The new Medium-Term Plan uses an integrated social development strategy aimed at total human development. Its emphasis is on the positive side of the Filipinos and builds on human development potentials present among the people -- potentials which could be brought forth through empowerment of the people in the economic and social realms. This development specifically centers on expanding the success of the marginalized sectors to basic social services and increasing the resources of the country.

Consistent with the vision of a better life for all, the Plan seeks to attain the following basic human development goals:

1. Enable the majority of the population to meet at least their minimum basic needs, with emphasis on raising incomes above the poverty threshold;
2. Provide focused basic services to the more disadvantaged sectors at a level which will allow them to manage and control their resources as well as benefit from development interventions; and
3. Harness the productive capacity of the country's human resources toward international competitiveness.

The strategies and policies in pursuit of these goals are as follows:

1. Establish a desirable social order, work ethic, and value system;
2. Reorient education and manpower development to enable the people to cope with the changing manpower demand;
3. Maintain social safety nets, particularly for those who will be adversely affected by economic restructuring and natural calamities;
4. Refocus government priorities toward intensified basic services, disadvantaged regions, and special groups;
5. Develop schemes to enhance social equity;

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6. Provide necessary infrastructure to improve social service delivery; and
7. Secure an appropriate balance among population growth, environment concerns, and available resources.

2 Past Performance and Present Targets

As efforts are directed toward the envisioned socioeconomic transformation, it is important to look at how the country fared in various sectors of human development in the recent past and what package of policies, strategies, and targets is formulated to achieve the new Plan's goals.

2.1 Income and Employment

The most pressing task of human development in the medium-term is to effect a continuous increase in the incomes of the majority of the Filipinos. It cannot be denied that human development efforts in the Philippines have failed simply because aggregate income has not risen fast enough, and because the resulting growth has been unevenly distributed socially and across regions. (See Table 1.)

Poverty incidence, or the number of Filipinos who are poor, has been estimated at 40.7 percent as of 1991. The situation, as pointed out, is aggravated by the fact that more than half of the country's total income flows to the richest 20 percent of the population.

NEDA reports further that despite the significant labor and employment policies and programs implemented by the government, the goal of full employment remained elusive during the previous plan period 1987-1992. Total employment grew impressively though, even slightly outpacing the growth in labor force. The growth in the first two years of the Plan implementation could be partly attributed to the Community Employment and Development Program (CEDP) which generated around 800,000 jobs from 1986 to 1988. However, employment growth in the succeeding years was not sustained as a result of slowdown of the economy after 1988.

The unemployment picture initially looked promising as the number of unemployed decreased during 1986 to 1990 by an annual average of five percent during the period. However, in 1991, the unemployment rate reached 10.5 percent, overshooting the original Plan target by about four percentage points. This implied an increase in the number of unemployed to about 2.7 million. In addition to the general economic slowdown, the worsening employment picture was due to the effects of the Gulf crisis which displaced thousands of overseas contract workers, the US bases pullout and the Mt. Pinatubo eruption. In 1992, however, the unemployment rate declined to 9.8 percent, equivalent to about 2.6 million unemployed workers.

In contrast, the underemployment rate, which is the proportion of the total employed wanting additional work, steadily went down during the period. This could be attributed to the continued increase in jobs offering stable income.

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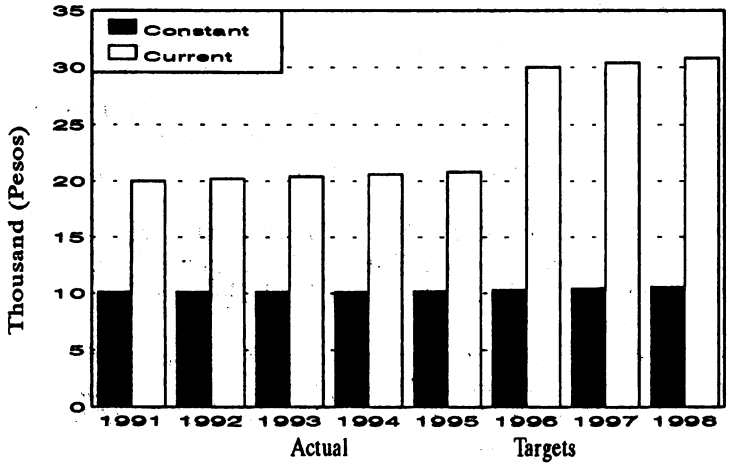
To address the perennial problems of poverty and unemployment, the following targets have been set in the new Plan:

1. The proportion of families living below the poverty line will decline from 39.2 percent in 1991 to 30 percent by the end of the Plan period 1993-1998.
2. Real per capita income will increase at an average annual rate of 3.6 percent to 5.2 percent from the estimated P11,537 in 1994 to P14,541 by 1988. The historical peak per capita income of P12,725 achieved in 1982 will be to will be regained by 1997. Real per capita income in dollars shall reach $966 $1,044 by 1998. Study the following figure:

PER CAPITA GNP, 1991-1998



3. An average 1.1 million jobs will be generated annually over the Plan period period. The unemployment rate will decline from 9.1 percent in 1994 to 6.6 percent by 1998.

2.2 Health, Nutrition, and Family Planning (Population)

Sustained efforts in the sector during the period 1987-1992 resulted in an improved overall health and nutritional status. This is seen in estimates of the vital impact indicator. Crude death rate was estimated to have declined from 7.7 per 1000 population in 1987 to around seven in 1992. The infant mortality rate decreased from 61.5 per 1000 live births in 1987 to 56.5 per 1000 live births in 1992. Crude birth rate, on the other hand, was posted at 31.1 per 1000 population in 1992 which is slightly lower than the 1987 figure of 32.3. The total fertility rate likewise declined from 4.1 in 1987 to 3.9 in 1992. With the overall reduction in mortality rate, life expectancy increased from 63.7 years in 1987 to 65.5 in 1992. Meanwhile, the proportion of preschoolers with weight less than 75 percent of the standard weight-for-age declined from 17.7 percent to 14 percent in 1990.

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It should be noted that the declining trend at the national level does not necessarily mean that the situation is the same in the regional level. There were some regions which posted higher rates than the national average and there were regions that experienced growth instead of decline.

The major policy developments during the period (1987-1992) include the following:

1. Passage of the Magna Carta for public health workers;
2. Formulation of rational drug policy including the enactment of R.A. 6675 or the Generics Act of 1988;
3. Upgrading of Medicare benefits;
4. Formulation of relevant policies on acquired immune deficiency syndrome (AIDS);
5. Adoption of 1987 nutritional policy statement; and
6. Adoption of a new population policy.

In delivering better health and nutrition services to the people, these are the targets that the new Plan has formulated:

In health and population:

1. The average life expectancy will increase from 68.3 years in 1994 to 69.7 years in 1998.
2. Infant mortality rate is projected to decrease from 54 per 1,000 livebirths in 1994 to 49.4 in 1998.
3. Crude death rate per 1,000 population is projected to decline from 6.2 in 1994 to 5.7 in 1998.
4. Crude birth rate per 1,000 population is projected to decrease from 26.8 in 1994 to 24.5 in 1998.
5. The population growth rate will be reduced from 2.21 percent in 1994 to 1.92 percent by 1998.
6. The total fertility rate is expected to decline from 32.6 in 1994 to 2.91 in 1998 through wider recognition of the benefits of small family size and the promotion of more responsible parenthood.
7. The proportion of family planning acceptors will increase from 40.6 percent in 1994 to 42.8 in 1998.

In nutrition:

1. The percentage of preschool children who are moderately and severely underweight will decline from 11.2 percent in 1994 to 8.4 percent in 1998.
2. The percentage of schoolchildren aged 7-10 who are moderately and severely underweight will decrease from 11.2 percent in 1994 to 8.4 percent in 1998.
3. Per capita energy intake will increase from 1,892 kilocalories in 1994 to 1,977 in 1998.
4. The proportion of households with less than 100 percent adequate energy intake will increase from 41.2 percent in 1994 to 47.1 percent in 1998.

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5. The prevalence of anemia among infants will decrease from 66.6 percent in 1994 to 64.5 percent in 1998.
6. The prevalence of Vitamin A deficiency/Bitot's spot among preschool children will decrease from 0.10 percent in 1994 to 0.04 percent in 1998.
7. The prevalence of iodine deficiency/goiter will decrease from 1.6 percent in 1994 to 0.5 percent in 1998.

2.3 Education and Manpower Development

In terms of student enrolment across levels, the education sector expanded by 15.97 percent from school year 1987-1988 to SY 1992-1993, an average annual growth rate of 3.13 percent during the Plan period 1987-1992. The public school system accounted for 77.6 percent of the total number of students enrolled in SY 1989-1990. Nationwide, enrolment in basic education expanded by 15.3 percent and constituted about 89.4 percent of the total enrolment during the six-year period. Tertiary education, on the other hand, posted the largest increases in enrolment during the latter years of the assessment period in which private schools still dominated enrolment with an 81 percent share.

At the elementary level, an average of only 68 out of every 100 students who enrolled in Grade I were able to complete Grade VI from SY 1987-88 to SY 1992-93. The rest either permanently dropped out of school or had no access to the intermediate grades. It is estimated that 35 percent of the 34,081 existing elementary schools in the country are considered incomplete, that is, offering only up to Grade IV.

In terms of educational outcomes, the achievement rate for the elementary level posted a modest increase from 53.1 percent in SY 1987-88 to 61.72 percent in SY 1992-93. Although this represents a 16 percent improvement from the SY 1987-88 levels, it still suggests that pupils learned only about three-fifths of what they were supposed to learn in school. The proportion of out-of-school youth declined from 14 percent in January 1988 to 12.5 percent in July 1989.

Since 1993, a total of 347 new elementary schools have been established in rural barangays that currently do not have an elementary school, with the initial construction of two-room schoolbuildings. These schoolbuildings formed part of about 5,200 elementary classrooms constructed during 1993. As a remedy to incomplete elementary schools, 1,495 multigrade and 7,330 combination classes were organized in 1,278 and 3,700 schools, respectively. Some 171,457 students benefited from the educational service contracting scheme while 584,326 private high school students were granted tuition fee supplements. About 164,413 out-of-school youths underwent skills training programs conducted by the National Manpower Youth Council (NMYC).

Meanwhile, on a broader scale, the average mean years of schooling were up from six to seven years over the past decade. Literacy rate improved from 83 to 93.5 percent.

Above all these, efforts to improve the quality of education continued. The school calendar has been increased from 185 to 200 days. The daily student

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contact hours in the elementary and secondary levels were also raised. The National Elementary Achievement Test (NEAT) and National Secondary Assessment Test (NSAT) were developed for yearly administration to all graduating students. Private education remained liberalized. Ceilings for tuition fee increases were removed. Initial steps to rationalize the state higher education system were undertaken by making state universities and colleges concentrate on agriculture, engineering and technology, and teacher education.

Various plans and programs aimed at further developing the country's human resources were formulated and completed. These included the National Manpower Plan, Science and Technology Education Plan, more scholarships and study grants, and skills development and apprenticeship programs provided by the NMYC.

For the next six years, the new Plan targets in the education and manpower development sector are as follows:

1. The literacy rate will improve from 93.5 percent in 1994 to 96.5 percent in 1998.
2. The elementary achievement rate is targeted to reach 72 percent in 1998, from its 1994 level of 65.2 percent.
3. The elementary and secondary level participation rates will increase from 88.8 percent and 59.6 percent in 1994 to 94.2 percent and 66.0 percent in 1998, respectively.
4. The cohort survival rate for Grade I to Grade VI is targeted to increase from 73.8 percent in 1994 to 82.2 percent in 1998 while that for Year I to Year IV in high shool is expected to increase from 78.9 percent in 1994 to 84.1 percent in 1998.
5. The postsecondary enrolment will increase from 531,739 students in 1994 to 781,638 students in 1998.
6. The number of persons to be given technical-vocational training will increase from 939,000 in 1994 to 1.2 million in 1998.

2.4 Social Welfare and Community Development

During the Plan period 1987-1992, the sector was faced with formidable challenges on all fronts which adversely affected the efficient and effective delivery of social welfare services to the poor, specifically those individuals or families whose income fall below the subsistence level or food threshold. Calamities and disasters set back the full attainment of the sectoral goals and targets. Regular programs and projects of the sector were realigned, particularly during the years 1988, 1990 and 1991 to give priority to disaster management and operations, emergency relief assistance and rehabilitation programs in the severely affected areas.

The number of socially disadvantaged families provided with services exceeded the Plan target by 4.3 percent. Some 4.2 million families were served compared to the four million families targeted, the bulk of which were the calamity victims. The highest increase in the number of beneficiaries was that

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income-generating projects. Their number rose from 16,169 women in 1987 to 592,867 women in 1992.

The new Plan sees that the proportion of ultrapoor families provided with basic welfare services will increase from 61 percent in 1994 to 89 percent by 1998.

Summary and Conclusion

The Medium-Term Philippine Development Plan for 1993-1998 has holistic, integrated, and area-specific views of development. It recognizes that the different factors of development are interdependent and it directly addresses structural problems not only within the economy but those influencing the economy. Its formulation is based on a broad consensus and an extensive process of consultation at the national, regional, and local levels. More significantly, the unifying theme of people empowerment and international competitiveness runs through every segment of the Plan as it reaffirms that the people's well-being occupies the central place in development.

As efforts are continuously being geared toward the realization of the Plan's vision and goals, the country will increasingly rely on the strengths, capabilities, and talents of the people and the leaders. The Plan's strategies, policies, programs, and priority activities or projects are now laid out in clear and concrete terms. But the more critical and important step is transforming the vision and goals into reality. All that is left for the government and the citizenry is to join hands in implementing the Plan and, in collaboratively working toward a common goal, face a new and brighter future.

Sources:

National Statistics Office. *1993 National Demographic Survey.*

National Economic Development Authority. *The Medium-Term Philippine Development Plan 1993-1998.*

National Economic Development Authority. *Philippine Development, July-August 1994.*

National Economic Development Authority. *Primer on the Human Development Index.*

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Table 1 Some Basic Development Indicators: ASEAN

	Population in 1990 (millions)	Average annual population growth rate: 1980-90 (percentage)	GNP per capita in 1990 (U.S. dollars)	Average annual growth rate of GNP per capita: 1980-92 (percentage)
Singapore	3	2.2	11,160	6.5
Malaysia	18	2.6	2,320	4.0
Thailand	56	1.8	1,420	4.4
Philippines	61	2.4	730	1.3
Indonesia	178	1.8	570	4.5
Brunei	0.27	n.a.	n.a.	n.a.

Source: World Bank, *World Development Report 1992.*
Hunter, Brian. ed. *The Stateman's Yearbook 1993-1994.*

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Table 2 Summary of Major Indicators of Human Development

Indicators	Annual Average 1987-1992	TARGETS Estimates 1993	1994	1995	1996	1997	1998	Annual Average 1994-1998
I. Income and Employment [a]								
PER CAPITA GNP (In pesos, at constant 1985 Prices) [b]	11,320	[m]11,483	11,537	12,024	12,661	13,470	14,541	12,847
Unemployment Rate [b]	9.8	9.29	9.13	8.84	8.37	7.53	6.60	8.09
Jobs to be created (000) [b]	781	686	858	972	1,086	1,321	1,509	1,149
II. Health and Population [a]								
Life Expectancy (in years)	[e]64.58	67.9	68.3	68.7	69.1	69.4	69.7	69.04
Infant Mortality Rate (per 1000 live births)	[e]58.35	55.2	54.0	52.7	51.5	50.5	49.4	51.62
Crude Death Rate (per 1000 population)	[e]7.30	6.3	6.2	6.1	5.9	5.8	5.7	5.94
Crude Birth Rate (per 1000 population)	[e]31.68	27.4	26.8	26.2	25.6	25.0	24.5	25.63
Maternal Mortality Rate [c] (per 1000 livebirths)	[e]0.81	0.7	0.7	0.7	0.6	0.6	0.6	0.64
Population Growth Rate	[e]2.39	2.24	2.21	2.18	2.09	2.00	1.92	2.08
Total Fertility Rate	[b]4.04	3.36	3.26	3.17	3.07	2.99	2.91	3.08
III. Nutrition								
Percentage of preschool children with weight less than 75 % of standard weight-for-age	[f]14.0	11.9	11.2	10.5	9.8	9.1	8.4	9.8

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Table 2 Summary of Major Indicators of Human Development (continued)

Indicators	Annual Average 1987-1992	TARGETS Estimates 1993	1994	1995	1996	1997	1998	Annual Average 1994-1998
Percentage of schoolchildren aged 7-10 years old with weight less than 70% of standard weight-for-age	13.9	11.9	11.2	10.5	9.8	9.1	8.4	9.8
Per capita energy intake (in kcals)	[g]1,753	1,872	1,892	1,913	1,934	1,956	1,977	1,934
Percentage of households with energy intake less than 100 % adequacy level	69.2	39.7	41.2	42.6	44.1	45.6	47.1	44.12
Prevalence of anemia among infants	[h]70.4	67.2	66.6	66.1	65.5	65.0	64.5	65.54
Prevalence of Vitamin A deficiency or Bitot's spot among preschoolers	[h]0.20	0.11	0.10	0.08	0.06	0.05	0.04	0.066
Prevalence of iodine deficiency disorders or goiter	[h]3.5	1.9	1.6	1.3	1.1	0.8	0.5	1.06
IV. Education [a]								
Literacy Rate	[i]89.8	92.78	93.53	94.27	95.02	95.76	96.51	95.02
Functional Literacy Rate	[i]60.54	76.50	78.07	79.64	81.21	82.79	84.36	81.21
Elementary Achievement Rate	55.18	63.44	65.16	66.88	68.60	70.32	72.04	68.60
Participation Rate								
a. Elementary	91.38	85.90	88.80	91.70	92.50	93.40	94.2	92.12
b. Secondary	54.79	58.00	59.6	61.2	62.8	64.4	66.0	62.80

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Table 2 Summary of Major Indicators of Human Development (continued)

Indicators	Annual Average 1987-1992	TARGETS Estimates 1993	1994	1995	1996	1997	1998	Annual Average 1994-1998
Cohort Survival Rate								
a. Grades I-VI	67.93	71.00	73.8	76.5	78.4	80.3	82.2	78.24
b. Years I-IV	76.01	78.86	78.90	79.50	80.60	82..71	84.13	81.17
Postsecondary Enrolment	[j]330,410	482,916	531,739	585,498	644,692	709,870	781,638	650,687
No. of persons to be given technical-vocational training (in 000) [k]	n.a.	788	939	1,000	1,072	1,143	1,191	1,069
V. Housing								
Number of households provided with units of assistance	80,699	133,326	150,359	176,900	213,967	260,284	316,756	223,653
Percentage of housing needs met	14.8	16.05	24.36	28.66	34.66	42.16	51.31	36.23
VI. Social Welfare								
Proportion of ultrapoor families provided with basic welfare services (%) [l]	n.a.	55.0	61.0	67.0	73.0	81.0	89.0	61.0

[a] Based on the revised population projections of NSCB per Resolution No. 11-93 dated December 1, 1993.
[b] Based on high growth scenario.
[c] Estimates based on the 1989 Philippine Health Statistics.
[d] Actual figure based on the 1993 National Demographic Survey (NDS), National Statistics Office (NSO).
[e] Based on the 1987-1992 Philippine Development Report (PDR).
[f] Actual figure for 1990.

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Table 2 Summary of Major Indicators of Human Development (concluded)

[g] Actual figure for 1987.
[h] Actual data for 1988 based on the 1988 NDS, NSO.
[i] Actual data for 1989 based on the Functional Literacy, Education and Mass Media Survey (FLEMMS), NSO.
[j] For SY 1988-89 to SY 1992-93 only.
[k] Based on National Manpower Plan: 1993-1998.
[l] Estimated figures based on the 38 percent outreach of DSWD in 1987 as well as the accomplishments of the other social development agencies.
[m] Actual figures for 1993.

Source: NEDA, *The Medium-Term Philippine Development Plan 1993-1998.*

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Chapter 1
Early Development, Rediscovery and Colonization of the Philippines

Man in the Philippines is as old as human prehistory. There is increasing evidence that he was already here around the time when Java man and Peking man walked the earth almost half a million years ago.

Long before the American Indians entered North and South America, before the Australian aborigines discovered the southern continent, and before the Micronesians, Melanesians and Polynesians scattered over the Pacific Islands, man had stood in the Philippines and beheld its mountain ranges.

1.1 Origin of the Philippines

On the map of Southeast Asia, the islands of the Philippine Archipelago appear like a string of emeralds hanging in a loose loop off the lower corner of the Asiatic continent. Depths of the surrounding seas indicate that the Philippines must have been attached to the Asian mainland by land bridges. At the edge of the continental shelf is a floor depth of more than nine kilometers, the greatest depth yet measured on the earth's surface. The nine-kilometer deep Philippine Trench was probably the result of earth-shattering folding of the sea floor many thousands of years ago.

Geologists believe that there was a period of violent tectonic changes in which there was much crumbling, folding and cracking of the sea floor, producing the general form of the Philippine archipelago. This upheaval threw up such elevations as the Baguio plateau and other tropical forests. Northern Luzon appears to have been two separate islands and the Sulu Archipelago a part of a much larger Mindanao.

The most popular theory which has been accepted by both scientists and scholars is that the Philippines was part of the continental shelf of Asia known as the "Sunda Shelf". During the post-glacial age, the world's ice melted causing the sea level to rise and submerge lower regions of the earth, including the land bridges connecting the islands to Asia. Certain similarities which appear in Asia and the Philippines are the different plants and some animals found in both places.

Racial Affinity. The Filipino is a product of the mixture of different races of the world. Several theories have been advanced to trace its genetic origin but were unsuccessful. It can be argued, however, that the Filipinos were part of the original "population core" present in Southeast Asia during prehistoric times,

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and prior to the coming of other peoples. They did not have ethnic names and they spoke a language belonging to one family which showed tremendous dialectical variations due to geographical isolation of some islands. During historic times other groups of people (Chinese, Indians, Spaniards, Americans, etc.) came to trade and later intermarry with the original groups, thereby blending further the genetic character and structure of the racial base. This racial type is shared by other inhabitants of Southeast Asia - particularly the Filipinos, Malays and Indonesians.

1.2 Beginning of Culture

Filipino culture began in this archipelago when man started to harness his environment for survival: Like other prehistoric groups of people throughout the world, early Filipinos also used stones as materials for manufacturing tools. The different phases, popularly called "Ages" of ancient technological development are as follows:

Paleolithic Age. Excavations in Palawan have exposed the fossilized skull cap of a *Homo sapiens* dating back some 22,000 years ago. Recent excavation work in Cagayan Valley has shown that probably an earlier form of man, *Homo erectus*, had been hunting the now extinct animals of the Pleistocene like elephants, stegodon, and rhinoceros during the middle to late Pleistocene times.

Early man appears to have been a food gatherer and hunter. His tool kit or what remains of it as found by archeologists included only lithic materials. These stone tools consisted of sharp flakes knapped off from rock nodules of cryptocrystalline quartz. The flake industry was characterized by the absence of core preparation prior to the manufacture of the flakes. What remained of the nodules were worked into certain types referred to as flaked core tools. Cobbles were also used to form larger tools. The larger cobble tools were ordinarily flaked on only one side and referred to as unifacial cobble tools or chopperchopping tools. The predominant presence of flaked tools compared to cobble tools was the major feature of the Paleolithic Age.

The first movements of the *Homo sapiens* into the Philippines occurred with the exposure of the "Sunda Shelf" during the last glacial beginning, according to various estimates, some 45 to 55 thousand years ago. The land bridges of the Riss Glacial estimated between 100 and 130 thousand years ago would appear to be too early for any significant movements of modern man into the islands at the time. The fossilized frontal bone of the earliest known inhabitant of the islands, the Tabon Man, found in Palawan, has been tentatively dated to be about 22 to 24 thousand years of age. The Tabon Cave, where the fossilized frontal bone was found, has thus far yielded five upper paleolithic assemblages of a nonhafted technology. Flake assemblage I-A is estimated to be 8,500 to 9,500 years of age, while C-14 determination of flake assemblage I-B gives a date of 9,250 $\pm$ 250 years before the present. The flake assemblage II has a C-14 determination of 21,000 B.P. The flake assemblage III to which the fossilized

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frontal bone was found, has a C-14 determination which dates between 22,000 B.P. and 23,000 ± 1,000 B.P. The fifth flake tools assemblage yielded a C-14 determination giving a date of 30,500 ± 1,000 B.P. and the flake assemblage VI as based on "Depth Age" estimates, dates 45,000 to 50,000 years or earlier.

Cultural chronologies overlap such that periods interlap with such succeeding and preceding cultural sequences. Guri Cave, a post-Pleistocene habitation site in Palawan serves as an example. Upper Paleolithic assemblages and a new Lithic technology emerged in this site, with two major periods indicated; at the main entrance of the cave a midden was formed during the period from about 5,000 B.C. to about 2,000 B.C. and the second assemblage which began during the early Metal Age, about 500 to 300 B.C.

The shell midden contained flake implements at all depths and blade tools in the upper levels as well as bones of animals including wild pigs and deer. C-14 determination yielded a date of 4,070 ± 80 B.P. Based on the presence of marine shells as well as the typology of the flake tools recovered, the cultural assemblage on the floor had been estimated to be early Post-Pleistocene 4,000 to 6,000 B.C. after the sea had risen more or less to its present level. Tabonian flake tradition presided in the Guri Cave although these were generally smaller; and a larger percentage of the tools had been retouched. A highly developed blade industry is associated with the late Neolithic peoples of Sorsogon and Albay. It is possible that the use of the blade tools by Neolithic peoples developed as a result of the co-existence of Neolithic and early Pleistocene periods.

The study of the tool assemblages in Cagayan Valley indicates the dominance of flake tools over such larger cobble tools, the latter consisting roughly of seven percent of the entire body of artifactual materials, a percentage higher than the cobble tools found in Tabon Cave which is ecologically differentiated. The presence of the cobble tools in Cagayan Valley together with the fossils of large mammals indicates that the major sources of food were the large and now extinct mammals. Tools recovered in other sites in Southeast Asia where man is believed to have co-existed with the Pleistocene mammals show remarkable uniformity.

Neolithic Age. The Neolithic or New Stone Age was built upon the foundation of the preceding Paleolithic or Old Stone Age technologies. Among the distinguishing features are the manufacture of stone and shell implements through the techniques of polishing and grinding, and later through shaving and drilling; also the manufacture of beads, pendants and bracelets from durable materials such as shells, bones, stones and clay. A tool preparation technique, that of the careful preparation of the parent rock nodule into a core, resulted in the production of sharp and well-shaped blades of stones.

Of great significance was the introduction of pottery making, a culture usually identified with settled people and never found among the nomadic people of the Paleolithic stage, manifesting an appreciable increase in early man's knowledge and control of his environment. He had attained a more stable

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socio-economic base and began to glimpse the spiritual world of values and ideas.

Metal Age. The Metal Age of the Philippines which succeeded the Stone Age (Paleolithic and Neolithic) dates back to about 1,500 B.C. and may be divided into sub-periods: Early Metal Age and Developed Metal Age. The two are combined under the single diagnostic artifacts; like ornaments of jade which were numerous during the early phase and became scarce toward the end when carnelian beads and iron implements increased considerably. The period is also characterized not only by metal implements but also by glass beads, jade and gold ornaments and burial jars.

The advent of metal working techniques suggested more organized communities with division of labor, early trading contacts and concern for prestige and religious values. Control over the economic resources increased in the measure that metal tools simplified agricultural tasks and possibly facilitated the construction of boats, houses and other simple structures with materials cut from the environment.

Age of Contact and Trade with the East. Some five hundred years before Magellan set foot on the Philippines, the people had begun to intensify their commercial relations with their neighbors: China, Indo-China, Malaysia, India and Arabia. Arab dhows, Chinese junks, and Malay praws sailed down the length of the Philippines. Chinese and Siamese porcelain and jars, silk, cotton, beads, gold, ivory and iron were traded for wax, bird's nest, teakwood, rattan, pearls, precious shells and other marine and forest products.

Thousands of plates, saucers, bowls and jars which have been excavated in archeological sites throughout the country, provide evidence of trade contacts with China and Indo-China, and on the basis of their characteristics, these wares could be dated to the period of their manufacture: between the Tang and Ching dynasties of China.

The Indian and Arabian influences can be seen in faint traces of Hindu-Buddhist beliefs among the minority groups and in large number of Sanskrit loan words (*rajah, diwata, budhi,* etc.) found in the Philippine language. The Arab influence is kept alive among the Muslim Filipinos of Southern Philippines.

Because of such early contacts with the great traditions of Asia, it is closer to historical truth to say that Europe did not discover the Philippines; the Filipinos discovered the western cultural tradition which they have used to enrich their authentic Asian heritage.

1.3 The Philippines at the Time of European Conquest

Filipino society and culture were fairly well developed prior to contacts with other countries. Archeological artifacts recovered in various parts of the country documented these assertions. During historic times, contact with India,

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China, Japan and Arabia enriched ancient Filipino civilization. The culture traits from these countries were carried by adventurers, traders and colonizers who came to Philippine shores. In time, the early Filipinos adopted these contributions into their indigenous life ways.

The pre-Spanish Filipinos had their own system of writing. They used an alphabet which resembled that of India, but was traced to be of ancient Southeast Asian origin. The Filipinos had no common language but the principal dialects were Tagalog, Iloko, Bikol, Bisayan, Pampangan, Pangasinan, Ibanag and Zambal.

The early Filipinos had both oral and written literature. They were rich in mythological folklore, like legends, fables, epics, proverbs, riddles and poems. They also had musical instruments, and they had songs concerning love, religion and nature. They were skillful painters and sculptors, as seen in their tattoes and deities. They had knowledge of medicine, astronomy, engineering, and architecture. They used herbs and roots of plants for medicinal purposes. They built canals for irrigation. The Ifugao rice terraces built on the mountain slopes show the engineering genius of the early people.

The family was, as it still is today, the smallest but most significant social unit of ancient society. The father and the mother are accorded complete obedience and respect by the children. There were four social classes: the chiefs, the nobles, the freemen and the slaves. The chief was called a *datu*, who headed a community or *barangay*. The nobles or *maharlikas* occupied the highest place in society, the freemen or *timaguas* were the freeborn or emancipated slaves, and the lowest class were the slaves or *alipin*, because they had no property and were under the control of their master.

Marriages were usually arranged by the parents. The groom had to give a dowry or *bigaykaya,* which consisted of money or a piece of land. He also had to render service in the bride's household for a certain period of time. The wedding among the nobles was elaborate and pompous, while that of the freemen were less expensive. The slaves just had to obtain permission from the master to live together.

The women occupied a high position in the early society. They were recognized as equal to men and were accorded due respect by men. The mother of the family had the privilege of selecting the names of the children.

Government and Laws. The unit of government was the *barangay*. The *barangay* varied in population from a hundred families to a thousand. The early *barangays* were independent of each other. Each was ruled by a *datu*, who was the chief executive, legislator, judge and military commander. However, he had a council of leaders who assisted him in the administration of the *barangay*.

The *barangay* had both written and oral laws. The oral laws were the customs and traditions which were handed down through generations. The written laws were promulgated by the *datu* and the council of leaders.

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Religion. The early Filipinos were pantheistic - they believed in a myriad of spirits who inhabited the cosmos and participated in the affairs of man. They worshipped a supreme being called *Bathala* and called the spirits, *anitos*. They also worshipped nature like rivers, mountains, trees and animals, which they believed, were habitats of the spirits.

1.4 Rediscovery of the Philippines

Magellan Takes Possession of the Philippines. Ferdinand Magellan, a Portuguese by birth and Spanish by naturalization, opened the colonization of the Philippines for Spain on March 16, 1521. On an Easter Sunday, March 31, 1521, the first Mass was celebrated on the shores of Limasawa. Magellan named the country "Archipelago of St. Lazarus" because that day happened to be the feast day of St. Lazarus. Magellan and his men proceeded to Cebu to look for more food supply. The king of Cebu, Rajah Humabon, welcomed the Spaniards and allowed them to trade with the natives.

Magellan was able to convert the ruler of Cebu to Christianity, and had his whole family baptized. All the other chieftains of Cebu were converted to the faith, and recognized Rajah Humabon as their king. Only the ruler of Mactan, Lapu-Lapu, refused to do so. Magellan with his men went to Mactan to fight against the natives only to meet his death in the hands of Lapu-Lapu. This marked the first triumph of Filipinos in their fight for freedom.

Other Spanish Expeditions after Magellan. The Loaisa expedition in 1525 under the command of Garcia Jofre de Loaisa failed to reach the Philippines because Loaisa died on the way. The survivors stayed in Tidore, an island in the Moluccas, to await help from Spain.

The Saavedra expedition in 1527 sailed from Mexico for the Philippines on the orders of Hernando Cortes, but Saavedra died on the coast of Tidore after losing two of his three ships.

The Villalobos expedition finally reached the island of Mindanao, and later the island of Tandaya, which was identified to be Samar or Leyte. Villalobos named the islands *Filipinas* in honor of the King of Spain, King Philip II.

Miguel Lopez de Legaspi, with Father Urdaneta as chief navigator, reached Cebu in 1565. They were met with hostility, so they sailed to Samar and the other neighboring islands. A blood compact between Legaspi and the chiefs of Bohol, Sikatuna and Sigala, sealed the friendship. Legaspi later established a Spanish settlement in Cebu and named it the "City of the Most Holy Name of Jesus". With Cebu and Panay as bases, the conquerors and missionaries worked side by side extending Spanish rule and Christianity to the other islands.

In 1570, an expedition was sent to Manila under the command of Martin de Goiti. At the time, Manila was a rich Muslim kingdom ruled by Rajah Soliman. After a naval battle, Goiti took possession of the city. When Legaspi came to Manila, he proclaimed it the capital of the country, rebuilt it and gave

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it a most charming name - *Insigne Y Siempre Leal Ciudad* (Distinguished and Ever Loyal City). However, the name Manila persisted, and up to the present it is called Manila, after the native plant *Nilad*.

1.5 Spanish Colonization

By the beginning of the 17th century, Spain's sovereignty over the Philippines had been fully established. Her colonization had brought great changes in the political, economic and cultural life of the people. Christianity was introduced to replace the old paganism, and a centralized government was established over the ruins of the *barangays*. New cities and towns were built, and Spanish civilization propagated. In exchange for the blessings of Christianity and Latin culture, the Filipinos paid tribute, rendered forced labor and contributed manpower and treasures.

The first and outstanding aim of Spanish colonization was to spread Christianity. This was attested by the last will and testament of Queen Isabella, by the Catholic spirit of the Laws of the Indies, by the apostolic labors and achievements of the missionaries, and by the actual results of Spain's more than 300 years of colonial work. Spain crossed the seas and colonized heathen lands because of her zeal to serve the cause of God.

The desire for economic wealth was the second aim of the Spanish colonizers. This aim rose from the keen struggle among European nations to control the rich spice trade of Malaysia. History shows that Magellan and other navigators blazed their way across the Pacific to secure spices and Oriental wares for the Spanish crown. But Spain failed to obtain the monopoly of the spice trade and derived no material profit out of her colonial ventures in the Far East.

The third aim of Spanish colonization was the aspiration for political grandeur. By acquiring the Philippines, Spain emerged as a mighty empire whose frontier comprised both hemispheres, and King Philip II became the first European monarch who could justly claim that the sun never set on his dominions.

1.5.1 Colonial Administration

For over 300 years, the Philippines was a crown colony of Spain. Until 1821, when the Mexicans revolted and won independence from Spain, the Philippines was a dependency of Mexico, being administered by the *Viceroy* in the name of the King. From 1821 to 1898, the country was a distinct governmental unit under the direct control of the home government in Madrid. The King issued *cedulas* for the administration of the colony and appointed a governor, members of the *Royal Audiencia* and other high officials.

Spanish Laws. Except for three brief periods: 1810-13, 1820-23 and 1834-37, the Philippines did not enjoy the benefits of the Spanish Constitution and the

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privilege of representation to the Spanish *Cortes*. The colony was governed by special laws which consisted of royal decrees, proclamations and laws of Spain extended to the Philippines by royal sanction. Among the Spanish laws applied to the Philippines were the Laws of the Indies, the Code of Spanish Legislation; *Siete Partidas*, a compilation of Spanish laws; *Leyes de Toro*, dealing with wills and succession; and *Novisima Recopilacion*, relating to all branches of law.

The Governor-General. At the head of the centralized government established by Spain in the country was the Governor-General, who symbolized the might and majesty of the Spanish Crown. He was appointed and removed from office by the King. He exercised great powers - executive, military, judicial and religious. In his capacity as governor, he had the right to control and supervise administrative offices, and appoint officials not named by the King. As Captain General, he was commander-in-chief of all armed forces. He was President of the *Royal Audiencia*, or Supreme Court; and he was in charge of ecclesiastical matters, as he assumed ecclesiastical authority over church offices and missions.

The Royal Audiencia. The first *Royal Audiencia* was created in 1583 in order to restrict the powers of the governor-general and to protect the people from the abuses of the officials. It was composed of the Governor-General as the President, three justices, a prosecuting attorney and other necessary officials. It was abolished in 1589 when the governor-general and the justices had quarrels and misunderstandings. It was restored in 1595 when the presidency was given to a regent instead of the governor. The *Audiencia* was the Supreme Court and also ran the government in case of the vacancy of the governatorial office.

The Encomienda System. After the conquest of the country there was no definite organization of provincial and local governments. Following the laws of the Indies, Legaspi divided the country into parcels, each parcel assigned to a deserving Spanish national for administration and care. These parcels including the inhabitants living therein were called *encomiendas,* and the administrators were called *encomenderos*. The *encomendero* took care of the temporal and spiritual welfare of the natives, like being taught the Christian religion and protected from harm both in their person and property. The laws related to the *encomiendas* created many evils and abuses. The people became discontented and complained against their *encomenderos*, so that in 1674, the system was abolished in the Philippines as well as in other colonies.

The Tribute and Forced Labor. From the days of Legaspi to 1884, the Filipinos paid tribute, a kind of head tax, to Spain. The rate was originally eight *reales* but was raised to ten in 1602, then to twelve *reales* in 1851. One tribute was equivalent to one family consisting of father, wife and minor children. Every unmarried man over twenty years and every unmarried woman over 25 years paid half tribute. Because of the humiliating way of collecting the tribute, the people hated it. The *encomenderos* made great profits in the collection of the tribute.

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Another manifestation of the people's vassalage to Spain was the forced labor. This was compulsory for all natives from 16 to 60 years of age. The people worked in the building and repair of roads and bridges, cutting of timber in the forests, and working in foundries and shipyards. The Filipinos were greatly oppressed because they never got paid for their services, and they were even denied their rations by the officials.

Abolition of Slavery. One of the best achievements of Spain in the Philippines was the abolition of slavery. The Laws of the Indies prohibited and penalized slavery in all Spanish colonies. The King of Spain issued a decree ordering the emancipation of all slaves in the country. This was strengthened by the Papal Bull of 1591, which threatened to excommunicate those who would not liberate their slaves.

The Galleon Trade. In the early days of the Spanish regime, Manila was the commercial center of the Orient. The strategic position and geographic location of Manila fitted her to be the Emporium of Far Eastern Trade and the Mistress of Oriental Marts. The expansion of commerce was so fast that there was more demand for Spanish ships to carry Oriental wares to Mexico. Because of the mercantilist doctrines of Europe at the time, Spain had to restrict trade between the Philippines and Mexico which lasted for two centuries. This monopoly of trade was known as the galleon trade or the Manila-Acapulco trade. Many of the ships were made in the Philippines as the Filipinos were both skilled shipbuilders and inborn sailors.

By 1815 the galleon trade had declined and was no longer lucrative due to the many dangers encountered along the way, like mutiny and piracy on the high seas. Furthermore, Mexico had revolted against Spain, so the trade was officially abolished in 1815. The galleon trade had adverse effects on the economic life of the Filipinos, because the other industries were neglected in the attempt to promote commerce with other Oriental countries.

Provincial and Municipal Government. For purposes of internal government and administration, the country was divided into provinces and districts according to the dialects spoken by the inhabitants. The provinces were known as *alcadias* and the executives were called *alcaldes mayor*. The districts were known as *corregimientos* under politico-military officers called *corregidores*. The *Alcalde* exercised both executive and judicial functions, and supervised the collection of tribute in the province. He was appointed by the governor-general, received very little salary but his office was highly lucrative because of his privilege to engage in trade.

The provinces were divided into *pueblos*, each under a *governadorcillo*, but ordinarily called a *capitan*. The other town officials were the chief of police, deputies or *tenientes* and other functionaries called *alguaciles*. The *pueblos* were divided into *barangays* each under a *cabeza de barangay*. The *cabezas* paid no tribute and after serving for sometime, they became members of the aristocracy

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- the *principalia*. The chief duty of the *cabeza* was to collect the taxes in his *barangay*.

1.5.2 Ecclesiastical Administration

For ecclesiastical administration, the country was divided into dioceses, parishes and missions. The country as a whole was a diocese. When Manila was raised into a diocese, the bishoprics of Cebu, Nueva Caceres and Nueva Segovia became sufragan dioceses. The Archbishop was the head of the ecclesiastical administration, and under him were the bishops, who were heads of the dioceses, and the parish priests, who were in charge of the parishes. The Church exercised religious, political and judicial functions. Political functions came out of the union of the Church and State. Clergymen enjoyed political power and prestige because of such functions. The Archbishop's Court and the Holy Inquisition discharged judicial functions. The Court tried cases of heresy and those involving the clergy.

The Spanish missionaries were evangelists as well as civilizers. Aside from introducing the Christian religion, they sowed the seed of European civilization in the country. The missionaries founded towns out of the lowland wildernesses and crude settlements. The new *pueblos* which they established exist up to the present, as thriving centers of population and culture.

The missionaries were also builders of roads, bridges, ports, irrigation dams and other public works. They introduced new plants and animals and taught new industries and crafts.

The Jesuits introduced silk raising and manufacturing. The Augustinians introduced the cattle industry in Nueva Ecija, the cultivation of indigo and corn in Rizal and Ilocos. The Franciscans taught the people how to cultivate coffee and discovered iron and copper deposits in Laguna. The Dominicans introduced the lime and brick industries.

The pioneer missionaries were the first educators of the Filipinos. They founded the first schools and colleges, many of which still stand today as centers of Catholic education in the Pacific. They established the first printing press and trained Filipinos in the trade, notably Tomas Pinpin, the Prince of Filipino printers.

The first libraries and museums were established by the religious orders in their convents and schools. They also founded asylums, orphanages and hospitals. The early colleges served as orphanages and asylums for homeless children.

The friars deserve praise for their contributions to the arts and sciences. Many of the early missionaries were distinguished musicians and music teachers. The churches built in Manila and the provinces are now priceless collections of Philippine architecture. Convents became schools of the arts where the Filipinos were taught the rudiments of painting and sculpture.

The greatest legacy of the missionaries is the Observatory of Manila founded by the Jesuit Fathers in 1865. It gained recognition for its accurate forecasting of typhoons and earthquakes. The first sun dials were constructed

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in the churchyard of Tagudin, Ilocos Sur, which gave almost perfect time in those days.

The Church and the State. In the Philippines, as in the other Spanish colonies, the Church and the State were united. There were two sets of authority - civil and ecclesiastical. The civil authority came from the governor-general and the members of the *Royal Audiencia,* who were representatives of the King. The ecclesiastical authority came from the Archbishop and the friars, who were representatives of the Pope. They, however, also represented the King in the preservation of Spanish sovereignty. The Church was financially supported by the State; the State paid the salaries of clergymen and defrayed the expenses of the ecclesiastical administration.

The Archbishop acted as the Governor-General in case of vacancy of the position. Church dignitaries wielded political power as the priests were both curate and power behind the town officials.

The union of the Church and State worked well in theory, but not in practice, because there was always that spirit of rivalry for supremacy between the civil authority in the person of the governor and the religious in the person of the Archbishop.

1.5.3 Filipino Revolts Against Spain

Many of the revolts were caused by the people's desire to win back their lost freedom and happiness. Other revolts were caused by the oppression of the Spaniards, the hated tribute and forced labor. A few were purely economic in nature, having been caused by agrarian disputes with the first friars. Lands which were considered by the people as their own were converted into large *haciendas* by the friars. The people felt the injustice done, so they rose up and fought for their rights. Many of the uprisings were in Cavite, Batangas, Laguna and Rizal.

The first Filipino revolt was led by Lakandula, the last King of Manila in 1574. Lakandula was one of the best friends of Spain, and it was he who welcomed Legaspi at Manila Bay in 1571. After Legaspi's death, the Spaniards seemed to have forgotten the promises made to Lakandula in the form of exemption from tribute and forced labor. The people were maltreated so they rose up in arms against the Spaniards. When the Spaniards learned of this, they went to Lakandula and promised to give the Filipinos better treatment if they would desist from the armed insurrection. The revolt was stopped and Lakandula remained faithful to Spain until his death. He became a Christian and one of his sons became an Augustinian friar, the first Filipino to become one.

This was followed by other revolts which turned out to be failures. The early revolts proved that the Filipinos were not satisfied to remain as an oppressed and dependent people.

The Philippine Revolution. The bloody climax of the Filipino struggle for freedom was the Revolution of 1896, which was also the culmination of

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hundreds of revolts against Spanish oppression. The opening scene of the revolution was the Cry of Balintawak on August 29, 1896. The unexpected discovery of the *Katipunan* precipitated the war. The *Katipunan*, a secret society founded by Andres Bonifacio, aimed to arouse national feeling and to work for the redemption of the Filipinos from the tyranny of Spain and from religious despotism. Bonifacio saw the misfortunes encountered by Dr. Jose P. Rizal as leader of the *La Liga Filipina*, so he kept the existence of the *Katipunan* a secret, a secrecy that was sealed with the blood of the members.

The first real battle was in San Jose del Monte on August 30, 1896. There were early triumphs, one of which was the battle at Binakayan, Kawit, Cavite.

The execution of Dr. Jose P. Rizal on December 30, 1896 was a colossal blunder of Spain for the Filipinos acclaimed Rizal as a martyr and they fought even harder to avenge him.

The ebb tide of the revolution occurred after the death of Andres Bonifacio on May 10, 1897, when the revolution suffered reverses. Because of superior forces and arms, the Spaniards were able to subdue the uprising in most places of encounter. The Filipinos also lacked the unity needed to fight the war.

The First Philippine Republic. General Emilio Aguinaldo organized a dictatorial government but was changed to a revolutionary government on the advice of Apolinario Mabini. A revolutionary Congress and a Cabinet were also organized. On June 12, 1898, the leaders of the revolution assembled at Kawit, Cavite, and declared the independence of the Philippines with General Aguinaldo exercising full authority to run the government. On August 1, 1898 the general assembly ratified the declaration of independence made in Kawit. The revolutionary Congress approved the Malolos Constitution on December 23, 1898 and on January 23, 1899, the Constitutional Republic was proclaimed in Malolos.

1.5.4 Intellectual and Cultural Growth Under Spain

During the more than three centuries of Spanish regime, the Filipinos imbibed influences that affected their culture profoundly. The schools and colleges founded by Spain contributed immensely to the intellectual progress of the people. The Philippines was the first Oriental country to assimilate the cultural influences of the West, and hence the first to be westernized. The schools and colleges did not only propagate the faith and Spanish culture, but they also lifted the people to a high intellectual level. Because of the existence of these schools, the Philippines had a high percentage of literacy.

The Latin alphabet and Spanish language brought the Filipinos closer to Europe. Through these intellectual vehicles, the Filipinos were able to understand the Occident, delve into its literature, arts and sciences, and the teaching of its sages.

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One of Spain's greatest achievements was the introduction of the art of printing. The first local printing press was established by the Dominican Fathers in Binondo. The first book to be printed was the *Doctrina Cristiana*.

Spanish influence was also felt in literature. The fantastic *awit* and *corrido* were based on Spanish romances and became popular among the people. The first poet to win recognition in Tagalog poetry was Fernando Bagongbanta, who composed poems as early as 1606. The Iloko literature also flourished during the time. Pedro Bukaneg was regarded as the Father of Iloko Literature.

The missionaries contributed to the development of music and the other fine arts like painting, sculpture and architecture. During the closing decades of Spanish rule, several Filipino scientists distinguished themselves in research and medicine. Pharmacy was introduced by the missionaries too. The Manila Observatory, the oldest in the Far East was a legacy of the Jesuits, which presently is known as the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA).

1.6 British Invasion of the Philippines

England and France were engaged in a war for world supremacy, which was to last for seven years. Spain was dragged into this war as an ally of France, because both French and Spanish kings belonged to the Bourbon family, and they had pledge to support each other in case of war. When England declared war against Spain in 1672, the British expeditionary forces set out to attack Spanish possessions in the New World and in the Orient. Because Spanish authorities were not prepared for this invasion, British forces occupied Manila on October 5, 1762. As a result of this invasion, the churches, convents, colleges, schools, public and private buildings were looted and plundered. Don Simon de Anda, a member of the *Royal Audiencia*, led the Spanish and Filipino troops to fight against the British. During the more than three months of fighting, the Seven Years' War had come to a close in Europe which also ended the British invasion of Manila. By virtue of the Treaty of Paris on February 10, 1763, the Philippines was restored to Spain.

The British occupation had far-reaching effects on the course of Philippine history. It shattered the veil of isolation that shrouded Manila and projected her into the limelight of world attention. The defeat of the Spaniards and the easy capture of Manila broke Spain's prestige in the Philippines. The Filipinos seized this chance to rise in arms and fight for freedom and reform. The British invasion opened Manila to foreign trade and awakened the British merchants to the possibilities of a lucrative commerce with the country. When the British evacuated Manila, many Indian (*Sepoy*) soldiers remained in the country and married Filipino women.

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1.7 The American Occupation

While the revolution was going on in the country, Cuba, a colony of Spain, was fighting for her independence. Because of American intervention in support of Cuba's cause, Spain declared war against the United States on April 24, 1898. Admiral George Dewey, the Commander of the American Asiatic Squadron, was instructed to proceed to the Philippines to destroy the Spanish fleet. The superiority of American warships and arms led to the defeat of the Spanish Armada on May 1, 1898. On December 10, 1898, the Philippines was formally ceded by Spain to the United States through the Treaty of Paris for $20,000,000. The occupation of the Philippines by the Americans was resented by the Filipinos, and the outcome was the Filipino-American War which lasted for three years (1899-1902). After finally subduing the Filipino forces, American sovereignty was recognized in the islands, although the people never gave up their dream of independence.

America's Policy Towards the Philippines. The policy of the United States towards the Philippines was not one of exploitation or permanent subjection, but rather a training in self-government, and a preparation for ultimate independence. All American Presidents, from Mckinley to F.D. Roosevelt, declared in their official statements that independence would someday be granted to the Philippines.

The Commonwealth Government. After several attempts of Filipino leaders to secure an act to grant independence to the Philippines from the United States, Manuel L. Quezon was able to obtain the approval of the Tydings-McDuffie Independence Act, which provided for the establishment of a Commonwealth government to end after a ten-year period, and the adoption of a constitution. A Constitutional Convention drafted the constitution which was ratified on May 14, 1935. The election of Commonwealth officials followed with Manuel L. Quezon as President, and Sergio Osmeña as Vice President. On November 15, 1935, the new officials assumed office and this began the ten-year period of self-government.

1.7.1 Progress Under America

Immediately after implementing her sovereignty in the Philippines, America opened the gates of the archipelago to progress. Under the new regime, agriculture developed rapidly, commerce and trade soared to unprecedented levels, transportation and communication were modernized, banking and currency were improved, and the manufacturing industries were given impetus. The greatest single factor that caused the phenomenal development of Philippine economy was the free trade relations with the United States. American exports were admitted free of duty into the Philippines without quota limits.

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With the spread of domestic ideals, the Filipinos learned to take pride in their race and cast off their inferiority complex. The Filipinos quickly assimilated the lesson that all men are created equal and equal before the law. Awakened by the liberating influence of democracy, the people broke the shackles of servility and became more assertive for their rights. Society and classes were based on wealth rather than education and ancestral lineage, as the rich, the middle class and masses.

One significant influence of America was the emancipation of Filipino women from social and political restrictions of Spanish days. They were given freedom to associate with men and to enter co-educational schools and universities. They also obtained their right of suffrage in 1937.

American system of education, language, literature, arts and sciences were introduced and taught to the Filipinos. The Filipino heritage, enriched by the culture of Spain, received further enrichment with the coming of the Americans. Just as Spain taught the Filipinos the Christian mode of living through religion, so did America undertake to teach them the democratic way of life through a system of popular education.

1.8 The Japanese Occupation

The war in Europe was triggered by the invasion of Poland by the Germans on September 1, 1939. However, the war was fundamentally a conflict between two ideologies: democracy and totalitarianism. In Europe, Germany and Italy were allies and when Japan was included in the alliance, they were called the Axis powers. By 1941, Japan with an expanding population, was on its way to conquer other territories, some of which were Manchuria and Indo-China.

While peace negotiations were going on in Washington, D.C., Japan bombed Pearl Harbor in Hawaii on December 8, 1941. This was followed by aerial attacks of Baguio, Manila and other points in the Philippines. Because of this treachery, the United States declared war on Japan, and the Philippines was drawn into this war as an ally of America. As an ally of Japan, Germany and Italy declared war on the United States and Great Britain. This started the global war.

Japanese troops occupied Manila on January 2, 1942 and consequently the whole country. On October 14, 1943, the second Republic was inaugurated with Dr. Jose P. Laurel as President. This republic established a puppet government under the supervision of the Japanese administrators.

On October 24, 1944, Allied troops landed in Leyte heralding the historic liberation of the country from the Japanese invaders. Liberation of the whole Philippines was fully attained in February 1945, and this marked the start of the country's massive rehabilitation and rebuilding out of the devastation brought about by the war.

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Chapter 2
Physiography and Related Characteristics

The name "Philippines" by which the country is known today, was given by the Spanish navigator, Ruy Lopez de Villalobos, in honor of Prince Philip of Asturias, who later became King Philip II of Spain. Long before the coming of the Spaniards, the Philippines was said to be known by ancient geographers as *Ophir* or the land which supplied King Solomon with gold, and *Maniolas* which appeared in Magini's edition of the geographical works of Cladius Ptolemy in 105 A.D. Ancient Chinese records also referred to the islands as *Ma-I* (Land of Barbarians), *Chin-San* (Mountain of Gold), *Liu-Sung* (Land Adjacent to the Mainland), and *San-Tao* (Three Islands). The first Europeans to set foot on the Islands christened it *La Aguada de las Buenas Señales*, the Watering Place of Good Omens.

In 1521, Magellan named the country "Archipelago of St. Lazarus" commemorating the event when he first set foot on Philippine soil. Many other names have been given to the islands like: *Islas del Poniente* (Western Islands), *Islas del Oriente* (Eastern Islands), *Islas de Luzones* (Island of Mortars), *Archipielago de Magallanes* (Archipelago of Magellan), and *Archipielago de Celebes* (Celebes Archipelago). The name "Pearl of the Orient Seas" was given by Dr. Jose P. Rizal in his poem *Mi Ultimo Adios* (My Last Farewell).

2.1 Geography and Location

The Philippines, composed of 7,100 islands and rocks above water is one of the largest island groups in the world. It lies 966 kilometers off the southern coast of Asia, between latitude 4°23'N and 21°25'N and between longitude 116°E and 127°E. The greatest length north to south of the archipelago is 1,851 kilometers, and the greatest breadth east to west of the archipelago is 1,107 kilometers. The archipelago is bounded in the west by the South China Sea, Pacific Ocean in the east, Sulu and Celebes seas in the south, and the Bashi Channel in the north. Its northernmost islands are approximately 240 kilometers south of Taiwan, and the southernmost islands lie approximately 24 kilometers from the coast of Borneo. From west to east, the archipelago spans 1,094 kilometers. It is situated on the eastern rim of the Asiatic Mediterranean: the warm and shallow waters between the Pacific and Indian Oceans and between Australia and the Asian mainland. This position finds the Philippines at the crossroads of international travel lanes.

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2.1.1 Land Area

The total land area of the Philippines is approximately 300,000 square kilometers, 92.31 percent of which is contained within the 11 largest islands. Of the 7,100 islands, only 3,144 are named. There are also thousands of small islets grouped with the larger islands, many of which are still unnamed. Table 2.1 shows the 11 principal islands and their respective areas and locations. The number of named and unnamed islands are also indicated.

The Philippines is divided into three major island groups: Luzon, with an area of 141,395 square kilometers; Visayas, with an area of 56,606 square kilometers and Mindanao, with an area of 101,999 square kilometers. These three groups are further divided into regions, regions into provinces, provinces into cities and municipalities. Cities and municipalities are also divided into *barangays*. As of September 30, 1993 the Philippines has 15 regions, including Metropolitan Manila, Cordillera Administrative Region (CAR), and Autonomous Region in Muslim Mindanao, 76 provinces, 60 cities, 1,544 municipalities and 41,921 *barangays*. Metropolitan Manila has been designated the National Capital Region, which includes four cities (Manila, Pasay, Quezon and Kalookan) and 13 municipalities (Makati, Malabon, Mandaluyong, Marikina, Muntinlupa, Navotas, Parañaque, Pasig, Pateros, San Juan, Taguig, Las Piñas and Valenzuela). Pursuant to Article X, Section 15 of the New Philippine Constitution, Executive Order No. 429 provided for the creation of Autonomous Region in Muslim Mindanao, the reorganization of the regional centers and the redistribution of the provinces and cities in each region. This order took effect on October 12, 1990. Table 2.2 shows the different regions and provinces with their respective number of cities, municipalities and *barangays*.

Due to its strategic location, Manila was proclaimed the capital of the Philippines on June 24, 1571 by Miguel Lopez de Legaspi, shortly after he landed and took possession of the city. Manila remained so until Quezon City was named capital on July 17, 1948, by virtue of R.A. No. 333. On June 14, 1976, Manila was again made the capital and the permanent seat of the national government under Presidential Decree No. 940.

2.1.2 Coastal Areas

The Philippines has the longest discontinuous coastline in the world. Its total coastline (34,600 kilometers) is longer than the coastline of Great Britain, twice that of Greece and more than twice the coastline of the United States. Its extensive sea coasts are indented with good harbors, navigable rivers and lakes. There are 61 natural harbors, 31 of them developed and used broadly and 20 landlocked straits. Manila Bay, the finest natural harbor in the Far East, has an area of 1,970 square kilometers. The principal islands have harbors adequate for large vessels in almost all kinds of weather and seasons, making them an asset to the country.

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2.1.3 Valleys and Mountains

The Philippines has a varied topography, with lofty highlands and numerous valleys. Its four major lowland plains are the Central Plain and Cagayan Valley in Luzon, and Agusan Valley and the Cotabato Valley in Mindanao. These lowlands contrast sharply with the adjacent high mountain areas of Central and East Cordillera and the Zambales Mountains. Diversity of topography is further contributed by the existence of several plateaus, like the Bukidnon and Lanao Plateaus in Mindanao.

Mountain ranges which lie almost parallel to each other are the Sierra Madre and the Cordillera of Luzon. Sierra Madre extends from Cape Engaño northeast of Cagayan to a point east of Laguna de Bay. The Cordillera lies parallel to the west of Luzon. The highest peak is Mt. Apo in Mindanao with an elevation of 2,954 meters.

In the Tagalog region, the mountains include Mt. Makiling, Tagaytay Ridge and Mt. Banahaw. Mindoro has Mt. Baco and Mt. Halcon. The Visayan islands are traversed by mountain ranges except Samar and Bohol. In Mindanao, the province of Lanao has many volcanoes and mountains. The Makaturing and Ragang volcanoes separate Lanao and Cotabato. Mt. Kitanlad and Kalatungan are found in Bukidnon. The Kulaman Canyon is located in Sumilao, Bukidnon, and can be reached by crossing the Kulaman River.

2.1.4 Inland Waters

Rivers. Around 132 rivers are found in the country's 76 provinces, aside from small mountain streams that sometimes expand up to three times their size during the rainy months. These rivers are valuable means of transportation and irrigation sources for the fields and farms through which they pass. Principal rivers are the 353-kilometer Cagayan River, the Agno and the Pampanga Rivers - all in Luzon. The Cagayan River drains a basin of about 20,000 square kilometers. This basin includes Cagayan, Isabela and Nueva Vizcaya. Pangasinan is drained by the Agno River and its tributaries, flowing into the Lingayen Gulf. Pampanga River flows into Manila Bay and drains the ricefields and sugarlands of Pampanga. Its tributaries irrigate most of Bulacan and Nueva Ecija of the Central Plain of Luzon. No large rivers are found in the islands of the Visayas, only streams that flow into them. In Mindanao, the Agusan River is navigable in certain areas. The Cotabato River, which flows into the Moro Gulf, is also navigable up to Cotabato inland.

The Pasig River, which flows into Manila Bay, is an outlet of Laguna de Bay. It is valuable as a means of tranportation for the places along its banks. Some rivers flow across a number of provinces, like the Cagayan River, which flows through the whole of Cagayan Valley. On the succeeding pages are lists of principal rivers and the provinces through which they flow.

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Name and Location of Principal Rivers

River	Location
Abra	Abra and Ilocos Sur
Abulog	Cagayan and Kalinga-Apayao
Agno	Pangasinan
Agos	Quezon
Agusan	Agusan del Norte and Agusan del Sur
Aklan	Aklan
Alimit	Ifugao
Angat	Bulacan
Aringay	La Union
Asid	Masbate
Bacarra	Ilocos Norte
Badoc	Ilocos Norte
Bago	Negros Occidental
Balamban	Cebu
Balingcaguin	Pangasinan
Basey	Western Samar
Bato	Catanduanes
Bauang	La Union
Bayauan	Negros Oriental
Bicol	Camarines Sur
Binahaan	Leyte
Boac	Marinduque
Bongabong	Oriental Mindoro
Buayan	South Cotabato
Bucao	Zambales
Bued	La Union and Pangasinan
Bugsanga	Occidental Mindoro
Bulacan	Bulacan
Bulsa	Tarlac
Butas	Oriental Mindoro
Cabiyangan	Cebu
Cabugao	Ilocos Sur
Cadacang	Sorsogon
Cagayan	Cagayan, Isabela and Nueva Vizcaya
Cagayan	Oriental Mindoro
Calumpang	Batangas
Cangaranan	Antique
Canas	Cavite
Catarman	Northern Samar
Cateel	Davao Oriental

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Catubig	Northern Samar
Chico	Cagayan, Kalinga-Apayao and Mt. Province
Cotabato	Cotabato
Danao	Negros Occidental
Davao	Davao del Norte
Dipolog	Zamboanga del Norte
Dolores	Eastern Samar
Donsol	Sorsogon
Gandara	Western Samar
Hagonoy	Bulacan
Himugaan	Negros Occidental
Hinatuan	Surigao del Sur
Ibulao	Ifugao
Ilagan	Isabela
Ilog	Negros Occidental
Iloilo	Iloilo
Imus	Cavite
Inabanga	Bohol
Ipil	Bohol
Iwahig	Palawan
Iyam	Quezon
Jalaud	Iloilo
Jaro	Iloilo
Kapal	Lanao del Sur
Kulaman	Bukidnon
Labo	Camarines Norte
Lamao	Bataan
Laoag	Ilocos Norte
Lawis	Zambales
Leay	Bohol
Lian	Batangas
Libuganon	Davao del Norte
Llorente	Eastern Samar
Looc	Romblon
Lumitao	Occidental Mindoro
Lum Masla	South Cotabato
Maapon	Quezon
Mag-asawang Tubig	Oriental Mindoro
Magat	Ifugao, Isabela and Nueva Vizcaya
Mainit	Davao del Sur
Malig	Isabela
Mambusao	Capiz
Mandulog	Lanao del Norte
Marikina	Rizal

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Mindoro	Maguindanao
Naga	Leyte
O'Donnel	Tarlac
Orani	Bataan
Oras	Eastern Samar
Oroquieta	Misamis Occidental
Pagbangaran	Leyte
Pagsangahan	Leyte
Pagsanjan	Laguna
Paliuan	Antique
Pamatuan	Zambales
Pambuhan	Northern Samar
Pampanga	Pampanga and Nueva Ecija
Panay	Capiz
Pansipit	Batangas
Pasag	Pampanga
Pasig	Rizal
Pinacanauan de Tumawini	Isabela
Pola	Oriental Mindoro
Pulangi	Bukidnon and Cotabato
Putiao	Sorsogon
Quinale	Albay
Rio Chico	Nueva Ecija
Saltan	Kalinga-Apayao
Sibalom	Antique
Sibuguey	Zamboanga del Sur
Sicopon	Surigao del Norte
Siffu	Isabela and Mt. Province
Sipocot	Camarines Sur
Soribao	Western Samar
Sto. Tomas	Zambales
Tago	Surigao del Sur
Tagoloan	Misamis Oriental
Tagum	Davao del Norte
Talisay	Albay
Tambang	Camarines Sur
Tanudan	Kalinga-Apayao and Mt. Province
Tarlac	Tarlac
Tinajeros	Manila
Tubay	Agusan del Norte
Tubig	Eastern Samar
Ulut	Eastern Samar
Viñas	Quezon

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Lakes. The country has roughly 59 lakes. The six largest lakes include: Laguna de Bay with an area of 922.14 square kilometers; Lake Lanao in Lanao del Sur with an area of 347.06 square kilometers; Lake Taal in Batangas, 266.77 square kilometers; Lake Mainit in Surigao del Norte, 150.22 square kilometers; Lake Naujan in Oriental Mindoro, 69.93 square kilometers; and Lake Buluan in Sultan Kudarat, 59.57 square kilometers. Laguna de Bay abounds with fish and other marine products. Lake Taal is a tourist attraction, because Taal Volcano is located in the middle of the lake. Lake Lanao is located in the middle of Lanao del Sur. Lake Mainit is believed to be the crater of an extinct volcano and is so called because of its hot springs. Lake Naujan is rich in fish products. Lake Buluan is in the center of Cotabato Valley, an agricultural area.

2.1.5 Volcanic Landforms

There are about 106 volcanic landforms distributed throughout the Philippines, 21 of which are considered active. Most active among them are Mayon Volcano in Albay and Taal Volcano in Batangas followed by Hibok-Hibok in Camiguin, Bulusan in Sorsogon, Canlaon in Negros Oriental and Pinatubo in Zambales.

A volcano is considered active if it has erupted within historic times or about 600 years for the Philippines. It is inactive if it has not erupted within historic times and its form is beginning to be altered by weathering and erosion. However, considering the short span of written history, some volcanoes classified as inactive may in fact be active and may again show signs of activity after a long time. Mayon, Taal, Bulusan and Hibok-Hibok have relatively shorter repose periods (8 to 40 years between eruptions) and are likely to erupt frequently.

Since 1572, Taal Volcano had 33 recorded eruptions. Its more violent eruptions occurred in 1749, 1754, 1911 and 1965. The 1911 eruption devastated almost the whole area of volcano island and spewed ashes as far as Manila. The 1965 eruption killed 150 people, injured more than 800, and displaced almost 65,000 people. As one of the six most active volcanoes, Taal has been under regular monitoring and surveillance. Accounts of the most recent activities are the following: From 1989 to 1991 it showed signs of abnormality with a seismic activity from a background level to a maximum of volcanic quakes with moderate steaming, geysering, fissuring and bubbling in the crater area. However, this did not remain too long and the situation returned to normal and remained restive for quite sometime. But in February 1992, its level of seismicity suddenly rose from low to high volcanic frequency with quakes and tremors and increase of temperature in the main crater was observed. In view of these unexpected changes in the activity of the volcano, alert level 2 was immediately raised. This was further raised to alert level 3 when high frequency volcanic quakes continued in the following days and bubbling intensified as evidenced by discoloration at the crater lake. At this point total evacuation of the island residents was recommended. However, after several days, the activity slowly

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simmered down and the seismicity decreased. Thus on February 22, 1992, the alert level was lowered to level 2, and since a steady decrease in the volcanic activity continued, it was returned to background levels.

The most destructive eruption in the country during the 80s was the eruption of Mayon Volcano in 1984. Although none was reported killed, 73,000 people were displaced and property worth P45.5 million were damaged by massive lava and mudflow. At the beginning of October, 1990 up to January 1991, the seismicity of Mayon Volcano started to increase. On February 2, 1993 it erupted unexpectedly with an explosion. This initial eruption generated a pyroclastic flow. Together with this a cauliflower-shaped cloud rose 4-5 km. above the summit and ash fell in the town of Camalig. This was followed by small ash emissions and explosions. This eruption lasted for 30 minutes and claimed the lives of 68 people and over 100 people injured. Most of the dead were farmers tending crops within the 6 km. permanent danger zone. Due to these activities the PHIVOLCS was prompted to announce that hazardous eruption will occur within the succeeding days. Thus on Feb. 12, eruptions longer than the initial explosion occurred. Alert level 5 was raised due to the explosions which again generated a pyroclastic flow. However, no casualties were reported during this eruption, but an evacuation of over 60,000 residents from the permanent danger zone area (6 km. from the summit) and from within 10 km. of the volcano was issued. During the last half of February 1993, moderate to heavy rains remobilized the new pyroclastic flow deposits and triggered small lahars. These lahars, however were confined to the channels. Moreover, in March 21 explosive eruptions were again exhibited at Mayon Volcano. A series of explosions were observed, thus it continuously generated pyroclastic flows and swelling at the slope of volcano was noted indicating influx of additional magma towards the surface. In view of these activities, alert level 5 was put in effect. But this declined in the succeeding days, so alert level 2 was implemented since then.

Canlaon had erupted six times in 1985, and thrice in 1986. In 1989, it had a minor eruption but did not cause any destruction, but in Feb. 1991, it exploded, with the volcano emitting voluminous steam clouds reaching a maximum height of 1,000 meters. A number of volcanic quakes together with tremors were also recorded. This event however, lasted only for one day. This steam emission was followed by mild ash emissions in January and June 1992, with again tremors and rumbling sounds accompanying the emissions. Although these activities progressed from moderate to voluminous within the day, but it declined in the succeeding days. Because of these activities, local residents were advised not to venture within the delineated 5 km. danger zone of Canlaon Volcano. Furthermore, in August and September 1993, two mild explosions occurred. As the first explosion developed, alert level 1 was raised. However, the seismicity declined in the following days. During the second explosion, aside from rumbling sounds, tremors and earthquake, strong sulfurous odor was noted and a slight ashfall was experienced at Canlaon Volcano Observatory.

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But these activities weakened in the succeeding days, bringing down to no alert level within the volcano's vicinity.

In Zambales, Mt. Pinatubo has lain dormant for 611 years. It began showing signs of restiveness on April 2, 1991 when a hydrothermal explosion was observed at the volcano's crater and was followed by emission of steam clouds with ash and occurrence of high frequency volcanic quakes. The most destructive series of eruptions were on June 12-15, 1991 with ashfalls reaching as far as Metro Manila and Palawan to the south and Cambodia to the east, and pyroclastic flows and mudflows which placed several towns in the provinces of Zambales, Tarlac and Pampanga under the state of calamity. As of June 30, 1991, a total of 289 persons were killed, 279 injured and 39 were missing. Extensive damage to property such as houses, buildings, infrastucture, roads and bridges, drainage channels, crops and other sources of livelihood reached an estimated value of P2,688.0 million. Just one year after that destructive eruption, long period earthquakes and tremors were detected at Pinatubo volcano on July 6, 1992. Then in July 9, a small mud cone which rose from the lake surface was noticed near the center of the lake, raising the alert level to 3. The island continued to grow and on July 14 it reached about 10 meters above the lake level. A continuous dirty white steam column which included some ash was emerging from the dome, this caused to raise the alert level to 5. Although magma had risen to the surface and dome building had started, but the activity did not lead to an explosive eruption despite the similarities in the patterns noted in 1991 eruption. Dome growth has occurred intermittently until August to September. Meanwhile, monsoon rains and typhoons passing through Northern Luzon triggered lahars and secondary explosions on the flanks of the volcano, forcing the evacuation of thousands of people living along the rivers. Two persons were reported killed on July 12 and several barangays were reported buried by the lahars. During the past few months, the volcano's seismicity had decreased to the same level as in the early months before dome building. Aerial surveys indicated that the dome had stopped growing and no additional lava had been extruded since late October. In view of this, alert level was lowered to 2 and the 10 km. radius danger zone was still maintained.

Table 2.3 presents the main features of principal volcanoes throughout the country.

The Philippine Institute of Volcanology and Seismology (PHIVOLCS) is the government agency which investigates and conducts studies of all active volcanoes in order to establish the necessary facilities to predict their eruptions. It formulates detailed plans for action and relief in the event of any volcanic eruption; conducts researches and demonstrates the technical feasibility of utilizing volcanic products; establishes and operates research centers; studies and recommends ways and means by which devastated areas may be speedily rehabilitated. It also undertakes geothermal research and development projects.

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2.1.6 Government Surveying and Mapping

The different types of surveys aid the various sectors, from government planners and policy makers to shipowners and fishermen. The most valuable survey which serves as the basis for the other types of surveys is the establishment of controls (horizontal, vertical and traverse). The horizontal control deals with the determination of triangulation stations or the position of a point on the surface of the earth; vertical levelling determines the benchmarks or the elevation of the point referring to mean sea level; and traverse control determines the distance between two points and the area enclosed by territorial treaty limits of the country as well as the total length of the country's coastline.

The hydrographic surveys determine the depth of the water with due priority to establishment of controls. One such complete survey involves the major ports of the country and is beneficial to the maritime industry.

The topographic survey includes mapping and locating surface features of the islands such as hills, volcanoes, rivers and lakes. Oceanographic surveys involve the determination of chemical and physical properties of water like salinity, temperature, underwater sound and speed. Current observations as well as tides aid the shipping and docking facilities.

The Coast Pilot Revision Survey serves as a guide to mariners arriving at places without landmarks. The Astronomical Observatory goes hand in hand with the establishment of controls to determine the meridian lines of a certain geodetic control point (latitude and longitude).

2.1.6.1 Surveying and Mapping Agencies

National Mapping and Resource Information Authority (NAMRIA). This is an attached agency to the Department of Environment and Natural Resources (DENR) which shall integrate the functions and powers of the Natural Resources Management Center (NRMC), National Cartography Authority (NCA), the Bureau of Coast and Geodetic Survey (BCGS), and the Land Classification Team of Bureau of Forest Development (BFD). The Authority shall act as the central mapping agency which will serve the needs of the DENR and other government agencies with regard to information and researches, and shall expand its capability in the production and maintenance of maps, charts and similar photogrammetry and cartography materials.

National Statistics Office (NSO). One of the services of the NSO involves the preparation, construction, updating and maintenance of a complete file of maps for use in periodic statistical surveys and censuses. It updates, verifies, and improves existing maps; constructs maps for specific purposes of different agencies. These maps are useful reference materials for field offices of the NSO as well as local governments. The NSO also prepares various kinds of statistical charts and graphic materials for publication. Enumeration districts and *barangay* maps are also prepared for enumerators in censuses and surveys.

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2.2 Meteorological Characteristics

2.2.1 Climate

Weather refers to the state of the atmosphere in relation to its effects upon life and human activities at a particular time. It is thought of in terms of temperature, humidity, precipitation, cloudiness, brightness, visibility and wind. *Climate* is the long-term manifestation of weather. The climate of a specific area is represented by the statistical collection of its weather conditions during a specific interval of time.

The description of the weather or local atmospheric activities at the time of observation must be drawn from a category of individual and combined atmospheric phenomena which include tornadoes, waterspouts, thunderstorms, rain and others. The country's weather is described with respect to rain, such as fine, fair or stormy weather. *Fine weather* describes the condition of the sky with few clouds and no rain. *Fair weather* would mean that clouds are present and may produce rain in scattered patches but the greater portion of the day is sunny or without rain. *Rainy weather* refers to a condition where rain occurs during the greater part of the day. *Stormy weather* is a condition of heavy rains accompanied by strong winds.

The climatic conditions of the country are varied due to the existence of mountains and plateaus in various parts. The differences in climatic conditions depend mainly on the local air currents, which are the result of the general air stream, the position of the islands and the most usual storm tracks.

Philippine air currents are divided into three groups: 1) the *northeast monsoon*, streaming along the easterly and southeasterly side of the great Asiatic high pressure area; 2) the *trade winds* reaching the islands from a generally easterly direction and coming from the tropical high pressure area of the Pacific; and 3) the *southwest monsoon or equatorial air*, which pushes its way across the equator from the strong high pressure areas of the southern hemisphere. The general direction of the winds from these three sources are: 1) northeast monsoon and trade winds from north to east from October to January; 2) the trade winds from east to southeast from February to April; and 3) southeast monsoon, southerly directions for the rest of the year.

The bases for climate classification in the country are the type of rainfall, the presence or absence of a dry season and the maximum rain period.

First Type. There are two pronounced seasons: dry from November to April, and wet the rest of the year. Regions on the western part of Luzon and Mindoro, Negros and Palawan are of this type.

Second Type. There is no dry season, and the maximum rain period is from November to January. Catanduanes, Sorsogon, eastern part of Albay, the eastern and northern parts of Camarines Norte and Camarines Sur and a great portion of eastern Mindanao fall under this type.

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Third Type. The seasons are not very pronounced: relatively dry from November to April and wet the rest of the year. The maximum rain periods are not very pronounced, but the short dry season lasts only from one to three months. Regions with this type of climate are the western parts of Cagayan, Isabela, Nueva Vizcaya, the eastern portion of the Mountain Province, southern Quezon, Masbate, and Romblon, northeastern Panay, eastern Negros, central and southern Cebu, part of northern Mindanao, and most of eastern Palawan.

Fourth Type. Rainfall is more or less evenly distributed throughout the year. The regions affected by this type are Batanes Islands, northeastern Luzon, southeastern part of Camarines Norte, western parts of Camarines Sur and Albay, eastern Mindoro, Marinduque, western Leyte, northern Cebu, Bohol and most of central, eastern and southern Mindanao.

2.2.2 Weather Disturbances

Typhoons. All regions over the country are exposed to typhoons, since the divisions are mainly longitudinal in character, whereas the frequency is latitudinal in type. The southern part of the archipelago up to 8°N latitude is nearly free from typhoons. This makes the agricultural lands of nearly the whole of Mindanao exceedingly valuable. From 8°N to 11°N, the typhoons are a little more frequent, and this leaves the sugarlands of Negros and Panay undisturbed. From 11°N to 13°N, the typhoons are quite frequent and destructive. North of this zone is less visited by typhoons. The northern parts of the archipelago are vulnerable to typhoons.

Of the weather disturbances, tropical cyclones are the most destructive. Aside from the heavy rains which they release, they are accompanied by strong winds. The winds blow around a low-pressure center called the "eye" in counterclockwise direction which increases in magnitude as it nears the center. The typhoon season is from May to January, but most typhoons occur in July, August and September. In 1992 and 1993, there were 15 and 34 tropical cyclones that hit the country, respectively. In contrast, the number of typhoons in 1992 was 25 percent below the normal frequency of 20 tropical cyclones annually while the 1993 data was 70 percent more than the normal frequency. The number of typhoons that hit the country in 1993 was so far the highest since 1971. In this connection, 387 domestic bulletins, 435 international warnings for shipping and 78 flood bulletins were issued in the same year. Table 2.4 presents the monthly and annual frequency of tropical cyclones within the area of responsibility from 1971-1993.

Other Weather Disturbances. Most typhoons form easterly waves. An easterly wave is a wave embedded in the wind system of the tropics called the trade winds. The trades are regarded as a great river of air moving from east to west at an average speed of 16-19 kilometers per hour depending on the season.

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Easterly waves occur during the typhoon season, usually once in every four days, and decrease in number towards the end of the typhoon season.

The *intertropical convergence zone* (ITCZ) is the region where the northern hemisphere trades meet the southern hemisphere trades. This region of convergence may at times be well defined or it may be diffused. It is characterized by towering clouds accompanied by showers and widespread thunderstorms. The axis of the convergence does not remain stationary at the equator but it migrates north or south of the equator following the sun. It oscillates over the Philippines from May to October.

A great portion of rainfall may be ascribed to monsoon weather. The Philippines experiences two monsoon winds, namely: the northeast and southwest monsoons. These monsoons are caused by the thermal variations of the Asiatic mainland. During winter, the Asiatic continent is snowbound and the high pressure cell over China sends northeasterly winds over the Philippines, giving cold temperature. During the summer of the northern hemisphere, the Asiatic continent becomes warmer than the surrounding seas and a low pressure cell develops over the continent. This causes a flow of moist southwest winds over the country. At times when this southwest flow becomes thick in depth, it persists for a long time causing continuous rains which may last for weeks during the months of June to September. The southwest monsoon is responsible for the great portion of rainfall during the wet season.

Termed the *cold front* is another weather disturbance characteristic of temperate regions in the country. It is a region that separates cold air from warm air resulting to widespread cloudiness and rains. Cold fronts cause a lot of rain in temperate regions. Hence, cold fronts are characterized largely by an increase in cloudiness and light rains. This occurs during the months of November to February. After the passage of the cold fronts, the sky clears up and the air is usually cool with good visibility, characteristic of cold air masses.

The topography and geographical location of a locality have great influence on the weather and climate. However, certain disturbances are induced locally so that they are felt only in a particular locality.

Thunderstorms occur when towering clouds reach a height where the temperature is well below the freezing point. These clouds form when there is a continuous updraft of moist air. The approach of a fully developed thunderstorm is preceded by gusty winds which blow towards the advancing storm. As the thunderstorm arrives overhead, the wind changes in direction blowing out from the storm in a forward direction. Heavy rain with thunder and lightning accompanies the storm changing gradually into continuous rain with decreased intensity. The life span of a thunderstorm is short, lasting for about one or two hours.

Orographic uplift refers to the process where air is forced to ascend over sloping surfaces such as the side of a mountain. The windward side of the mountain receives more rainfall than the leeward side. The occurrence of sea

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breezes promotes the orographic lifting of air over mountain slopes near coastal areas.

2.2.3 Meteorological Observations

Table 2.5 presents the normal rainfall (in millimeters) and the number of rainy days by month and by principal islands covering the years 1991 to 1993. Maximum rainfall in 1992 was reported in the months of August, July and September while in 1991 it was in July, August and June, respectively. Meanwhile, the warmest month in 1992 was May with highest average maximum temperature recorded at 35.5°C. The months of May and June 1991 were hottest, with a recorded temperature of 34.9°C in both months. On the other hand, the coldest month in 1992 and 1991 was January, with minimum temperatures of 19.0°C and 19.5°C, respectively. Table 2.6 shows the normal minimum and maximum temperatures by month and principal islands from 1991-1993.

Table 2.7 shows the annual average vapor pressure by principal island by month from 1991 to 1993. In 1992 and 1991, the annual average vapor pressure are the same and recorded at 28.7 millibars.

Mean sea level pressure throughout the country for 1991 to 1993 is presented in Table 2.8. In 1992 and 1991, the annual average mean sea level pressure was 1,010.3 and 1,021.9 millibars respectively. Among the principal islands, the highest average mean sea level pressure was recorded in Luzon at 1,010.6 millibars and 1,046.4 millibars respectively, in both years. By month, the highest sea level pressure was recorded in October 1991 at 1,440.3 millibars and the lowest was recorded in August 1992 at 1,006.4 millibars both in Luzon area.

2.2.4 Tides and Currents

The regular rise and fall of the sea, rivers and landlocked harbors are the main concern of port authorities and navigators. The predictions are based on constants derived from the harmonic analysis of a year's observation for tides and at least 29 days continuous observations for currents. The principal variations in the tides follow the moon's changing phases. At Davao and Legaspi ports the tides are semidiurnal. The tide at Jolo, Cebu and Manila becomes diurnal around the time of the moon's maximum declination.

Currents are also affected by the declination of the moon. The San Bernardino Strait has two floods and two ebb currents each day when the moon is near the equator. As the moon's declination increases, there is a diminishing velocity in one ebb and an increasing velocity in the other. As the moon approaches the extreme declination north or south of the equator, the diurnal inequality in the ebb current is so pronounced that one ebb entirely disappears and instead of two floods and two ebbs there is only one flood in a day, and lasts for the greater period of the day with varying strength.

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2.2.5 Standard Time

The Philippine Standard Time (120° East Meridian Time) is used when observation of meteorological elements is made. This time is eight hours in advance of Greenwich Mean Time. The observation time corresponding to the standard time for synoptic stations are 8:00 a.m., 2:00 p.m., 8:00 in the evening and 2:00 in the morning, Philippine Standard Time.

2.2.6 The Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)

Presidential Decree No. 78 established the Philippine Atmospheric, Geophysical and Astronomical Services Administration to take over the functions and responsibilities of the abolished Weather Bureau. PAGASA was entrusted with "providing environmental protection and utilizing scientific knowledge as an effective instrument to ensure safety, well being and economic security of all people and for the promotion of national progress." This agency is under the supervision of the Department of Science and Technology. Under the reorganized setup of PAGASA, the office, effective January 1988, is now composed of five major units, namely: the Weather Branch; the Flood Forecasting Branch; the Climatology Branch; the Atmospheric, Geophysical and Space Sciences Branch; and the Typhoon Moderation Research and Development Branch.

The Weather Branch issues weather forecasts, advisories, bulletins and warnings through the broadcast and print media. It also provides the necessary information to the public about time with greatest accuracy.

The Flood Forecasting Branch provides for the installation of automatic river gauges along or near the base of major rivers. It issues appropriate warnings to inhabitants of endangered areas as soon as a critical level of water is determined.

The Climatology Branch undertakes observations and investigations of seismological and astronomical phenomena. It is responsible for the issuance of bulletins and technical advisories on earthquakes and *tsunamis*, and serves as the official time service agency. It also undertakes the acquisition, collection, quality control, processing and archiving of atmospheric data and observations and prepares these in usable forms for dissemination to the public for the benefit of agriculture, commerce and industry.

The Atmospheric, Geophysical and Space Sciences Branch conducts and coordinates in-service training in meteorology, astrology, seismology, and administration in both professional and subprofessional levels.

The Typhoon Moderation Research and Development Branch undertakes researches on the structure, development and motion of typhoons and seeks to improve techniques and scientific measures of predicting them in order to

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minimize their disastrous effects. It also studies the environmental impact on such measures/precautions necessary to prevent destruction of lives and property.

2.3 Geological Characteristics

2.3.1 Formation of the Philippine Islands

The Philippines is believed by historians to be the remnant of a vast continent in the Pacific that sank beneath the waters in prehistoric times. Some geologists, however, asserted that the Philippines was of volcanic origin. The eruptions of these volcanoes caused the emergence of islands above waters.

Structurally, the archipelago may be considered as the crumpled edge of the Asian continental platform. The second deepest known part of the Pacific is located 89 kilometers northeast of Mindanao. This fore deep is undoubtedly related to similar deeps off the coasts of Formosa and Japan, and form the same relationships to the mainland. It seems, however, that between Formosa and the Philippines there is lack of connection marked by the Bashi Channel.

West of the archipelago is a much lesser deep off the China Sea presumably a sunken area of Graben. This China Graben is analogous to the submerged area between New Zealand and Australia. The Asiatic mainland may bear the same relations to the Philippines that Australia does to New Zealand.

2.3.2 Rocks in the Country

Almost all principal types of rocks are found in the Philippines. On a basement complex of igneous rocks there are many thousand meters of sediment, mainly Tertiary Age, with some small outcrops of mizoic rocks, which are succeeded by lava of the andesitic type, with great accumulations of more recent tufts and considerable areas of coral limestones. The deep-seated rocks are naturally not very widely distributed to the surface and are usually found only in canyons of mountain ranges, whenever the streams have cut through the overlying recent formations. They are particularly abundant in northern Luzon through the Cordillera Central, in Palawan, the Cordilleras of Panay, Cebu and Leyte, and the eastern Cordilleras of Mindanao and Masbate.

In all parts of the islands there are large amounts of extrusive materials found around the volcanic areas, and they are pronounced in the Zambales range of southwestern Luzon, and various parts of the Cordillera Central lying above the igneous rocks and tertiary sediments. In the Cordillera Central there are great patches of andesite, indicating probably a later period of volcanic activity. Basalt occurs in the mountain of Arayat, which rises isolated in the central plain of Luzon. Extrusives are well developed in the southeastern volcanic cluster of Luzon, comprising the well-known peaks of Bulusan, Mayon, Isarog and other mountains. They are also found in Masbate, western Panay, Cebu and northern Negros. A broad belt of extrusives is found running north and south through Apo and Matutum ranges in Mindanao. A great patch of

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basaltic material is found in Lanao Lake. There is also a great development of extrusive covering almost the entire of Basilan and Sulu, and the northern part of Palawan. Mount Halcon in Mindanao is largely andesite. The sedimentary formations in the islands consist of shells, limestone, sandstone, and conglomerates. The rocks in abundance are andesite, pyroclastics, quartz, diorite and small amounts of alluvium and limestone.

Three megalithic sites have been found in Mindanao early in 1977. One of them is on two hills of Canuman and Balungating in Dumalinao, Zamboanga del Sur; the second is at the Atugan Falls in Impausug, Bukidnon, and the third is at the Alalum waterfall in Kisolon, Bukidnon.

In Dumalinao, there are thousands of huge stone structures which are elongated, with sizes varying from 1.5 to 5 meters long. Their cross sections are quadrilateral with diameters of 45 to 50 centimeters. The stones found in Impausug are 1.5 to 2.2 meters long, rectangular and roundish in cross section and about 40 to 60 centimeters thick. The rocks in Zamboanga and Bukidnon are extensive and appear to be prismatic or columnar, geologically called columnar structure. The stones in the three places are volcanic and basaltic, from dark gray to black fine grained rock. The sites are located in the basalt regions of Bukidnon, where millions of years ago, liquid basaltic lava emanated from the earth fissures.

2.3.3 Earthquakes

The Philippines is prone to earthquakes, and is rocked on the average by one perceptible earthquake every two days besides many more tremors that are too weak to be felt by people, but strong enough to be recorded by the seismograph. However, not all parts of the country are vulnerable to destructive quakes, which could be explained that while the country is crisscrossed by large fractures along which any dislocation would produce a tectonic earthquake, these fractures are not of the same stability. The Seismological Division of PAGASA compiles and publishes data on significant earthquakes taking into account the location of the epicenter and the places affected.

Earthquakes of severe character have been experienced in the Philippines. The Lanao earthquake of 1955 was one severe quake that hit the country. Another one hit Luzon in August 1968, where more than 300 persons were killed. In 1970, a main shock was felt in Luzon and Visayas but there were no casualties. An earthquake in Mindanao brought great damage to life and property in 1976. On August 17, 1983, the worst earthquake to hit Northern Luzon in 52 years, caused extensive damage in the Laoag-Pasuquin-Batac areas. There were landslides and liquefaction of the soil due to the shallow source of the earthquake. Residential homes and churches were damaged and toppled. Cracks on highways and bridges appeared and a total of 16 people were killed.

On July 16, 1990 at 4:26 in the afternoon (DST) strong earthquakes called the "killerquakes," struck Luzon. The first one with a magnitude of 7.7 hit

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Cabanatuan City. It was closely followed by a second quake with the same magnitude that hit the Baguio-Benguet area. As of September 1990, a total of 1,283 persons were killed, 2,786 injured, and 120,021 left homeless. Thousands of houses were destroyed and damage to property reached an estimated value of P6,844.87 million. Much of the destruction had been due to liquefaction and ground settling specially along coastal areas, river banks and swampy surfaces. The quakes also triggered massive landslides which blocked major highways and drainage channels.

2.4 Archeology

2.4.1 Archeological Explorations and Excavations

The presence of man (*Homo sapiens*) in the Philippines has been documented with the recovery in southwestern Palawan of fossil remains of at least three individuals, estimated to date from 22,000 to 24,000 years ago. Stone artifacts and associated archeological materials indicate continuous habitation of one large cave, Tabon Cave from 36,000 years ago to about 900 years ago. Hundreds of caves and rockshelters indicating various periods of occupation or burial have been identified.

In Cagayan Valley in northern Luzon fossils of elephants, stegodon and rhinoceros have been documented and collected. Stone tools of the "Paleolithic Tradition" have been recovered from the same general area but their direct association with the fossils have to be confirmed geologically. In Peñablanca, west of Cagayan, the fossils were found in limestone formations where archeological sites have been confirmed. Stone tools with pottery have been noted in caves dating to the Holocene period.

In Lal-lo, Cagayan Province, shell midden sites with polished stone tools and pottery have been excavated indicating a settled way of life. This was also the case at Ma-ug, Prosperidad, Agusan del Norte. Definite Neolithic Sites have yet to be encountered.

The earliest metals have been found in Western Palawan in the Tabon Cave complex. Since then, a number of sites have indicated the presence of metal artifacts although the existence of a "Metal Age" in the country has been questioned as a result of the examination of the metal artifacts and slags.

The presence of numerous ceramics from China, Thailand, and Annam as early as the 10th century A.D. proves that the Philippines has been trading with our neighboring countries. The coasts of Batangas Bay, Manila, Bolinao and the lakeshores of Laguna de Bay have definite archeological evidence of occupation and burial during this period. Ceramics were interned with the dead as early as the Neolithic period and continued until porcelain from other countries were used.

In Butuan City, Agusan del Norte, excavations indicate a flourishing trading center during this period. Remains of seven wooden, plank-built and edged-

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pegged boats called *balangay* have been discovered, three of which have been conserved and displayed. These boat types, dating back to the 10th century A.D. are also known in Pontian, Malaysia and Northern Sumatra but this is the only time that such number has been encountered in Southeast Asia, if not the world.

2.4.2 The National Museum

The National Museum had its origin and historical roots at the beginning of the 20th century. It was originally known as the Insular Museum of Ethnology, Natural History and Commerce under the Department of Public Instruction. The name was changed to Philippine Museum after the St. Louis Exposition in 1904. Since then, it has undergone a number of changes and functions, until it finally became the National Museum as it is today. In 1951, its supervision was placed under the Department of Education, now Department of Education, Culture and Sports (DECS).

The National Museum has a tri-dimensional goal covering diverse fields of knowledge through various educational, scientific and cultural activities. As an educational institution, the National Museum disseminates scientific and technical knowledge in more understandable and practical forms through lectures, exhibitions, interviews and publications for students and the general public.

As a scientific institution, it conducts basic research projects through laboratory and field work in anthropology, archeology, geology and paleontology, botany and zoology. It maintains reference collections and promotes scientific development in the country.

As a cultural center, the National Museum has taken the lead in the study and preservation of the nation's rich artistic, historic and cultural heritage, in the rebuilding and reconstruction of its glorious past, and in remembering and venerating the great men who helped in the building of the nation.

Some branch museums have been established all over the country especially where archeological excavations and other scientific studies are undertaken. To date there are branch museums in Tuguegarao, Cagayan; Magsingal and Vigan in Ilocos Sur; Bolinao in Pangasinan; San Fernando in La Union; Kiangan in Ifugao; Kabayan in Benguet; Quezon in Palawan, Butuan City, Cotabato City, and Zamboanga City. The Cagsawa Museum in Daraga, Albay was constructed in 1990 and was formally inagurated in October 1992. Its exhibits cover a comprehensive information on volcanoes, their various types and the different kinds of eruptions and locations of volcanoes in the Philippines, the Geologic History of the Philippines from its evolution to the various geologic periods, the types of rocks and minerals and the fossils unearthed in the Philippines, that were made the bases for the dating of the Philippine geologic period.

The Angono Petroglyphs, a rockshelter in Angono, Rizal as well as the Tabon Caves in Lipuun Point, Palawan are preserved and maintained. The Biological Research Section at Jawili, Tangalan, Aklan also maintains exhibits of marine flora and fauna of Panay Island.

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2.4.3 Preservation of Cultural Heritage Related to Archeology

Several laws and proclamations for the preservation and protection of the Filipino cultural heritage, principally those related to archeology were legislated. These laws and regulations were necessary to avoid such sites and edifices from being cannibalized and disturbed by commercial diggers and collectors. Presidential Decree No. 374, amending Republic Act (RA) No. 4846 known as the "Cultural Properties Preservation and Protection Act" states that "it shall be unlawful to explore, excavate or make diggings on archeological or historical sites without prior written authority from the Director of the National Museum". As such, the Director of the National Museum has the sole control and supervision over all the sites where excavations and explorations are made, to avoid indiscriminate diggings which may destroy valuable artifacts. Churches, monuments and museums are also protected and preserved for posterity.

Other related laws and proclamations include:

a) Enactment of Republic Act. No. 7356, the law creating the National Commission for Culture and the Arts.

b) Proclamation No. 913, declaring the period from October 1 to 7 of every year as National Museum Week;

c) Proclamation No. 996, declaring the Tabon Cave Complex and all of Lipuun Point in Quezon, Palawan, as a Site Museum Reservation;

d) Presidential Decree No. 260 declaring the Sta. Ana Museum, Manila; the Catholic Churches of Paoay and Bacarra, Ilocos Norte; the San Agustin Church and liturgical objects therein, Intramuros, Manila; Fort Pilar in Zamboanga City; the petroglyphs of the Rock Shelter in Angono, Rizal and of Alab, Bontoc; the stone agricultural calendars of Dap-ay Guiday of Besao, Bontoc; the mummy caves of Kabayan, Benguet and of Sagada and Alab, Bontoc; the Ifugao Rice Terraces of Banaue; the Barasoain Church in Malolos, Bulacan; Tirad Pass in Cervantes, Ilocos Sur; Miagao Church in Miagao, Iloilo; the site of the battle of Mactan Island, Cebu; San Sebastian Church in Manila; the convent of Sto. Niño in Cebu City as national shrines, monuments and/or landmarks, defining the implementing agencies and providing funds for these cultural sites and objects;

e) Presidential Decree No. 375, amending P.D. No. 260, by including the two hundred-year old basilica of Taal, Batangas and the Church of Sta. Maria, Ilocos Sur among the national landmarks and monuments declared as national shrines;

f) Presidential Decree No. 373, exempting from taxation all donations to the National Museum, the National Library and Archives of the National Historical Institute;

g) Presidential Decree No. 1683, declaring the burial caves at Sitio Alabok, Barangay Cambali, Bagulin, La Union, as a national cultural treasure;

h) Presidential Proclamation No. 1743, reserving for anthropological and archeological research purposes a certain portion of the public domain situated in the municipality of Quezon, Palawan.

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Sources:

2.1 National Statistics Office, Cartography Section; Bureau of Coast and Geodetic Survey; Philippine Institute of Volcanology and Seismology; Department of Interior and Local Government.

2.2 The Philippine Atmospheric, Geophysical and Astronomical Services Administration; Bureau of Coast and Geodetic Survey; and the National Museum.

2.3 *Geologic Observations in the Philippine Archipelago*, Manila, 1937; Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA); Philippine Institute of Volcanology and Seismology (PHIVOLCS).

2.4 National Museum; Presidential Commission on Culture and Arts.

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Table 2.1 Area and Location of Principal Islands and Number of Named and Unnamed Islands

Principal island	Area (square kilometers)	Islands			Location of principal island
		Total	Named	Unnamed	
Total	276,926.2[a]	7,150	3,144	3,956	
Luzon	104,687.8	2,016	589	1,427	Northern part of the Philippine island group
Mindanao	94,630.1	1,018	513	505	Southern part of the Philippine island group
Samar	13,080.0	603	240	363	East central part of the Philippine island group
Negros	12,705.1	97	20	77	Southwest part of the Philippine island group
Palawan	11,785.1	1,169	649	520	Extending northeast from Borneo
Panay	11,515.1	407	133	274	West central part of the Philippine island group
Mindoro	9,734.6	127	38	89	Northwest central part of the Philippine island group
Leyte[b]	7,214.4	116	64	52	Southwest of Samar
Cebu[b]	4,422.0	167	55	112	East of Negros
Bohol[b]	3,864.8	118	81	37	Southeast of Cebu
Masbate[b]	3,287.2	121	61	60	West of the north end of Samar
Sulu Group[1]		958	658	300	Southwestern part of the Philippine island group
Romblon[1]		158	26	132	North of Panay
Marinduque[1]		25	17	8	South of Luzon

[a] Total area of 11 principal islands only.
[b] These last four (4) of the 11 principal islands together with Samar, Negros and Panay are generally known as the Visayan Islands
[1] Small groups of islands considered as principal islands.
Source: National Statistics Office, Cartography Section.

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Table 2.2 Number of Cities, Municipalities, and Barangays and Estimated Area by Region and Province: As of December 30, 1993

Region/province	Area (square kilometers)	Cities	Municipa-lities	Barangays
Philippines	300,000.0	60	1,544	41,921
National Capital Region (NCR)	636.0	4	13	1,689
Cordillera Administrative Region (CAR)	18,293.7	1	76	1,173
Abra	3,975.6	-	27	303
Benguet	2,655.4	1	13	269
Mt. Province	2,097.3	-	10	143
Ifugao	2,517.8	-	11	175
Kalinga-Apayao	7,047.6	-	15	283
I. Ilocos	12,840.2	3	122	3,265
Ilocos Norte	3,399.3	1	22	557
Ilocos Sur	2,579.6	-	34	768
La Union	1,493.1	-	20	576
Pangasinan	5,368.2	2	46	1,364
II. Cagayan Valley	26,837.7	-	93	2,311
Batanes	209.3	-	6	29
Cagayan	9,002.7	-	29	820
Isabela	10,664.6	-	37	1,055
Nueva Vizcaya	3,903.9	-	15	275
Quirino	3,057.2	-	6	132
III. Central Luzon	18,230.8	5	117	2,944
Bataan	1,373.0	-	12	236
Bulacan	2,625.0	-	24	567
Nueva Ecija	5,284.3	3	29	848
Pampanga	2,180.7	1	21	536
Tarlac	3,053.4	-	18	510
Zambales	3,714.4	1	13	247
IV. Southern Tagalog	46,924.1	8	214	5,625
Aurora	3,239.5	-	8	152
Batangas	3,165.8	2	32	1,078
Cavite	1,287.6	3	20	828
Laguna	1,759.7	1	29	674
Marinduque	959.2	-	6	218
Occidental Mindoro	5,879.8	-	11	162
Oriental Mindoro	4,364.7	-	15	426

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Table 2.2 Number of Cities, Municipalities, and Barangays and Estimated Area by Region and Province: As of December 30, 1993 (continued)

Region/province	Area (square kilometers)	Cities	Municipa-lities	Barangays
Palawan	14,896.3	1	22	430
Quezon	8,706.7	1	40	1,251
Rizal	1,308.9	-	14	187
Romblon	1,355.9	-	17	219
V. Bicol	17,632.5	3	112	3,461
Albay	2,552.6	1	17	719
Camarines Norte	2,112.5	-	12	273
Camarines Sur	5,266.8	2	35	1,063
Catanduanes	1,511.5	-	11	315
Masbate	4,047.7	-	21	550
Sorsogon	2,141.4	-	16	541
VI. Western Visayas	20,223.2	8	123	4,047
Aklan	1,817.9	-	17	327
Antique	2,522.0	-	18	590
Capiz	2,633.2	1	16	473
Guimaras	a	-	3	96
Iloilo	5,324.0	1	43	1,901
Negros Occidental	7,926.1	6	26	660
VII. Central Visayas	14,951.5	9	123	3,002
Bohol	4,117.3	1	47	1,109
Cebu	5,088.4	5	48	1,202
Negros Oriental	5,402.3	3	22	557
Siquijor	343.5	-	6	134
VIII. Eastern Visayas	21,431.7	3	140	4,392
Biliran	b	-	8	132
Eastern Samar	4,339.6	-	23	597
Leyte	6,268.3	2	41	1,641
Northern Samar	3,498.0	-	24	569
Samar (Western)	5,591.0	1	25	953
Southern Leyte	1,734.8	-	19	500
IX. Western Mindanao	15,997.2	4	74	2,124
Basilan	1,327.2	-	7	265
Zamboanga del Norte	6,618.1	2	25	690
Zamboanga del Sur	8,051.9	2	42	1,169

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Table 2.2 Number of Cities, Municipalities, and Barangays and Estimated Area by Region and Province: As of December 30, 1993 (concluded)

Region/province	Area (square kilometers)	Cities	Municipalities	Barangays
X. Northern Mindanao	28,327.8	7	117	2,509
Agusan del Norte	2,590.3	1	11	248
Agusan del Sur	8,965.5	-	14	312
Bukidnon	8,293.8	-	22	464
Camiguin	229.8		5	58
Misamis Oriental	3,570.1	2	24	502
Misamis Occidental	1,939.3	3	14	435
Surigao del Norte	2,739.0	1	27	490
XI. Southern Mindanao	24,224.1	2	85	1,820
Davao del Norte	8,129.8	-	22	452
Davao del Sur	6,377.6	1	15	517
Davao Oriental	5,164.5	-	11	183
Surigao del Sur	4,552.2	-	19	306
South Cotabato	7,644.8	1	11	223
Sarangani	c		7	139
XII. Central Mindanao	14,144.7	3	52	1,423
North Cotabato	6,741.9	1	18	579
Lanao del Norte	3,114.6	2	22	599
Sultan Kudarat	4,288.2	-	12	245
Autonomous Region in Muslim Mindanao (ARMM)	11,836.2	-	83	2,136
Maguindanao	5,298.1	-	18	463
Lanao del Sur	3,850.3	-	37	1,060
Sulu	1,600.4	-	18	410
Tawi-Tawi	1,087.4	-	10	203

[a] Area included in Iloilo.
[b] Area included in Leyte.
[c] Area included in South Cotabato.

Source: Department of Interior and Local Government.

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
Binitican	12°37'N 124° 00'E	Matnog, Sorsogon					
Gate	12°35'N 124°00'E	Matnog, Sorsogon	475				
Maraut-Banua	12°48'N 124°09'E	Bulusan, Sorsogon					
Abunug	11°2'N 124°42'E	Ormoc, Leyte	600	100	Caldera		
Caraycaray	11°1'N 124°26'E	Naval, Biliran Island	437	437	Caldera		
Maagonoc	11°1'N 124°41'E	Ormoc, Leyte	680	480	Caldera		
Natib	14°42'N 120°24'E	Bataan, Central Luzon	1,287		Caldera	Andesite	
Proto-Janagdan	11°6'N 124°43'E	Ormoc, Leyte	1,400	600	Caldera		Hosts Janagdan volcano. Remnants of Proto-Janagdan are traceable northwest of Janagdan Bato.

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (continued)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
Proto-Lobi	120°44'E 11°7'N	Ormoc, Leyte	1,120	1,120	Caldera		Hosts Lobi volcano.
Taal Caldera	14°0'N 121°0'E	Laguna/Batangas, Southern Tagalog	650		Caldera		Hosts Taal Lake which occupies the caldera depression. The depression is about 21 km wide at the center lies Taal Volcano.
Bud Dajo	5°59'N 121°13'E	Panamao, Jolo Island, Southern Mindanao	399		Cinder cone		
Liñon Hill	13°9'N 123°44'E	Legazpi City, Albay	156	156	Cinder cone	Andesite	Rests on the southeast slope of Mayon volcano.
Osmeña	11°25'N 124°32'E	Osmeña, Northern Leyte	380	380	Cinder cone		Named after the barrio on its eastern foot slope.
Sungay	14°9'N 121°2'E	Tagaytay Ridge, Batangas	520	120	Cinder cone	Andesite	Rests on the northern rim of Taal caldera.
Alto Peak	11°6'N 120°44'E	Ormoc, Leyte	1,350	1,350	Compound volcano		Resting at the eastern block of the Phil. Fault in Leyte. Bounded to the north by the Tacloban

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (continued)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
							Ophiolites.
Ambalatungan	17°19'N 121°6'E	Kalinga Apayao Northeast Luzon			Compound volcano	Andesite	A cluster of volcanoes together with Mt. Bumabag and Mt. Bodakan. These are presently solfataric.
Amorong	15°50'N 120°47'E	Pangasinan	376		Compound volcano	Andesite	
Ascuero Oriental	11°32'N 124°35'E	Uson, Biliran Island, Leyte	1,266		Compound volcano		
Balatucan	8°46'N 124°59'E	Misamis Oriental, Mindanao	2,560	2,560	Compound volcano	Andesite	
Balungao	15°51'N 120°40'E	Pangasinan, Luzon	382		Compound volcano	Dacite	
Banahaw [1]	14°4'N 121°29'E	Lucena City, Quezon Province	2,177	2,177	Compound volcano	Andesite	Violent eruption in 1730 and 1743. Numerous fumaroles, hot springs; mudflows in 1730, 1843 and 1909.
Bangcay	15°46'N 120°45'E	Nueva Ecija, Luzon	406		Compound volcano	Andesite	

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (continued)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
Bulusan [1]	12°46'N 124°3'E	Bulusan, Sorsogon, Southern Luzon	1,559		Compound volcano	Andesite, Dacite	Sits inside Irosin caldera. 1852-1916 phreatic episodes. Latest activity in March 1988 was phreatic in nature.
Butay	9°7'N 124°46'E	Mahinog, Camiguin	679		Compound volcano	Andesite, Basalt	
Canlaon [1]	10°24'N 123°7'E	Negros Oriental, Negros Island	2,465		Compound volcano	Px Andesite	Earliest recorded eruption in 1866. Latest eruption in October 1989. Ground deformation was at back-ground level.
Hibok-Hibok [1]	9°12'N 120°40'E	Mambajao, Camiguin Island	1,300		Compound volcano	Hb, Px Andesite	Prob. eruptions in 1827 and 1862; solfataric activity 1897-1902; 1948-1953 formed dome extruded lava and glowing avalanches.
Kalatungan [1]	7°57'N 124°48'E	Bukidnon, Mindanao	2,824		Compound volcano		
Katangiad	8°8'N 124°55'E	Bukidnon, Mindanao	2,896		Compound volcano		

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (continued)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
Labo and Bayabas	14°4'N 122°47'E	Daet, Camarines Norte	943	943	Compound volcano		A huge central cone is surrounded by subsidiary cones. Bayabas is inferred to have a 10-km wide crateral opening.
Mahagnaw (Burauen)	10°52'N 124°51'E	La Paz, Eastern Leyte	890		Compound volcano	Hb-Andesite	Reportedly erupted in 1895.
Makaturing [1]	7°38'N 124°19'E	Lanao, Mindanao	1,675		Compound volcano	Basalt	
Makiling	14°8'N 121°11'E	Los Baños, Laguna	1,144	1,144	Compound volcano	Andesite	Mudpools are found at the eastern side of the volcano.
Malinao	13°25'N 123°36'E	Tiwi, Albay	1,548		Compound volcano	Andesite	A hydrothermal explosion occurred on June 29, 1980 at the Tiwi Hotspring National Park.
Malindang	8°12'N 123°28'E	Misamis Occidental, Mindanao	2,425		Compound volcano		
Malindig (Marlanga)	13°14'N 122°1'E	Buenavista, Marinduque	1,157		Compound volcano	Andesite	

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (continued)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
Mambajao	9°10'N 124°43'E	Mambajao, Camiguin Island	1,600		Compound volcano	Andesite	
Nalusbitan	14°7'N 122°36'E	Jose Panganiban, Camarines Norte	265		Compound volcano		
Paco	9°35'N 125°31'E	Surigao del Norte, Mindanao	524	524	Compound volcano	Basaltic Andesite	Sits north of Lake Mainit. Hosts domes such as Maragongong, Magsuyuan, Buhangin, Paliron, Miniyao, Binga, Masipe.
Pinatubo [1]	15°7'N 120°20'E	Zambales, Central Luzon	1,780		Compound volcano	Andesite	Contains ignimbrite deposits. C-14 dating revealed 600 old carbonized wood within the ignimbrites. Latest eruption in June 1991, formed a 3-km fissure south of the volcano. Ashes, pyroclastic materials and lahar were ejected from the active vent of the south-western slope.
Pocdol mountains	13°2'N 123°52'E	Bacon, Sorsogon	1,099		Compound volcano		

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (continued)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
San Cristobal	14°5'N 121°26'E	Nagcarlan, Laguna	1,409	1,318	Compound volcano		
Taal [1]	14°0'N 121°0'E	Talisay, Batangas	311		Compound volcano	Basalt, Andesite	Sits inside Taal caldera. Earliest recorded eruption in 1572 at the main crater. At least 33 recorded eruptions.
Aguiting	11°9'N 124°38'E	Ormoc, Leyte	523	400	Dome		
Capinyayan	11°35'N 124°30'E	Caibiran, Biliran Island	980	680	Dome		
Didicas [1]	19°4'N 122°12'E	Babuyan Island Group, Northern Luzon	244	800	Dome	Andesite	Violent eruptions in 1773, 1857, 1860, 1900, 1969, 1978.
Gumansan	11°36'N 124°29'E	Naval, Biliran Island	1,045	745	Dome		Rests on the southern slope of Guiauasan caldera.
Kirikite	11°57'N 124°22'E	Kirikite Island, Northern Leyte	202	202	Dome		

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (continued)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
Laao	11°8'N 124°43'E	Ormoc, Leyte	780	380	Dome		Source of a subterminous lava flow towards the east.
Vulcan	9°13'N 124°29'E	Catarman, Camiguin Island	580		Dome	Andesite	Dome building activity from 1871-1875
Abuyug	10°50'N 124°55'E	Abuyug, Leyte			Dome complex	Andesite	
Cancajanag	11°5'N 124°46'E	Ormoc, Western Leyte	700	700	Dome complex		Consists of at least 8 domes.
Janagdan	11°10'N 124°43'E	Ormoc, Leyte	970		Dome complex		Consists of at least 5 domes resting on the western slope of Alto Peak.
Apo	6°59'N 125°16'E	Davao/Cotabato, Southern Mindanao	2,953		Strato volcano	Andesite	Solfataric.
Arayat	15°2'N 120°44'E	Pampanga, Central Luzon	1,030	1,030	Strato volcano		
Ascuerro Occidental	11°32'N 124°33'E	Ascuero, Biliran Island	1,172	1,172	Strato volcano		

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (continued)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
Babuyan Claro [1]	19°31'N 121°56'E	Babuyan Island, Northern Luzon	837		Strato volcano	Basalt	Erupted in 1831; ash explosion in 1860; 1913, 1917. A landslide occurred in Feb. 6, 1980.
Bagacay	14°12'N 122°50'E	Jose Panganiban, Camarines Norte	786		Strato volcano		
Balut	5°24'N 125°22'E	Jose Abad Santos, Davao del Sur	883	1,800	Strato volcano		
Boahao	11°26'N 124°29'E	Leyte, Northern Leyte	485	485	Strato volcano		
Cabalian	10°17'N 125°13'E	Cabalian, Southern Leyte	920	920	Strato volcano		Hosts a summit crater lake. It shares a northern boundary with Mt. Cantoloc.
Cagua [1]	18°13'N 122°7'E	Cagayan, Northeast Luzon	1,158		Strato volcano	Andesite	Solfataric. Latest eruption in 1860.
Camandag	11°58'N 124°25'E	Camandag Island, Northern Leyte	432	432	Strato volcano		An island off Northern Leyte.
Camiguin de Babuyanes [1]	18°50'N 121°51'E	Babuyan Island Group, Northern Luzon	712		Strato volcano	Andesite	Erupted in 1857.

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (continued)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
Cantoloc	10°19'N 125°10'E	Cabalian, Southeastern Leyte	820	820	Strato volcano		Relatively older than Cabalian volcano, Cantoloc volcano is breached to the northwest.
Costa Rica	11°56'N 124°19'E	Almagro Island, Northern Leyte	394	394	Strato volcano		Mt. Costa Rica was named after the town at the eastern foot of the volcano.
Cuernos de Negros	9°15'N 123°10'E	Negros Oriental, Negros Island	1,904		Strato volcano	Andesite, Dacite	Hosts sulfur deposits. It emitted vapors during an earthquake swarm in May 1902.
Culasi Peak and Cone	13°54'N 123°0'E	Hinipaan, Daet, Camarines Norte	959		Strato volcano		
Danao	11°4'N 124°40'E	Ormoc, Leyte	1,020	1,020	Strato volcano	Dacite	A sag pond is situated at its summit occupied by Lake Danao. This volcano is cut by the Philippine Fault.
Gayad	11°26'N 124°31'E	Culasi, Northern Leyte	618	618	Strato volcano		Named after a barrio at the southern foot of the volcano.
Guiauasan	11°36'N 124°29'E	Naval, Biliran Island	1,078	778	Strato volcano		Resting on the southern slope of Guiauasan caldera.

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (continued)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
Guinsiliban	9°6'N 124°46'E	Guinsiliban, Camiguin Island	581		Strato volcano	Andesite	
Iraya [1]	20°27'N 120°1'E	Batanes, Northern Luzon	1,008		Strato volcano	Andesite, Dacite	Seismic swarms in Sept. and Dec. 1970 were attributed to this volcano.
Iriga (Asog) [1]	13°27'N 123°27'E	Iriga, Camarines Sur	1,143	1,123	Strato volcano	Basaltic andesite	A debris avalanche deposit rests at the foot of an amphitheater facing the southwest.
Isarog	13°39'N 123°21'E	Pili, Camarines Sur	1,976		Strato volcano		
Jolo (Buddajo) [1]	5°55'N 121°10'E	Jolo Island, Southern Mindanao	811		Strato volcano		Eruptions in 1641, 1897.
Jormajan	124°0'E 12°47'N	Irosin, Sorsogon	1,556		Strato volcano		Located 6 km southwest of Bulusan volcano. Nested domes and conelets are found in the summit.
Juban	12°48'N 123°56'E	Juban, Sorsogon	730		Strato volcano		

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (continued)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
Kasiboi	10°52'N 124°53'E	Central Philippines	845		Strato volcano		
Laao	11°7'N 124°42'E	Ormoc, Leyte	1,135		Strato volcano		
Latukan	7°39'N 124°28'E	Poona Bayabao, Lanao del Sur	2,158		Strato volcano		Solfataric
Limbangcavayan	11°55'N 124°29'E	Limbangcavayan Is., Northern Leyte	418	418	Strato volcano		Hosts a number of small domes.
Lobi	11°1'N 124°49'E	Ormoc, Leyte	1,300	800	Strato volcano		Nested inside Proto-Lobi caldera
Macape	11°13'N 124°41'E	Ormoc, Leyte	315	315	Strato volcano		Named after Bo. Macape to its southwest slope. Breached to the west where a subterminous lava flow was extruded.
Macolod	13°49'N 121°5'E	Cuenca, Batangas	947	947	Strato volcano	Andesite	Rests on the southeastern rim of Taal caldera.
Magaso	91°15'N 123°10'E	Negros Island	1,904		Strato volcano		

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (continued)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
Mandalagan	10°36'N 123°13'E	Negros Occidental, Negros Island	1,880		Strato volcano	Basalt	Solfataric.
Maripipi	11°48'N 124°19'E	Maripipi Island, Northern Leyte	924	924	Strato volcano		
Mariveles	14°30'N 120°30'E	Bataan, Western Luzon	1,420	1,420	Strato volcano		
Masaraga	13°19'N 123°22'E	Ligao, Albay	1,328	1,328	Strato volcano	Andesite	
Matutum [1]	6°22'N 125°6'E	Cotabato, Southern Mindanao	2,293		Strato volcano	Andesite	
Mayon [1]	13°15'N 123°41'E	Legazpi City, Albay	2,462	2,462	Strato volcano	Andesite	First recorded eruption 1616; most violent and destructive eruption in 1814; most recent Sept. 1984. Total of 44 eruptions.
Naliwatan	11°40'N 124°20'E	Naval, Biliran Island	1,200	1,200	Strato volcano		Its peak forms the northern rim of Guiauasan caldera.
Nelangcapan	125°16'E 9°56'N	Panaon Island, Southern Leyte	687	687	Strato volcano		Breached to the north.

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (continued)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
Opow	11°25'N 124°18'E	Almagro Island, Northern Leyte	553	553	Strato volcano		
Parker	6°9'N 124°53'E	South Cotabato, Mindanao	2,040		Strato volcano		
Ragang [1]	7°43'N 124°31'E	Cotabato, Northern Mindanao	2,815		Strato volcano		Eruptions in 1756, 1834, 1840, 1856, 1858, 1865, 1871, 1873 1915, 1916.
Sembrano (Jala-Jala)	14°19'N 121°19'E	Jala-Jala Peninsula, Rizal			Strato volcano		
Silay	10°46'N 123°11'E	Negros Occidental, Western Visayas	1,534	1,534	Strato volcano	Andesite	
Smith [1]	19°31'N 121°54'E	Babuyan Island, Northern Luzon	688		Strato volcano	Basalt	Eruptions in 1652, 1831, 1860 1907, 1917, 1918, 1919, 1924.
Biliran [1]	11°40'N 124°24'E	Naval, Biliran Island	929	929	Strato volcano		Named after a barrio on its southwest foot slope.
Unnamed	20°28'N 122°1'E	Batan Island, Northern Luzon			Strato volcano		

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Table 2.3 Main Features of Volcanic Landforms in the Philippines: 1993 (concluded)

Name of volcanic landform	Location		Height		Classification		Remarks
	Latitude/ longitude	Place	Above sea level (m)	Volcanic edifice (m)	Type of volcanic landform	Main rock type	
Camalobagoan	11°37'N 124°31'E	Caibiran, Biliran Island	1,048	1,048	Strato volcano		
Ibugos	20°19'N 121°45'E	Batanes Island, Northern Luzon			Submarine volcano		Submarine volcano to the west of Northern Luzon.
Unnamed	121°45'E 20°20'N	Luzon Strait			Submarine volcano		Unnamed submarine volcano.
Guiauasan	11°37'N 124°29'E	Naval, Biliran Island	1,600	1,600			Hosts a 4-km. summit crateral opening.
Musuan (Calayo) [1]	7°52'N 125°4'E	Valencia, Bukidnon	646		Tuff cone		Steam eruption 1866 or 1867; solfataric activity 1871.

[1] Active.

Source: Philippine Institute of Volcanology and Seismology.

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Table 2.4 Monthly and Annual Frequency of Tropical Cyclones in the Philippine Area of Responsibility (PAR): 1971 - 1993

Year	Total	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1971	27	1	-	1	2	4	2	5	2	3	5	2	-
1972	17	2	-	-	-	-	2	4	2	4	1	1	1
1973	12	-	-	-	-	-	1	2	3	2	3	1	-
1974	23	1	-	-	-	-	2	5	4	2	5	2	2
1975	15	1	-	-	-	-	-	1	3	4	3	2	1
1976	22	1	1	-	1	1	3	3	3	3	1	2	3
1977	19	1	-	-	-	1	1	4	2	4	2	2	2
1978	25	-	-	-	1	-	3	1	7	6	4	2	1
1979	22	-	-	1	1	2	1	3	3	3	4	2	2
1980	23	-	1	1	1	3	2	4	3	2	2	3	1
1981	23	-	1	-	-	-	3	5	4	3	2	3	2
1982	20	-	-	2	-	-	-	5	4	4	3	-	2
1983	23	-	-	-	-	-	-	3	3	4	6	4	3
1984	22	-	-	-	-	-	1	2	8	2	5	3	1
1985	17	1	-	-	-	1	2	2	3	3	4	-	1
1986	19	-	1	-	1	1	2	2	2	1	4	2	3
1987	16	1	-	-	-	1	-	4	3	2	2	2	1
1988	19	1	-	-	-	-	4	3	-	3	6	2	-
1989	19	1	-	-	-	1	2	6	1	2	3	2	1
1990	20	-	-	-	-	3	3	2	3	4	1	3	1
1991	19	-	-	1	1	1	1	4	2	4	2	3	-
1992	15	-	-	-	-	-	2	3	4	1	3	2	-
1993	34	-	1	-	2	1	2	5	5	7	5	2	4

Source: Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA).

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Table 2.5 Total Rainfall and Average Number of Rainy Days by Month and by Principal Island: 1991 to 1993
(Rainfall in millimeters)

Month	Philippines		Luzon		Visayas		Mindanao	
	Monthly rainfall	Number of rainy days	Monthly rainfall	Number of rainy days	Monthly rainfall	Number of rainy days	Monthly rainfall	Number of rainy days
1993								
Annual total	35,838	76	18,929	72	8,248	76	8,661	92
January	3,627	11	1,707	11	1,156	13	765	11
February	5,245	13	1,550	10	1,139	14	2,556	16
March	3,332	8	893	7	1,268	9	1,171	11
April	2,034	6	1,137	6	413	7	483	8
May	2,713	7	1,483	6	274	6	957	12
June	7,098	13	5,171	13	1,081	10	846	15
July	11,789	18	6,988	19	2,917	17	1,883	19
1992								
Annual total	80,841	147	54,837	159	14,059	149	11,946	140
January	3,618	9	2,334	9	920	11	364	7
February	1,248	6	789	6	276	8	183	4
March	1,014	7	585	8	220	7	209	7
April	1,265	5	971	6	128	4	166	5
May	5,039	9	4,068	11	313	7	659	9
June	7,244	16	3,991	14	1,786	17	1,467	18
July	15,353	20	10,441	21	2,682	20	2,230	20
August	15,442	15	12,597	21	2,208	13	638	12
September	10,303	14	7,659	18	1,594	12	1,050	13

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Table 2.5 Total Rainfall and Average Number of Rainy Days by Month and by Principal Island: 1991 to 1993 (concluded)
(Rainfall in millimeters)

Month	Philippines		Luzon		Visayas		Mindanao	
	Monthly rainfall	Number of rainy days	Monthly rainfall	Number of rainy days	Monthly rainfall	Number of rainy days	Monthly rainfall	Number of rainy days
October	9,953	18	5,390	18	2,022	18	2,541	19
November	3,435	13	2,621	13	545	15	269	11
December	6,927	15	3,391	14	1,365	17	2,170	15
1991								
Annual total	86,777	161	54,498	168	18,184	167	14,095	145
January	3,468	15	1,722	15	774	14	972	15
February	4,104	12	2,709	14	930	10	465	10
March	3,337	10	1,302	7	1,499	17	536	6
April	3,468	8	1,923	9	847	9	698	6
May	5,086	11	2,629	8	946	12	1,511	13
June	8,905	15	4,947	15	1,776	15	2,182	15
July	15,319	17	10,554	17	2,538	17	2,227	17
August	11,668	17	9,079	22	1,291	15	1,298	14
September	8,469	15	5,905	20	1,259	11	1,305	13
October	8,539	14	5,466	13	1,849	15	1,224	15
November	7,741	13	4,432	14	2,416	15	893	10
December	6,673	14	3,830	14	2,059	17	784	11

Source: Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA).

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Table 2.6 Average Maximum and Minimum Temperatures, by Month and by Principal Island: 1991 to 1993
(Degree celcius)

Month	Philippines		Luzon		Visayas		Mindanao	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
1993								
Annual average	33.9	20.6	33.9	19.9	33.3	21.5	33.8	20.7
January	32.8	18.6	31.6	17.6	28.9	18.3	33.3	19.7
February	32.3	18.8	32.2	17.6	32.1	20.8	32.7	19.9
March	32.8	19.1	32.8	17.3	32.6	20.9	33.4	19.5
April	34.3	20.7	34.6	20.3	33.8	22.0	34.0	19.9
May	35.5	22.2	35.7	22.1	35.4	22.7	34.7	21.7
June	35.5	22.4	35.8	22.2	36.0	23.1	34.2	22.0
July	34.3	22.2	34.4	22.1	34.4	23.0	34.0	22.0
1992								
Annual average	33.7	21.1	33.4	20.5	33.7	22.2	34.2	20.7
January	32.3	19.0	31.1	18.1	32.1	20.2	33.7	18.7
February	33.6	19.8	35.3	18.9	31.9	21.5	33.8	19.2
March	33.7	21.1	33.6	19.5	33.0	24.1	34.7	19.7
April	35.2	21.6	34.8	21.4	35.4	22.2	35.4	21.2
May	35.5	22.3	34.8	21.9	35.8	23.0	36.0	22.2
June	34.9	22.2	34.2	22.4	35.6	23.0	35.1	21.2
July	33.8	21.7	33.7	21.7	34.1	22.4	33.8	21.2
August	33.9	22.0	33.3	21.8	34.4	23.1	34.0	21.2
September	34.2	21.8	33.3	21.5	34.7	22.5	34.6	21.4
October	33.4	21.6	32.8	20.8	33.5	22.6	34.0	21.5

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Table 2.6 Average Maximum and Minimum Temperatures, by Month and by Principal Island: 1991 to 1993 (concluded)
(Degree celcius)

Month	Philippines		Luzon		Visayas		Mindanao	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
1993								
November	32.5	20.4	32.0	18.8	32.7	21.0	33.0	21.6
December	32.0	20.0	31.7	19.4	31.8	21.1	32.7	19.7
1991								
Annual average	33.0	21.3	32.9	20.7	32.5	22.0	34.3	20.6
January	31.9	19.5	33.1	19.0	31.9	20.9	33.4	19.1
February	32.3	19.6	32.0	19.1	32.5	20.9	33.4	19.1
March	33.2	20.0	32.6	19.8	33.1	20.8	34.7	19.2
April	34.3	21.2	34.2	21.0	33.7	22.0	35.5	20.7
May	34.9	22.6	34.9	22.7	34.9	23.0	35.1	21.7
June	34.9	22.2	34.5	22.1	35.8	23.1	35.1	21.5
July	34.3	21.8	34.4	22.1	34.2	21.9	34.1	21.0
August	29.1	22.1	29.7	21.7	22.6	22.6	34.9	22.4
September	33.7	22.2	33.2	21.9	33.8	23.2	34.8	21.6
October	33.5	21.3	33.5	19.8	-	22.5	34.0	20.7
November	32.6	22.7	31.9	19.6	33.2	21.9	33.8	20.3
December	31.6	19.9	31.0	19.1	31.7	21.5	33.0	19.8

Source: Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA).

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Table 2.7 Annual Average Vapor Pressure by Principal Island by Month: 1991 to 1993 (Millibars)

Month	Philippines	Luzon	Visayas	Mindanao
1993				
Annual average	24.8	24.1	25.6	25.6
January	24.7	23.0	26.3	25.4
February	24.8	22.1	26.5	26.0
March	25.2	24.3	26.7	26.6
April	26.1	26.4	28.3	25.6
May	24.0	24.8	23.1	24.2
June	24.5	24.2	23.9	26.3
July	24.2	23.7	24.5	25.1
1992				
Annual average	28.7	28.3	29.0	28.8
January	27.5	26.5	27.9	28.1
February	26.1	26.3	24.5	27.7
March	27.0	25.5	28.0	27.6
April	29.2	28.7	29.8	29.1
May	30.2	30.1	29.8	30.7
June	29.7	29.9	30.5	28.9
July	29.7	29.9	30.2	29.2
August	30.3	29.9	30.8	30.3
September	30.0	30.2	30.6	29.2
October	30.0	29.6	30.9	29.6
November	28.1	26.5	29.3	28.6
December	26.3	26.3	25.7	27.1
1991				
Annual average	28.7	28.3	29.2	28.8
January	27.3	25.4	27.8	28.7
February	26.9	26.1	27.9	26.9
March	26.8	26.8	26.4	27.4
April	29.2	29.3	29.3	29.2
May	30.3	30.9	30.2	29.8
June	30.8	31.2	30.5	30.9
July	29.4	28.7	31.1	28.6
August	29.9	29.6	30.3	30.0
September	30.3	30.3	30.8	30.0
October	28.1	28.5	28.2	27.8
November	28.3	27.3	29.0	28.8
December	27.4	25.5	28.9	27.9

Source: Philippine Atmospheric, Geophysical Astronomical Services Administration (PAGASA).

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Table 2.8 Mean Sea Level Pressure by Principal Island by Month: 1991 to 1993 (Millibars)

Month	Philippines	Luzon	Visayas	Mindanao
1993				
Annual average	1,011.1	1,011.2	1,010.7	1,011.0
January	1,013.0	1,013.2	1,012.8	1,012.6
February	1,013.1	1,014.0	1,011.8	1,012.6
March	1,012.5	1,013.0	1,012.1	1,011.2
April	1,011.0	1,011.3	1,010.6	1,010.6
May	1,010.0	1,010.2	1,009.8	1,009.4
June	1,009.2	1,008.7	1,009.1	1,010.7
July	1,008.7	1,008.3	1,008.9	1,009.8
1992				
Annual average	1,010.3	1,010.6	1,010.2	1,010.1
January	1,013.8	1,015.1	1,013.7	1,012.6
February	1,013.2	1,014.0	1,013.4	1,012.2
March	1,012.3	1,013.1	1,013.0	1,011.0
April	1,010.2	1,011.1	1,010.1	1,009.5
May	1,008.6	1,009.3	1,008.8	1,007.9
June	1,007.9	1,007.5	1,007.7	1,008.7
July	1,009.1	1,009.0	1,009.1	1,009.4
August	1,007.2	1,006.4	1,007.2	1,008.1
September	1,008.5	1,007.2	1,008.4	1,009.9
October	1,008.5	1,008.4	1,007.5	1,009.6
November	1,010.9	1,011.7	1,010.8	1,010.2
December	1,013.0	1,014.1	1,012.7	1,012.2
1991				
Annual average	1,021.9	1,046.4	1,009.7	1,009.6
January	1,012.0	1,013.9	1,011.5	1,010.6
February	1,012.3	1,014.3	1,012.1	1,010.6
March	1,011.7	1,012.6	1,011.2	1,011.3
April	1,009.3	1,010.9	1,009.6	1,007.5
May	1,009.6	1,009.7	1,009.4	1,009.7
June	1,008.9	1,008.6	1,008.6	1,009.5
July	1,008.5	1,007.7	1,008.6	1,009.2
August	1,007.8	1,006.8	1,007.8	1,008.9
September	1,008.5	1,007.5	1,008.6	1,009.5
October	1,152.1	1,440.3	1,007.6	1,008.6
November	1,010.2	1,011.2	1,010.3	1,009.1
December	1,011.9	1,013.6	1,011.6	1,010.7

Source: Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA).

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Chapter 3
Constitution, Government and Foreign Relations

3.1 Constitution

The development of Philippine constitutionalism may be traced through the different periods in history beginning from the Spanish colonization to the revolutionary period, the American regime, the Commonwealth period, the Japanese occupation and the Philippine Republic.

3.1.1 Historical Background

Before the declaration of martial law in 1972, the Philippine government operated under the 1935 Constitution which was drawn up when the country was a commonwealth of the United States. Before the Commonwealth Constitution, the fundamental law of the country was based on two organic Acts of Congress of the United States: the Philippine Bill of 1902 and the Philippine Autonomy Act of 1916, commonly known as the Jones Law named after the author, Congressman William A. Jones. Prior to these two laws, President Mckinley's Instructions to the Philippine Commission and the Spooner Amendment Act were considered organic in nature. The 1935 Constitution was actually a constitution of two governments: the Commonwealth of that period and the Republic after July 4, 1946. The Commonwealth government was a preparation for self-government for a period of ten years after which the country would be granted full independence from the United States. Under Republic Act No. 6132, known as the 1971 Constitutional Convention Act, some 300 delegates from all over the country convened on June 1, 1971 to draft a new Constitution. This draft was approved on November 29, 1972, eighteen months after the inaugural session and two months after the imposition of martial law. This Constitution was ratified on January 10, and 15, 1973, through the Citizens' Assemblies (*Barangays*). On January 17, 1973, the same Constitution was in full force under Proclamation No. 1102. The 1973 Constitution established a modified parliamentary form of government believed to be suitable to the temperament of the Filipinos at that time. In the modified parliamentary form of government, the President is assisted by the Prime Minister and Members of the Cabinet with close links with the legislative body, then called the Batasang Pambansa. The close relationship between the executive and legislative branches was perceived to be a deterrent to constant deadlocks in the passage of important and urgent laws, and would guarantee smooth operations of the

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government hierarchy. The 1973 Constitution was in force for twelve years until 1986.

Upon her installation into office as President of the Philippines on February 25, 1986, President Corazon C. Aquino promulgated the Freedom Constitution by Proclamation No. 3. This provisional Charter mandated the Chief Executive to reorganize the government and draft a new Constitution.

After establishing the revolutionary government, President Aquino appointed constitutional delegates who would be responsible for the framing of the new constitution. Although they were not chosen by direct vote of the people, the 1986 framers worked under the stringent budget in only 133 days without the President's interference.

The new draft was approved for ratification on October 12, 1986. It was ratified on February 2, 1987 and went into full force immediately. The new Constitution offers the Filipino people freedom based on economic justice, national sovereignty and participatory democracy.

3.1.2 Constitutional Framework

Like all other constitutions, the new Charter starts with a preamble or introductory statement that defines government objectives. There are 18 Articles which will be summarized briefly:

Article I - The National Territory, defines the boundaries and territories belonging legally to the country, including the terrestrial, fluvial and aerial domain, the territorial sea, the seabed and other submarine areas.

Article II - Declaration of Principles and State Policies, states that the Philippines is a democratic and republican State and sovereignty resides in the people. It also states that the Church and State are separate entities and neither one can encroach on the other's domain.

Article III - Bill of Rights, stresses that no person may be deprived of life, liberty or property without due process of law. Some important provisions of this Article are the abolition of the death penalty and the right to bail which should not be impaired even when the privilege of the writ of habeas corpus is suspended.

Article IV - Citizenship, defines those who are Filipino citizens at the time of the adoption of the Constitution. It describes the natural-born citizens, and how citizenship which has been lost may be reacquired.

Article V - Suffrage, states that all citizens of the Philippines have the right of suffrage and no substantive requirement may be imposed in the exercise of it.

Article VI - The Legislative Department. Legislative power is vested in the Congress of the Philippines consisting of the Senate and the House of Representatives. The Senate is made up of twenty-four members and the House of

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Representatives, not more than two hundred and fifty members unless otherwise fixed by law. It also states the qualifications, remuneration and term of office of both Senators and Representatives.

Article VII - The Executive Department, gives the duties and responsibilities of the President and the Vice President. The executive power is vested in the President. The Vice President has the same qualifications and elected in the same manner as the President. However, the President is not eligible for reelection, while the Vice President may serve for two consecutive terms.

Article VIII - The Judicial Department, gives judicial power to the Supreme Court and the lower courts which may be established by law. The Supreme Court is composed of the Chief Justice and 14 Associate Justices. All Justices and Judges of the lower courts are appointed by the President.

Article IX - The Constitutional Commissions. There are three constitutional commissions: the Commission on Elections, the Commission on Audit, and the Civil Service Commission. These Commissions enjoy fiscal autonomy. The Chairman of each Commission and the additional Commissioners are appointed by the President with the consent of the Commission on Appointments.

Article X - Local Government. In the general provisions, the territorial and political subdivisions of the Republic are the provinces, cities, municipalities and the *barangays*. The political subdivisions enjoy local autonomy. They are entitled to an equitable share in the proceeds of the utilization and development of the national wealth within their respective areas. The autonomous regions include Muslim Mindanao and the Cordilleras. These regions shall have an organic act which will define the basic structure of their government consisting of the legislative and executive departments, both of which are elective and representative of the constituent political units.

Article XI - Accountability of Public Officials. Public office is a public trust. Public officers and employees must at all times be accountable to the people to serve them with utmost responsibility, integrity, loyalty and efficiency. The President, Vice President, Members of the Supreme Court, Members of the Constitutional Commissions and the Ombudsman may be removed from office by impeachment. All other public officers and employees may be removed from office as provided by law but not by impeachment.

Article XII - National Economy and Patrimony. The goals of the national economy are a more equitable distribution of opportunities, income and wealth, a sustained increase in goods and services produced by the nation for the benefit of the people and an expanding productivity as the key to raising the quality of life for all especially the underprivileged. In the pursuit of these goals, all sectors of the economy should be given the opportunity to develop.

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Article XIII - Social Justice and Human Rights. Highest priority in the legislative process is the enactment of laws to protect and enhance the right of all people to human dignity and reduce social, economic and political inequalities by diffusing wealth and political power for the common good. The state shall ensure full protection to laborers, local and overseas, and promote full employment and employment opportunities for all. There shall be an agrarian reform program founded on the rights of farmers and farmworkers who are landless to own the lands they till and to receive a just share of the fruits of their toil.

A continuing program of urban land reform shall provide decent housing and basic services to the underprivileged and homeless citizens in the urban areas. An integrated approach to health development should be designed to make essential goods and services available to all people at affordable cost. The state shall protect working women by providing safe and healthful conditions and facilities that will enhance their welfare and enable them to realize their full potential in the service of the nation. The state shall also respect the role of independent people's organizations to enable them to pursue their legitimate interests and aspirations through peaceful and lawful means. A Commission on Human Rights is created to be composed of a Chairman and four Members whose terms of office and other qualifications shall be provided by law.

Article XIV - Education, Science and Technology, Arts, Culture and Sports. The State shall maintain and support a complete and adequate system of education relevant to the needs of the people and society. Free public education is compulsory in the elementary level and eventually in the secondary level. The national language shall be Filipino and shall be further developed and enriched on the basis of existing Philippine and other languages. Priority shall be given to research and development and to science and technology education, training and services. The State shall foster the preservation, enrichment and dynamic evolution of a Filipino national culture based on the principle of unity in diversity in a climate of free artistic and intellectual expression. The State shall promote physical education and encourage sports programs including training for international competitions to foster self-discipline, teamwork, and excellence for the development of a healthy and alert citizenry.

Article XV - The Family is recognized as the foundation of the nation. It should therefore strengthen its solidarity and actively promote its total development.

Article XVI - General Provisions. Among others, the Philippines shall have a flag of three colors: red, white and blue, with a sun and three stars, and will be consecrated and honored by the people. Pensions and gratuities may not be considered as additional or indirect compensation. The Armed Forces are the protectors of the people and country. All members of the armed forces should take an oath of allegiance to uphold and defend the Constitution.

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Article XVII - Amendments or Revisions. Any amendments or revisions to the Constitution may be prepared by the Congress or by constitutional convention.

Article XVIII - Transitory Provisions. One of the transitory provisions is the first election of the Members of the Senate and the House of Representatives which will be held on the second Monday of May 1987. The first local elections shall be determined by the President. The first regular presidential election shall be held on the second Monday of May 1992. The President and the Vice President shall continue in office up to June 30, 1992.

3.2 National Government

With the ratification of the 1986 Constitution, the Philippines returned to the presidential form of government headed by a President. In this set-up, the smooth flow of governmental affairs is undertaken by three departments namely: the legislative, executive and judicial departments.

3.2.1 The Executive Department

The executive official is the President, assisted by the Vice President who is a Member of the Cabinet, and the department secretaries. The President and the Vice President are elected by direct vote for a term of six years. The President is not eligible for reelection but the Vice President may serve for two consecutive terms. The President has the power to nominate and appoint with the consent of the Commission on Appointments, heads of departments, ambassadors, and other public officers whose appointments are vested in him/her by the Constitution. As Commander-in-Chief of the Armed Forces, the President has the power to call on the armed forces to prevent or suppress violence, invasion or rebellion. He may also suspend the privilege of the writ of habeas corpus, or place the country or any part of it under martial law, when public safety requires it. The President may also grant amnesty with the concurrence of a majority of all members of Congress. He may contract or guarantee foreign loans on behalf of the Philippine Republic with the prior concurrence of the Monetary Board and subject to the limitations as may be provided by law.

3.2.2 Legislative Department

The legislative power is vested in the Congress of the Philippines, consisting of the Senate and the House of Representatives. The Congress convenes once a year, but a special session may be called by the President anytime. The Congress has an Electoral Tribunal, which is the sole judge of all contests relating to elections. There is also a Commission on Appointments which meets only during the duration of the sessions of Congress. The Congress has the sole power to declare the existence of a state of war. It also gives authority to the President to exercise powers necessary and proper to carry out a declared national policy.

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3.2.2.1 Summary Statistics on Congress Bills and Resolutions As of December 31, 1993, a total of 11,681 bills were filed at the House of Representatives. These consist of bills of general and local application numbering 2,359 and 9,256 respectively. Of the total, 289 were acted upon by the House of which 31 were enacted or lapsed into law, zero vetoed by the President, 224 approved on third reading and 34 approved on second reading. Similarly, there were 11,615 house bills that were referred to various committees. Of the 31 bills enacted into law, 26 were of general application and 5 were of local application. House resolutions, on the other hand, reached 901 of which 63 were adopted and 898 were referred to various committees. In addition, the House had 34 concurrent resolutions. These are resolutions adopted by both Houses of Congress that do not have the force of law or do not require the signature of the President.

Four of these concurrent resolutions were adopted by both houses, 13 were adopted by the house while 9 are still waiting action by the Senate. The number of bills passed by the Senate and transmitted to the House totalled 39 of which 24 were passed by the House and 13 are still pending.

3.2.2.2 Selected Bills of General Application Enacted Into Law: As of December 31, 1993.

HB 318	Repealing RA 1700 otherwise known as the Anti-Subversion Law	RA 7636
HB 2505	Appropriating P10 B for Rehabilitation Services of Areas Affected by the Eruption of Mt. Pinatubo	RA 7637
HB 2212	Creating the Department of Energy	RA 7638
HB 2139	Providing for the Payment of NAPOCOR Capital Stock Out of the OPS Fund	RA 7639
HB 2581	Constituting the Joint Legislative-Executive Development Advisory Council	RA 7640
HB 317	Providing for Retirement to Private Sector Employees in the Absence of a Retirement Plan	RA 7641
HB 2165	Increasing the Penalties for Tax Evasion	RA 7642
HB 1503	Empowering the BIR Commissioner to Require Monthly VAT Payment to Allow LGU's to Share in it	RA 7643
HB 3811	Extending the Rent Control Period for Certain Residential Units	RA 7644
HB 3192	Appropriating Funds for the Operation of the Government for 1993	RA 7645
HB 1470	Authorizing the BIR Commissioner to Prescribe the Place for Payment of Taxes by Large Taxpayers	RA 7646
HB 4315	Setting the Election in the Autonomous Region in Muslim Mindanao	RA 7647

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HB 8546	Prescribing Urgent Related Measures Necessary and Proper to Effectively Address the Electric Power Crisis	RA 7648
HB 5260	Requiring to Withhold the Value Added Tax Due on Contracts with the Gov't. re-Purchase of Goods, Service by Contractors	RA 7649
HB 3695	Eliminating the Mandatory 10% Physical Examination of Imported Articles	RA 7650
HB 4502	Revitalizing and Strengthening the Bureau of Customs	RA 7651
HB 4906	Allowing Long-Term Lease of Private Lands by Foreign Investors	RA 7652
HB 7037	The New Central Bank Act	RA 7653
HB 8308	Increasing the Ceiling for Registered Wholesale Prices of Locally Manufactured Cigarettes	RA 7654
HB 8153	Increasing the Minimum Wage of Househelpers	RA 7655
HB 11024	Declaring at Least 25% of the Annual Net Profit of GOCC's as Cash Dividends to the National Government	RA 7656
HB 7823	Amending RA 7637, otherwise known as the Mt. Pinatubo Assistance Act	RA 7657
HB 8179	Prohibiting the Employment of Children Below 15 Years of Age	RA 7658
HB 62	Declaring Certain Crimes as Heinous Crimes	RA 7659
HB 7789	Increasing the Rates of Documentary Stamp Tax	RA 7660
HB 10696	Extending the Life of the Committee on Privatization and the Asset Privatization Trust	RA 7661
HB 4698	Providing for Reforms in Legal Education, Creating for the Purpose a Legal Education Board	RA 7662
HB 10900	Appropriating Funds for the Operation of the Government for 1994	RA 7663
HB 2442	Establishing the Aurora State College of Technology	RA 7664
HB 564	Converting the Bulacan College of Arts and Trades into a State College	RA 7665
HB 4210	Converting the Sorsogon College of Arts and Trades into a State College, Integrating therein Certain Schools	RA 7666

3.2.3 The Judicial Department

The judicial power is vested in the Supreme Court and in inferior courts as may be established by law. Judicial power includes the duty of the courts to settle

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actual controversies involving rights which are legally demandable and enforceable and to determine whether there has been a grave abuse of discretion amounting to lack or excess of jurisdiction on the part of any branch or instrumentality of the government. The Supreme Court is composed of the Chief Justice and 14 Associate Justices. Any vacancy has to be filled within 90 days from the occurrence of the vacancy. All cases involving the constitutionality of a treaty, international or executive agreement, shall be heard by the Supreme Court en banc. Cases or matters heard by a division shall be decided or received with the concurrence of a majority of the members who actually took part in the deliberations. The Congress prescribes the qualifications of judges of lower courts, but no person may be appointed judge unless he is a citizen of the Philippines and a member of the Philippine Bar.

The Inferior Courts. Executive Order No. 867 reorganized the judiciary and abolished all existing courts. *Batas Pambansa 129*, otherwise known as Judiciary Reorganization Act of 1980, changed the name Court of Appeals to Intermediate Appellate Court which took effect in 1983. However, in 1986, under the new government, Executive Order No. 33 was issued reverting the name to the original Court of Appeals and also amended 13 sections of the Judiciary Reorganization Act of 1980. It shall be composed of a Presiding Justice and 50 Associate Justices. The Court of Appeals exercises powers, functions and duties through 17 divisions, each composed of three members; the chairman, senior member and junior member.

There are 15 Regional Trial Courts all over the country based on population. These Regional Trial Courts replaced the Courts of First Instance. The Municipal Trial Courts took the place of the City and Municipal Circuit Courts. A Metropolitan Trial Court was created in the Metropolitan Manila Area as established by law.

Special Courts. The *Sandiganbayan* is an entirely new mechanism to combat graft and corruption committed by public officials. It is on the same level as the Court of Appeals. The *Sandiganbayan* is composed of the Presiding Justice and eight Associate Justices, in three divisions, appointed by the President. The *Tanodbayan* is the office of the Ombudsman, an independent body which receives and investigates complaints relative to public office including government-owned and controlled corporations. The Court of Tax Appeals is a special court which specializes in the review of decisions of the Bureau of Internal Revenue, Bureau of Customs and Board of Assessment Appeals.

3.3 Local Government

Republic Act No. 6975, also known as the Department of Interior and Local Government Act of 1990, was approved on December 13, 1990. It established the Philippine National Police under a reorganized Department of Interior and Local Government. It aims to promote peace and order, public safety and effective delivery of basic services to the citizenry. Under this Act, the Depart-

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ment shall consist of the Department Proper, the existing bureau and office of the Department of Local Government; the National Police Commission, the Philippine Public Safety College and the following bureaus; Philippine National Police, Bureau of Fire Protection and Bureau of Jail Management and Penology. However, the staff services for the Department Proper will remain as provided for under Executive Order No. 262.

Pursuant to this Act, the Department shall take the responsibility of preserving internal security while the AFP shall continue its present role of protecting the state from outside forces. This shall be operative 24 months from the effectivity of the Act unless otherwise extended by the President. Meanwhile, the incumbent Secretary of the Department of Local Government shall be the Secretary of the Department until such time when a new Secretary has been appointed by the President and confirmed by the Commission on Appointments. Countryside development is the principal objective of the Local Government Code of 1991 also known as Republic Act 7160 which was signed into law on October 11, 1991 and took effect on January 1, 1992. This is relative to the Department of Interior and Local Government Act of 1990 which focuses on the effective delivery of services to the local constituents of the society. This code provides greater autonomy to municipal and provincial governments. A big portion of the functions of the national government such as public works, maintenance of health systems, education, agricultural support services and social welfare is transferred to the local government.

To carry out these functions effectively, the local government units are given increased share of taxes from the present 11 percent to 40 percent. They are also given increased powers to exact tax and collect fees from their territorial jurisdictions in order to raise revenues. Decision-making powers are now also delegated to local officials.

The Constitution states that no local government unit may be created, divided, merged, abolished or its boundaries substantially altered without the approval of the majority of the votes cast in the unit or units affected. It supports a local government code that will provide for an effective system of recall. It grants supervisory powers to higher government units over their component units. Furthermore, it stipulates that provinces with respect to their component cities or municipalities with respect to their component *barangays*, shall ensure that the acts of their component units are within the scope of their assigned powers and functions.

In the Philippines, there are four types of local government units: the *barangay*, the municipality, the city and the province. However, distinct political subdivisions were created and were considered as local government units since they possess all the elements or requisites of a municipal corporation such as: legal creation, corporate name, inhabitants, place or territory and a charter. These subdivisions are: the National Capital Region (NCR) or Metropolitan Manila, the Cordillera Administrative Region (CAR) and Autonomous Region in Muslim Mindanao (ARMM).

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3.3.1 Attributes of Local Government Units

The local government units (LGUs) exercise both governmental and corporate powers and functions. Governmental powers include powers expressly granted, those necessarily implied therefrom, as well as powers necessary for governance, such as to promote health and safety, enhance property, improve morals, maintain peace and order in government units, and preserve the comfort and convenience of the inhabitants. Corporate powers are the following: to have continuous succession in the corporate seal; to sue and be sued; to possess and utilize a corporate seal; to acquire and transfer real or personal property; to enter into contracts; and to exercise other powers granted to corporations. The corporate existence of a new government unit starts upon the qualifications of its chief executive and a majority of the members of its legislative body, unless some other time is fixed by law.

3.3.2 Local Government Units

The *barangay* is the basic unit of the Philippine political system. It consists of not less than one thousand (1,000) inhabitants residing within the territorial limit of a city or municipality and administered by a set of elective officials headed by a *barangay* chairman *(Punong Barangay)*. Although the *barangay* was conceived originally as a new mechanism through which the citizens could react on public policy and program decisions, recent developments have indicated that it is being transformed into an administrative arm of the government as part of the delivery system of services to the people. The *barangay* has become a vehicle for delivering goods and services at the community level; like assisting national and local government units in the maintenance of peace and order; engaging in cleanliness and beautification campaigns; regulating urban traffic; facilitating the reporting system for census and intelligence purposes; and implementing some aspects of the *barangay* roads program. The *barangay* performs both political and developmental functions under the Local Government Code. It serves as the primary planning and implementing unit of government programs, projects and activities and also as forum in which the collective views of the people in the community may be crystallized and considered.

Municipality. The municipality is a political corporate body which is endowed with the facilities of a municipal corporation, exercised by and through the municipal government in conformity with law. A municipality is a subsidiary of the province which consists of a number of *barangays* within its territorial boundaries, one of which is the seat of government found at the town proper (*Poblacion*). The elective officials of the municipality are the Municipal Mayor, Vice Mayor and *Sangguniang Bayan* members; while the appointive officials are the Municipal Secretary, Treasurer, Assessor, Budget Officer and Planning and Development Coordinator. Positions which may be allowed if necessary are the Municipal Attorney, Personnel Officer, Bookkeeper and Civil Security Officer. The *Sangguniang Bayan* which is the legislative body of the town is composed

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of the Mayor as the Presiding Officer, the Vice Mayor as the Presiding Officer pro-tempore, eight members of the *Sangguniang Bayan* who are elected at large, the President of the Association of *Barangay* Chairmen (ABC) President or *Katipunan Bayan*, the *Kabataang Barangay* Federation and a representative from agricultural and industrial labor sectors appointed by the President of the Philippines.

City. Cities in the Philippines are of two classes: the highly urbanized cities which are independent of the province and the component cities which are part of the provinces where they are located and subject to their administrative supervision. The officials of the city government are the City Mayor, Vice Mayor, *Sangguniang Panlungsod* Members, a City Secretary, City Treasurer, City Engineer, Budget Officer, and a City Planning and Development Coordinator. In highly urbanized cities, additional officials may be appointed, such as the City Legal Officer, City Civil Registrar, City Administrator, Veterinarian, Social Services and Development Officer, General Services Officer and a City Agriculturist. The legislative body of the city which is the *Sangguniang Panlungsod*, is composed of the Vice Mayor as the Presiding Officer, the elective *Sangguniang Panlungsod* as members and the Presidents of the *Katipunang Panlungsod* ng mga Barangay and the City Federation of the *Kabataang Barangay* as ex-officio members. The number of *Sanggunian* members vary according to the population of the city.

Highly urbanized cities are large centers of population and generally have a high degree of economic and cultural development. Component cities, on the other hand, have smaller population and lesser income but are capable of governing themselves independently of their province. According to the Local Government Code, component cities continue to share their income with their respective provinces in the same manner as the municipalities. A highly urbanized city must have a population of at least 150,000 and an average annual income of P30 million. A component city should have a population of 100,000 and an average annual income of P10 million.

Province. The province is the largest unit in the political structure of the Philippines. It consists, in varying numbers, of municipalities and in some cases, of component cities. Its functions and duties in relation to its component cities and municipalities are generally coordinative and supervisory. With the ratification of the 1987 Constitution, the creation of a province is subject to the conditions as provided for under the Local Government Code, in which case, the creation is through the act of Congress. Requirements for the creation of a province are: a territory of at least 3,500 square kilometers, either contiguous or comprising two or more islands; a population of at least 500,000 persons; and an estimated annual income of at least P10 million as certified by the Finance Department. The creation of a province should not reduce the population and income of the mother province to less than the aforementioned requirements. Officials of the provincial government are the Governor, Vice Governor and

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members of the *Sangguniang Panlalawigan* who are elected; and the Provincial Secretary, Treasurer, Assessor, Budget Officer, Provincial Engineer, Agriculturist and a Planning and Development Coordinator who are appointed. The provincial legislature or lawmaking body, known as the *Sangguniang Panlalawigan*, is made up of the Governor, Vice Governor, elective members of the *Sanggunian*, Presidents of the *Katipunang Panlalawigan* and the *Kabataang Barangay* Provincial Federation who are appointed by the President of the Philippines.

Metropolitan Manila and the Autonomous Regions. The National Capital Region (NCR) or Metropolitan Manila, the Autonomous Region in Muslim Mindanao (ARMM) and the Cordillera Administrative Region (CAR) are governed by special laws: PD 824 for Metropolitan Manila, EO 429 for the Autonomous Region in Muslim Mindanao and EO 220 for the Administrative Region in the Cordilleras. Metropolitan Manila is an integrated local government of four cities (Manila, Quezon, Pasay and Kalookan) and 13 municipalities (Las Piñas, Malabon, Makati, Mandaluyong, Muntinlupa, Marikina, Navotas, Parañaque, Pasig, Pateros, San Juan and Taguig in Rizal province and Valenzuela in Bulacan). The ARMM is comprised of the provinces of Sulu, Tawi-Tawi, Maguindanao (excluding Cotabato City) and Lanao del Sur (excluding Marawi City). The CAR, on the other hand, consist of the provinces of Abra, Benguet, Ifugao, Kalinga-Apayao, Mt. Province and the chartered city of Baguio. The governments of the CAR and the ARMM have broad powers. They administer the affairs of the government in the region, and accelerate the socio-economic growth and development of the units in the region. These include the maintenance of schools, operation of health facilities, legislation and implementation of development plans except for national defense, security, banking, trade and foreign affairs. The *Sanggunian Pampook* is the lawmaking body, whose members are duly elected by the people in the autonomous region. The seat of government for CAR is Baguio City while Cotabato City is for ARMM.

3.4 Foreign Relations

Long before the United Nations envisioned an organization of nations, President of the Commonwealth Manuel L. Quezon laid down a foreign policy which stresses that "the people of the earth are interdependent and their prosperity and happiness are inseparably linked with each other, so that international brotherhood and cooperation are necesary." Geographically, the Philippines is situated at the crossroads of international travel lanes, thus it cannot live independently and in total isolation from its neighbors and from the rest of the world. The 1986 Constitution states a new direction on foreign policy which says: "The state shall pursue an independent foreign policy. In its relations with other States, the paramount consideration shall be national sovereignty and the right to self-determination." Another provision in the same Constitution

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says: "The Philippines renounces war as an instrument of national policy, adopts generally accepted principles of international law as part of cooperation and amity with all nations." Therefore, the goals and objectives of Philippine foreign policy are: to promote peace, equality, justice, cooperation and amity with all nations, uphold our sovereignty and independence, safeguard our territorial integrity, assist in the conservation of the national patrimony, develop our economy, improve the quality of life and enhance the human rights and welfare of the Filipino people. In 1990, the Philippine diplomatic relations with other countries continued to gain significant progress. Friendly relations were likewise strengthened despite critical international developments such as the historic transformations in Europe and the Middle East conflict.

3.4.1 ASEAN Affairs

The Association of Southeast Asian Nations (ASEAN) was established on August 8, 1967 in Bangkok, Thailand. Its inital members were Indonesia, Malaysia, Singapore, Thailand and the Philippines. On January 7, 1984, the Sultanate of Brunei formally became the sixth member of the ASEAN. The objectives of the association are to accelerate the economic growth, social progress and cultural development of the region, promote regional peace and stability based on justice and equality and promote active cooperation and mutual assistance on matters of common interest.

In the first ten years of the association's existence, the member nations exercised active cooperation in the achievement of its goals. The Bali Summit of February 1976 proved to be the real breakthrough in its development as this summit paved the way to the signing of the Declaration of the ASEAN Concord and the Treaty of Amity and Cooperation which opened up various cooperation schemes in the field of trade and industry.

The Third ASEAN Summit Meeting held in Manila in December 1987, adopted the Manila Declaration of 1987, otherwise known as the Manila Declaration of ASEAN Resolve. During this summit, the member countries reaffirmed their commitment to ASEAN and agreed to intensify their efforts in the implementation of their objectives. One of the major concerns initiated by the ASEAN was its resolution filed at the 1984 Session of the UN General Assembly for the withdrawal of Vietnamese forces from Kampuchea. Simultaneous with this were the actions made by the association on demanding respect for territorial integrity, withdrawal of foreign military forces in Southeast Asia and bringing to the world's attention the region's grave problem on the influx of refugees from Kampuchea to Thailand.

Although ASEAN was established primarily for intra-regional cooperation, it was necessary to maintain relations with developed countries outside the region particularly in the field of trade and commodity issues.

The year 1990 revealed various developments within the ASEAN Region as well as in the rest of the world. In Europe, the liberation of East European States and the reunification of East and West Germany necessitated new

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assessments and responses on its relations with ASEAN. Also, the Common Market of Europe reaffirmed that a vast European community would soon be integrated into one trading market, thus posing a need for greater cohesion and unity in ASEAN economic policies. In the Middle East, the Gulf War prompted ASEAN to review and revise its plans for future direction and program of action.

In other developments, the member nations of the ASEAN agreed to withdraw or delist project proposals that were consistently ignored by other countries. Trade experts of Japan and ASEAN met for the first time and agreed to improve ASEAN access in Japanese market and to encourage Japanese investment into the region. During the 23rd ASEAN Ministerial Meeting in July 1990, the concept of an ASEAN Treaty of Economic Council (ATEC), Common Effective Preferential Tariff (CEPT) leading to ASEAN Free Trade (AFTA) were discussed and how it can enhance ASEAN relations with other developed countries; and b) substantial matters and proposals were discussed during the 9th ASEAN-EC Ministerial meeting, the ASEAN-EC Economic Ministers Meeting (AEEMM) and, the Asia-PAcific Economic Cooperation (APEC) in relation to its concern on economic, cultural and other forms of cooperation.

The above ASEAN considerations and cooperation were further strengthened during the 4th ASEAN summit on January 27-28, 1992 held in Singapore when its member nations signed diffferent agreements on enhancing ASEAN economic cooperation most important of which is the CEPT scheme for the AFTA. They had also decided on intensifying functional cooperation to enhance ASEAN's strength and solidarity to contribute to the social and economic progress of the region. Lastly, the Presidents's visit to Brunei, Thailand and Malaysia in the past recent years showed our commitment to have a strong relationship with our ASEAN neighbors.

3.4.2 American Affairs

The United States remains to be the primary trading partner of the Philippines and the largest foreign investor. After the expiration of the Laurel-Langley Agreement in 1974, the two nations entered into several trade agreements. some of these agreements pertained to trade in cotton, wool and man-made fiber textile products and the implementation of the "Buy Philippines Program" which is strongly supported by the United States Government to procure local goods and service and to further expand potential markets for Philippine products.

With respect to RP-US bilateral relations, the Philippines has continuously reexamined and renegotiated existing agreements and treaties. In 1976, the renegotiations resulted in the recognition of the Philippines sovereignty over the bases. In 1979, amendments to the Military Bases Agreements (MBA) provided for the periodic review of the MBA every five years with the Philippines still sovereign over the bases.

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Pursuant to the 1979 Amendments calling for a periodic review of the MBA, the 1988 Memorandum of Agreement provided for a compensation package, beginning October 1989, of US $962 million in the form of Economic Support Fund, Military Assistance over the remaining two years of the MBA's duration. Meanwhile, during the May 14-18, 1990 Exploratory Talks held in Manila the Philippine Government resolved to apply "additional assistance" to the so-called shortfalls of the US Government with regards to the compensation. In compliance to the expiration of the 1074 MBA and Section 25 Article XVII of the new Constitution, the Philippine Government gave formal notice of termination of the US bases on September 16, 1991 without extension. This was finally terminated on December 31, 1992. Moreover, the last U.S. military facility (Subic) was turned over to the Philippine Government on November 24, 1992. However, even with the expiration of MBA, the historic bond of friendship between the two countries is continuously being strengthened. The Philippine-American Cooperation Talks (PACT) which was started on September 18, 1990 gave both countries the chance to go beyond the narrow concern of termination or extension (of the MBA) and formulate a mutually acceptable framework that will govern the countries' relations. In view of these events, President Fidel V. Ramos created a committee on July 14, 1992, headed by the Secretary of Foreign Affairs with some government agencies as members, to conduct a review of the Phil-American relations. Thus, a paper was submitted entitled "A Review of RP-US Relations Towards a New Partnership". After the drafting of this paper, special cabinet meetings were held to discuss further matters relating to the new partnership between the two coutries.

Despite the termination of the US bases, the Philippine government showed its openness in continuing ties with the US. Hence in November 1993 President Ramos visited the United States. A wide range of issues were brought up by President Ramos to US President Clinton at their one-on-one meeting in Washington, D.C. Most significantly, this meeting set a new tone to Phil.-US relations. Bilateral relations are to be based more on trade and investment than on aid. The new focus will stress the two countries mutually beneficial economic ties, their common commitment to democracy and respect for human rights, and their shared interest in the continued growth and progress of the Asia-Pacific region.

With regard to regional security, President Clinton renewed U.S. commitment to maintain a credible military presence in East Asia and the Western Pacific. The two Presidents also agreed to strengthen military cooperation under the Mutual Defense Treaty (MDT) framework.

The signing of the Agreement for the continued operations of the US Department of Veterans Affairs in the Philippines on May 5, 1990 provided a heartwarming news to the Filipino veterans of World War II. Through this agreement the Veterans Memorial Medical Center (VMMC) now receives about $500,000 in the form of grants-in-aid and $10 million worth of medicines, medical supplies and equipment from the US Government as reimbursement

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for services extended by war veterans. The signing of the Immigration Act of 1990 on November 29, 1990 paved the way for the naturalization for US citizenship of Filipino veterans who were in active service during World War II. On October 6, 1992 former US President George Bush signed a bill (HB 5678) which allows the processing for US naturalization of Filipino veterans of World War II in Manila, instead of the US.

In the area of cultural relations, the Department of Foreign Affairs (DFA) directly serviced the requirements of the Exchange Visitors Program and participated in the work of the Philippine- American Educational Foundation.

The Governments of Canada and the Philippines still hold strong to their diplomatic relationship as evidenced by the ratification of the RP-Canada Extradition Treaty. Both countries actively made representation to the United Nations for the adoption of a policy on refugees. In 1993, bilateral relations between these two countries become stronger as evidenced by an increase in economic exchanges. There were visits by Canadian trade and investment missions that showed interest in power projects, information technologies, and mineral exploration and development.

On the other hand, relationships with Central and South America were further strengthened with the exchange of visits of high- level representatives as well as artists and cultural performers. Improved economic relations was marked by the increased efforts of Philippine missions in promoting the export of nontraditional products. Furthermore, ties were strengthened by signing the Constitutive Act of the Philippine Mexico Friendship Association, the conclusion of a visa-waiver agreement for government officials with Cuba and exchange visits of some top officials of both governments to discuss possible industrial projects.

3.4.3 Asian and Pacific Affairs

Philippine diplomatic exchanges with its neighbors in Asia and the Pacific Region with which the country has long-standing relationships continues to gain strength. They provide opportunities for trade, investment, technology transfer, export market for skilled labor and tourism. These countries include Japan, Korea, China, India, Pakistan, Bangladesh, Sri Lanka, Australia, New Zealand, Papua New Guinea and other newly- independent states of the region.

One of the major contributors to Philippine affairs is Japan. It provides work opportunities, rehabilitation, project development aid and technical training and tourism inflow. Bilateral economic cooperation especially after the July 16, 1990 earthquake and the onset of the crisis in the Gulf was also enhanced. Likewise, exchange of visits to strengthen friendly and diplomatic relations were pursued. The relations with the People's Republic of China (PROC) has grown considerably with the resumption of Philippine-China high-level official exchanges. Tourism and business opportunities with PROC gained progress while trade between the two countries expanded rapidly. This was evidenced

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by the signing of an Investment Protection Agreement between the two countries in July 1992 here in Manila.

The Philippine socio-economic concerns have constantly gained support from the two countries. The Republic of Korea especially on areas of rural community development and land reform. The Republic of Korea also extended help in the country's efforts for rehabilitation.

Trade markets and bilateral relations with other regional neighbors such as India, Vietnam, Papua New Guinea and the small island countries in the Pacific were likewise expanded. Recently accession of Laos and Vietnam to the Treaty of Cooperation in Southeast Asia indicated a significant step in regional cooperation and achievement of peace and security in Southeast Asia. The establishment of a Vice Consulate in Saipan and the opening of embassy in the Federated States of Micronesia and Marshall Islands fostered closer ties particularly in the field of politics, culture and economics. In the pursuit of a permanent political solution to the Cambodian problem and of Indochinese refugees and asylum-seekers, intensified consultations among the ASEAN countries were made. Countries in this region also worked for the security of the Asia-Pacific, the reunification of North and South Korea as well as the establishment of an Asia-Pacific Economic Cooperation (APEC). The Philippine Government, likewise, actively participated in the formulation of Philippine position and guidelines on major policy issues under consideration such as the One-China Policy and the proposed legislation on Philippines-Taiwan relations; visa policies towards nationals of certain countries, including the so-called "restricted" countries; and the Sabah question and related issues. Continued development assistance with Australia and New Zealand is being maintained specifically on areas of education, agriculture, health, economics and environmental issues. Moreover, consultative dialogues were done to further strengthen friendly and diplomatic bonds.

3.4.4. European Affairs

State visits were exchanged by the Philippines and Eastern Europe to express support for each other's government and also to conclude mutually beneficial projects and agreements. Consultations were undertaken for the implementation of new policies on trade relations such as the liberalization of entry rules for Eastern European nationals, negotiation of agreements with the USSR and Yugoslavia, encouragement of direct trading of private entities with Eastern European firms, and the intensification of business relations with Hungary.

On the other hand, close and friendly ties with Western Europe were likewise intensified. The Philippines gained concrete manifestation of support from these countries by way of official visits and dialogues. The Western European countries were among the first to come to the aid of the Philippines after the July 16, 1990 killerquake and the typhoon Ruping that devastated the

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southern part of the country. They were also among those who assisted in the repatriation of Filipinos in the Gulf at the outbreak of the war.

Philippine relations with the European Community (EC) was further improved when the two governments agreed for the establishment of a delegation of the EC Commission in Manila. In the pursuit of a stronger cultural relations, the revival of cultural accords specifically with Spain, Italy and France were dealt with.

3.4.5 Middle East and African Affairs

The Gulf crisis was the focus of Philippine diplomatic relations in the region in 1990. Appropriate actions were taken particularly those necessary to protect national interests such as the evacuation and repatriation of almost 30,000 Filipinos and ensuring the safety of those who were caught in the crossfire. In 1991, much of the activity was then focused on the continued relocations and in many cases repatriation of displaced Filipino workers in the affected countries.

Even before the outbreak of the war and especially after it ended, the demand for Filipino manpower in the Middle East boomed. The Philippine government coordinated with various Middle East governments to secure jobs for thousands of displaced Filipino workers as well as those who had long been seeking for employment.

Significant attention was also given to the Moro National Liberation Front (MNLF) problem. In 1991, the Philippine government extended assistance to talks regarding the President's amnesty and reconciliation program to MNLF Chairman Nur Misuari. A conference workshop was organized by the Department of Foreign Affairs through the Office of Middle Eastern and African Affairs (OMEAA) to review the bid of the MNLF for a full membership in the Organization of Islamic Conference (OIC). Thus, in the 19th Islamic Conference of Foreign Ministers in Cairo the membership issue failed once more since it was not included in the agenda as a result of the joint efforts of the DFA and the OMEAA. Relationships with Palestine gained strength with the establishment of a resident Palestinian embassy in Manila. The Philippines also participated in a regional conference on the Palestinian question on independence and self-government held in Buenos Aires in February 1990. In 1991 the Philippine government was directly involved in sending observer and goodwill missions to meetings such as the 20th Islamic Conference of Foreign Ministers and the 6th Islamic Summit. Here, favorable reactions were given by OIC in the passages of important resolutions which recognizes the Philippine government's efforts concerning the conditions and needs of our citizens in the south. Also, particular interest in South Africa was seen and there were proposals on sending immediate trade mission in 1992.

At the same time it strongly supported the newly proclaimed independence of Namibia and offered to build closer relations in economic, educational and cultural fields.

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3.4.6 Participation in the United Nations

Philippine participation in the United Nations System and its specialized agencies and international organizations was directed primarily to activities relating to political and security issues, trade and development, food and agriculture, science and technology, human settlements and the environment, and social and humanitarian concerns such as those relating to women and the youth, refugees and disabled persons. These activities keep the nation abreast with current information on development and serve as sources of technical and financial assistance as well. During the 45th Session of the United Nations General Assembly, the Philippine delegation together with the ASEAN Chairman from Malaysia, strongly supported the question on Cambodia which gained favors from the General Assembly. It has also expressed its strong disapproval of apartheid, the institutionalized system of racism in South Africa. The government together with the 17 other members of the Special Committee Against Apartheid intensified their international campaign to end this racial segregation through the implementation of resolutions and program of action for 1990. In 1992, apartheid laws were repealed hence, revisions in the Philippine policy towards South Africa were adopted. On October 21, 1992, the 47th session of the UN General Assembly adopted by, consensus, a resolution co-sponsored by 63 member states entitled "Emergency Assistance to the Philippines". The resolution was submitted by the Philippines in order to support the appeal for international assistance to the victims of Mt. Pinatubo disaster.

Another significant participation of the Philippine delegation in the Assembly was the election of two of its representatives as officers of the Special Political Committee and the Third Committee. The former, handled issues relating to information, protection and security of small states and peacekeeping operations while the latter covered social, humanitarian and cultural issues. In line with the Gulf conflict, the Philippines joined the international community in condemning the Iraqi invasion of Kuwait. It supported all Security Council Resolutions including Resolution 661 of 1990 which imposed trade and economic sanctions against Iraq and Kuwait. In 1991 and 1992, Philippine government had exhausted all its efforts in coordinating with the different United Nations offices or committees in giving assistance to the displaced Filipino contract workers and its claims and compensation.

In 1991 the Philippines was simultaneously elected to three posts in three major bodies of the UN. Beginning January 1992, the Philippines will sit as a member of the UN Economic and Social Council (ECOSOC). It has won its re-election bid for a seat in the council of the International Maritime Organization (IMO) and finally it has won in the 51 member Executive Board of United Nations Educational, Scientific and Cultural Organization (UNESCO).

In connection with the country's stand on nuclear armaments, the country maintained its firm position that a Comprehensive Test Ban Treaty is necessary to ensure the success of the Nuclear Non- Proliferation Treaty (NPI).

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3.4.7. International Organizations in the Philippines

Organization	Address
Agency for International Development of the USA (AID)	Ramon Magsaysay Center 1680 Roxas Blvd., Manila Tel. 521-71-16
Asian Development Bank (ADB)	6 ADB Avenue 1501 Ortigas, Mandaluyong Metro Manila Tel. 632-44-44
Food and Agricultural Organization of the United Nations (FAO)	NEDA *sa* Makati Building 106 Amorsolo Street Legaspi Village, Makati Metro Manila Tel. 85-06-11 to 25
Intergovernmental Committee for Migration (ICM)	Victoria Building 429 United Nations Ave. Ermita, Manila Tel. 521-38-12
International Committee of the Red Cross (ICRC)	ERECHEM Building Herrera/Salcedo Streets Legaspi Village, Makati, M.M. Tel. 87-89-51; 815-84-46
International FinanceCorporation (IFC)	Rm. 416 Five-Storey Bldg. Central Bank of the Philippines A. Mabini St., Malate, Manila Tel. 521-16-64
International Labor Organization (ILO)	NEDA *sa* Makati Building 106 Amorsolo Street Legaspi Village, Makati, M.M. Tel. 85-06-11
International Monetary Fund (IMF)	Rm. 407 Five-Storey Bldg. Central Bank of the Philippines A. Mabini St., Malate, Manila Tel. 59-74-61
International Rice Research Institute (IRRI)	Los Baños, Laguna Tel. 742-07-17
Joint United States Military Assistance Group to the Republic of the Philippines (JUSMAG)	Patio Madrigal, Seafront Cmpd. Pasay City, Metro Manila Tel. 742-05-80
United Nations Children's Fund (UNICEF)	NEDA *sa* Makati Building 106 Amorsolo Street Legaspi Village, Makati

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	Tel. 85-06-11
United Nations Development Program (UNDP)	NEDA *sa* Makati Building 106 Amorsolo Street Legaspi Village, Makati Tel. 85-06-11
United Nations High Commissioner for Refugees (UNHCR)	JEG Building 150 Legaspi Street Legaspi Village, Makati Tel. 818-51-21
United Nations Information Center (UNIC)	NEDA *sa* Makati Building 106 Amorsolo Street Legaspi Village, Makati Tel. 85-06-11
United Nations for Population Activities (UNFPA)	NEDA *sa* Makati Building 106 Amorsolo Street Legaspi Village, Makati Tel. 85-06-11
United Nations Fund for Population Activities (UNFPA)	NEDA *sa* Makati Building 106 Amorsolo Street Legaspi Village, Makati Tel. 85-06-11
World Bank (WB)	Rm. 200 Multi-storey Bldg. Central Bank of the Phils. A. Mabini St., Malate, Manila Tel. 521-13-17
World Food Program (WFP)	NEDA *sa* Makati Building 106 Amorsolo Street Legaspi Village, Makati Tel. 816-40-98
World Heath Organization (WHO)	WHO Building United Nations Ave., Manila Tel. 521-84-21 or Tuberculosis Bldg., DOH Cmpd. Sta Cruz, Manila Tel. 711-67-16

3.4.8 Foreign Diplomatic Posts in the Philippines: (As of January 31, 1994)

Country	Ambassador	Address
Argentina	Ana Maria Bianchi	6/F, ACT Tower 135 Sen. Gil Puyat Ave.

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		Salcedo Village Makati, Metro Mla. Tel. 88-60-91; 87-56-55
Australia	John Quinn	1-5/Flrs., Doña Salustiana Dee Ty Tower, 104 Paseo de Ro Makati, Metro Manila Tel. 817-79-11
Austria	Guenther Gallowitsch	4/F, Prince Building 117 Rada St., Legaspi Village Makati, Metro Mla. Tel. 817-91-91; 817-49-92
Bangladesh	M.A. Samad	2/F, Universal-Re Building 106 Paseo de Roxas cor. Perea Sts., Legaspi Village Makati, Metro Mla. Tel. 817-50-10/01
Belgium	Johan H. Ballegeer	6/F, Don Jacinto Bldg. Dela Rosa cor. Salcedo Sts. Legaspi Village, Makati Tel. 87-65-71
Brazil	Antonio Carlos Coelho da Rocha	6/F, RCI Building 105 Rada St., Legaspi Village Makati, Metro Manila Tel. 88-81-81; 85-61-66
Brunei Darussalam	Dato Paduka Malai Ahmad Murad Bin Syed Haji Mashore	11/F, Ayala Wing Bank of Phil. Islands Bldg. Ayala Ave., cor Paseo de Roxas Makati, Metro Mla. Tel. 816-28-36 to 38
Canada	Stephen Henry Heeney	9 & 11/Flrs., Allied Bank Centre 6754 Ayala Ave., Makati, M.M. Tel. 815-95-36
Chile	Patricio Rodriguez Renteria	6/F, Doña Salustiana D.T. Tower 104 Paseo de Roxas Legaspi Vill.,Makati, Metro Mla. Tel. 816-03-95; 810-31-49
China (PROC)	Huang Guifang	4896 Pasay Road Dasmariñas Village Makati, Metro Mla. Tel. 86-77-15; 85-31-48
Colombia	Stella Marquez deAraneta	18/F, Aurora Tower Araneta Center Quezon City, Metro Manila Tel. 921-27-01 loc. 214

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Cuba	Jose Luis Martin Portal	11/F, Rms. 1103 & 1104 Heart Tower Condominium 108 Valero St., Salcedo Village Makati, Metro Manila Tel. 817-11-92; 816-40-94
Czech Rep.	Milan Duchacek	3/F, Quadstar Building Ortigas Ave., Greenhills San Juan, Metro Manila Tel. 70-86-26/97
Denmark	Mogens Jensen	6/F, Salustiana Dee Ty Tower 104 Paseo de Roxas cor Perea Sts. Legaspi Village, 1226 Makati, M.M. Tel. 819-19-06/07/50
Egypt	Kamal Bahgat Abdel Motaal	2229 Paraiso cor. Banyan St. Dasmariñas Village Makati, Metro Manila Tel. 88-03-96/97
Finland	Juha Kuusi	14/F, BPI Building Ayala Ave., cor Paseo de Roxas Makati, Metro Manila Tel. 816-21-05 to 09
France	Olivier Gaussot	The Pacific Star Building 16/F, Makati Ave., cor. Sen. Gil Puyat Ext., Makati, Metro Mla. Tel. 810-19-81 to 88
Germany	Peter Scholz	6/F, Solidbank Building 777 Paseo de Roxas Street Makati, Metro Manila Tel. 86-49-06 to 09; 86-49-00
Holy See	Archbishop Gian Vincenzo Moreni	2140 Taft Avenue Manila Tel. 521-03-06/07
Hungary	Janos Chalapu	1267 Acacia Road Dasmariñas Village Makati, Metro Manila Tel. 812-92-54
India	Shyamala Cowsik	2190 Paraiso Street Dasmariñas Village Makati, Metro Manila Tel. 87-33-39; 87-24-45
Indonesia	Piter Damanik	Indonesian Embassy Bldg. 185 Salcedo St., Legaspi Village Makati, Metro Manila P.O. Box 1671 MCPO 1299

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		Tel. 85-50-61 to 68
Iran	Abdulazim Hashemi Nik	4/F, Don Jacinto Bldg. Salcedo cor. Dela Rosa Sts. Legaspi Village Makati, Metro Manila Tel 87-15-61 to 63; 812-56-96/97 86-64-31
Iraq	Neama Faris Hussein Al-Muhjawi	2261 Avocado Street Dasmariñas Village Makati, Metro Manila Tel. 817-92-42; 813-30-67
Israel	Amos Shetibel	5/F, PS Bank Building 6813 Ayala Avenue Makati, Metro Manila P.O. Box 1697, MCPO 1256 Makati, Metro Manila Tel. 88-53-29; 88-53-20; 86-36-45
Italy	Alessandro Serafini	6/F, Zeta Building 191 Salcedo St., Legaspi Village Makati, Metro Manila Tel. 87-45-31 to 34
Japan	Hirokazu Arai	375 Sen. Gil Puyat Ave. Makati, Metro Manila Tel. 818-90-11 to 19 P.O. Box No. 891 Makati Central Post Office
Korea	Chang Soo Lee	3/F, Alpap I Building 140 Alfaro St., Salcedo Village Makati, Metro Manila Tel. 817-57-03 to 05
Libya	Rajab Abdulaziz Azzarouz	2416 Bougainvilla Street Dasmariñas Village Makati, Metro Manila Tel. 810-89-42
Malaysia	Dato Zainuddin Bin Abdul Rahman	107 Tordesillas Street Salcedo Village Makati, Metro Manila Tel. 817-45-81 to 85
Malta	Jose M. Zaragoza (Sovereign Military Order)	102 Gamboa Street Legaspi Village Makati, Metro Manila Tel. 88-14-84
Mexico	Vicente Luis Coca Alvarez	2/F, Adamson Center Bldg. 1221 Alfaro St., Salcedo Village

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		Makati, Metro Manila Tel. 85-73-23; 815-25-66 812-40-65
Myanmar (Burma)	U Oung Oung	4/F, DAO II Bldg. Basic Petroleum Bldg. 104 Palanca, Jr. Street Legaspi Village, Makati P.O. Box 1070, MCPO Makati, Metro Manila Tel. 817-23-73
Netherlands	Lambert Jan Hanrath	King's Court Building 2129 Pasong Tamo St. Makati, Metro Manila Tel. 812-59-81 to 83
New Zealand	Harle Freeman-Greene	3/F, Gammon Centre 126 Alfaro St., Salcedo Village Makati, Metro Manila P.O.Box 3228 MCPO 1272 Makati Tel. 818-09-16; 815-63-01
Nigeria	S.I. Ajewole	2211 Paraiso Street Dasmariñas Village Makati, Metro Manila Tel. 817-38-36/37/51/52
Norway	Lars Tangeraas	69 Paseo de Roxas Urdaneta Village Makati, Metro Manila P.O.Box 3344, MCPO Makati, M.M. Tel. 88-11-11; 815-98-66 88-02-90; 88-04-69
Pakistan	M. Afzal Qadir	6/F, Alexander House 132 Amorsolo St., Legaspi Village Makati, Metro Manila Tel. 817-27-60/72/76
Palestine	Musa Amer S. Odeh	1201 Tamarind Road Dasmariñas Village Makati, Metro Manila Tel. 817-01-50
Panama	Jorge Luis Perez Moreno	Rm. 501, Victoria Building 429 United Nations Ave. Ermita, Manila Tel. 58-32-77; 521-12-33
Papua New	Andrew I. Temu	2280 Magnolia Street Guinea Dasmariñas Village Makati, Metro Manila

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		Tel. 810-84-56/57
Romania	Dumitru Mazilu	1216 Acacia Road Dasmariñas Village Makati, Metro Manila Tel. 810-94-91/93
Russian Federation	Vitaly B. Koutchouk	1245 Acacia Road Dasmariñas Village Makati, Metro Manila Tel. 810-96-14; 85-01-90 810-95-81
Saudi Arabia	Fouad Hasan Faki	Saudi Embassy Building 389 Sen.Gil J. Puyat Ave. Ext. Makati, Metro Manila Tel. 817-33-71
Singapore	Rengaraju Raj Kumar	6/F, ODC Int. Plaza Bldg. 219 Salcedo St.,Legaspi Vill. Makati, Metro Manila Tel. 816-17-64/65; 816-21-15/16
Spain	Herminio Morales Fernandez	6/F, ACT Tower 135 Sen.Gil J. Puyat Ave. Salcedo Village Makati, Metro Manila Tel. 818-35-61/81; 818-55-26
Sweden	Christofer Gyllenstierna	16/F, PCI Bank Tower II Makati Ave. cor. Dela Costa St. Makati, Metro Manila Tel. 819-19-51
Switzerland	Hanspeter Strauch	18/F, Solidbank Bldg. 777 Paseo de Roxas Makati, Metro Manila P.O.Box 2068 MCPO 1260 Makati, M.M. Tel. 819-02-02
Thailand	Sorayouth Prompoj	Royal Thai Embassy Bldg. 107 Rada St., Legaspi Vill. Makati, Metro Manila Tel. 815-42-20
Turkey	Erhan Yigitbasioglu	2268 Paraiso Street Dasmariñas Village Makati, Metro Manila Tel. 817-54-85; 810-89-82
United Arab Emirates	Hassan Mohammed Obaid Al-Suwaidi	2/F, Renaissance Building 215 Salcedo St., Legaspi Vill. Makati, Metro Manila

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		Tel. 817-39-06
United Kingdom of Great Britain and Northern Ireland	Alan Everard Montgomery 1	5-17/Flrs. L.V. Locsin Bldg. 6752 Ayala Ave., cor Makati Ave. 1226 Makati, Metro Manila Tel. 816-71-16; 816-72-71
United States of America	John Negroponte	1201 Roxas Blvd., Manila Tel. 521-71-16
Venezuela	Maria Tibisay Urdaneta Troconis	6/F, Majalco Bldg Benavides cor. Trasierra St. Legaspi Village, Makati, M.M. MCPO Box 2738 Tel. 817-91-18/37
Vietnam	Vu Quang Diem	554 Vito Cruz Street Malate, Manila Tel. 50-03-64; 521-68-43 58-60-41

3.4.9 Philippine Embassies, Consulates and Special Missions Abroad:(As of February 28, 1994)

Location	Ambassador/Consul	Address
Abu Dhabi (E)	Fortunato F. Oblena	1/F, Al-Samman Tower Sheikh Hamdan St., Abu Dhabi United Arab Emirates (UAE) P.O.Box 3215 Tel. 34-56-64/65; 33-49-98
Agana (CG)	Rolando M. Libas	Suite 406, GITC Bldg. Tamuning, Guam 96931 P.O.Box 9880 Tamuning, Guam 96931 Tel.(671) 646-46-20/30 646-79-65
Ankara (E)	Bonifacio P. Arribas	No. 24 Cayhane Sokak Gaziosmanpasa, Ankara, Turkey Tel. 146-58-31; 146-57-34
Athens (E)	Jose U. Fernandez	Xenofondos 9, Syndagma Athens, Greece 100557 Tel. 681-33-74; 324-16-15 to 17
Baghdad (E)	Rafael E. Seguis	Mahalat 929, Zukak 6 House #8, Hay Babil Al-Masbah, Baghdad Republic of Iraq

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		P.O.Box 3236 Tel.(9641) 718-55-44; 719-32-28
Bandar Seri Begawan (E)	Juan V. Saez	4 and 5/F, Badiah Bldg. Mile 1 Jalan Tutong Bandar Seri Begawan Brunei Darussalam P.O.Box 3025 B.S.B. 1930 Tel. (02) 24-14-65/66
Bangkok (E)	Rosalinda V. Tirona	760 Sukhumvit Rd., Bangkok Kingdom of Thailand Tel. 259-01-39/40
Beijing (E)	Felipe H. Mabilangan, Jr.	23 Xiu Shui Bei-jie Jianguomenwai, Beijing People's Republic of China Tel. 532-27-94; 532-25-18 532-24-51
Berlin (EO)	Constancio R. Vingno (Officer-in-Charge)	Philippine Extension Office Hohenzollerndamn 196 1000 Berlin 31, Germany Tel. (030) 251-48-11
Berne (E)	Tomas T. Syquia	Hallwylstrasse 34 3005 Berne, Switzerland Tel. (031) 351-42-11/12
Bonn (E)	Francisco V. del Rosario	Argelander-Strasse 1 5300 Bonn 1, West Germany Tel. (0228) 267-99-16/24 267-990
Brasilia	Jose Macario Laurel, IV	San Avenida das Nacoes Lote 01, 70.431 Brasilia D.F. Brazil P.O. Box 02295 70349 Brasilia, D.F., Brazil Tel. (061) 224-86-94; 223-51-43 226-10-15
Brussels (E)	Alberto A. Pedrosa	85 Rue Washington 1050 Brussels Kingdom of Belgium Tel. (332)-(02) 533-18-11 533-19-06
Bucharest (E)	Wilfredo R. Cuyugan	Str. Vasile Conta Nr. 12 Bucharest, Romania Tel. 312-00-83; 311-01-99 311-14-99
Budapest	Franklin M. Ebdalin	1025 Budapest II

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(E)		Jozsephegy UT 28-30, C-5 Budapest, Hungary Tel. (361) 115-32-20/21 135-58-52
Buenos Aires	Carlose Alberto Villa Abrille y Oteyza	Juramento 1945, 1428 Buenos Aires Argentine Republic Tel. 781-41-73/75; 783-81-71
Cairo (E)	Menandro P. Galenzoga	5 Ibn El-walid St. Dokki, Cairo Arab Republic of Egypt Tel. 348-03-96/98/94/93/91
Canberra (E)	Rora N. Tolentino	1 Moonah Place Yarralumla, Canberra A.C.T. 2600, Australia P.O.Box 3297 Manuka A.C.T. Canberra, Australia Tel. (06) 273-25-35/36
Chicago (CG)	Diosdado R. Orocio	30 North Michigan Avenue Suite 2100 Chicago Illinois, 60602 USA Tel. (312) 332-64-58/59 332-65-13
Dhaka (E)	Mac Arthur F. Corsino	House 7, Blk. K, Rd. 2 Baridhara Model Town, Dhaka People's Rep. of Bangladesh Tel. 88-36-86; 60-59-45 60-00-77
Doha (E)	Mariano A. Dumia	4040 Al-Wahda West Bay, Doha State of Qatar P.O.Box No. 24900 Tel. 83-15-85/94
Geneva (CG/M)	Jaime J. Yambao	47 Ave. Blanc 1202 Geneva, Switzerland Tel. 31-38-20/29; 31-68-88
The Hague (E)	Romeo A. Arguelles	125 Laan Copes Van Cattenburch 2585 EZ The Hague Kingdom of the Netherlands Tel. (070) 360-48-20/21 365-43-93
Hamburg (CG)	Bayani V. Mangibin	Jungfrauental 13 20149 Hamburg 13, Germany Tel. (040) 44-29-52/53

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Hanoi (E)	Francisco F. Santos	27-b Tran Hung Dao Street Hanoi, Socialist Rep. of Vietnam Tel.(84) 25-78-73; 25-79-48 26-18-26
Havana (E)	Erlinda F. Basilio	Sta. Avenida No. 2207 Esquina a Calle 24, Miramar Ciudad dela Habana, Cuba Tel. 33-23-77
Hongkong (CG)	Ofelia B. Castano	21-22 Flrs. Wah Kwong Regent Centre 88 Queens Rd., Central Hongko Tel. (852) 810-01-83
Honolulu (CG)	Solita M. Aguirre	2433 Pali Highway Honolulu, Hawaii 96817 Tel. (808) 595-63-16 to 19
Islamabad (E)	Ernesto V. Llamas	H. 19, St. 1 Shalimar 6/3, Islamabad Islamic Rep. of Pakistan P.O. Box 1052 Tel. 21-26-54; 21-27-21 22-12-18
Jakarta (E)	Eusebio A. Abaquin	Jalan Imam Bonjol 6-8 Jakarta, Pusat Rep. of Indonesia Tel. (6221) 310-03-02/45 315-51-18
Jeddah (CG)	Candidato B. Gutoc	Sarhan Al-Ajmawi Street Al-Faisaliyyah District 1 P.O.Box 4794 Jeddah 21412 Kingdom of Saudi Arabia Tel. 660-03-48; 667-09-25
Kobe (CG)	Victor G. Garcia III	Taiwa Bldg., 4/F 18-1 Akashi-Machi Chou-ku, Kobe, 650 Japan Tel. (078) 331-94-71 to 74
Kuala Lumpur (E)	Alberto A. Encomienda	No. 1 Changkat Kia Peng 50450 Kuala Lumpur Malaysia Tel. 248-42-33; 242-15-08 248-99-89
Kuwait (E)	Shulan C. Primavera	Villa No. 363, Area 10 Police Station Street

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		Jabriya, Kuwait P.O. Box 13123, Kuwait Tel. 532-93-16 to 18
Lagos (E)	Mukhtar M. Muallam	Plot 152 (House B) 302 Road, Off 3rd Avenue Victoria Island Annex P.O. Box 2948 Lagos, Fed. Rep. of Nigeria Tel. 61-40-48
London (E)	Jesus P. Tambunting	9A Palace Queen London WB 4QE United Kingdom of Great Britain and Northern Ireland Tel. (071) 937-16-00; 937-91-55
Los Angeles (CG)	Edwin D. Bael	3660 Willshire Blvd. Suite 900 Los Angeles California 90010 Tel. (213) 387-53-21
Madrid (E)	Isabel Caro Wilson	Claudio Coello 92 28006 Madrid Kingdom of Spain Tel. 576-54-01 to 403; 575-86-82
Manado (CG)	Rodrigo S. A. Aragon	8 Jalan Luminuut Tikala Kumaraka Manado City Tel. (0062) (0431) 623-65; 621-81
Manama (E)	Leonides T. Caday	Bldg. No. 81 Umm Al Hassam Road No. 3902 Block No. 339 Manama, Bahrain Tel. 72-53-55; 72-85-50 72-97-57
Mexico (E)	Samuel T. Ramel	Calderon de la Barca #420 Colonia Reforma Polanco Delegacion Miguel Hidalgo 1150 Mexico, D. F. Tel. 254-80-55; 254-82-30 254-84-41
Moscow (E)	Romualdo A. Ong	Karmanitsky, Pereulok 6 Moscow, Union of Soviet Socialist Republic Tel. (795) 241-05-63 to 65
Muscat (E)	Sanchez A. Ali	Square 4, Way 3019 Villa No. 1617

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		Shati Al Qurm City, Muscat P.O. Box 420 Madinat, Qaboos Sultanate of Oman 115 Tel. 69-99-69
Nairobi (E)	Edmundo B. Libid	State House Road P.O. Box 47941 Nairobi, Rep. of Kenya Tel. 72-58-97; 72-17-91
New Delhi (E)	Juanito P. Jarasa	50 N Nyaya Marg. Chanakyapu New Delhi 110021 Republic of India Tel. 60-11-20; 60-35-11; 60-69-8
New York (CG)	Ma. Lourdes Ramiro-Lopez	Philippine Center 556 Fifth Avenue New York, New York 10036-5095 Tel. (212) 764-13-30/37
UN New York (M)	Narcisa L. Escaler (Permanent Rep.)	Philippine Mission to the United Nations Philippine Center 556 Fifth Avenue New York, New York 10036 Tel. (212) 764-13-00; 704-73-22
Ottawa	Pacifico A. Castro	130 Albert Street Suite 606, Ottawa Ontario KIP 5G4, Canada Tel. (613) 233-11-21
Paris (E)	Rosario G. Manalo	4, Hameau de Boulainvilliers 75016 Paris, Republic of France Tel. 44-14-57-00 (Chancery) 44-14-57-01 to 03 (Consulat
Port Moresby (E)	Rodolfo L. Diaz	P.O.Box 5916, Boroko N.C.D., Port Moresby Papua New Guinea Tel. 25-65-77; 25-64-14 21-21-15
Riyadh (E)	Romulo M. Espaldon	King Fahd Quarter Opposite Al Owais Market P.O.Box 94366 Riyadh, 11693 Kingdom of Saudi Arabia Tel. 454-07-77
Rome (E)	Sergio A. Barrera	Via San Valentino 12-14 00197 Rome

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		Republic of Italy Tel. 808-35-30 to 31; 808-28-04 87-75-98
Saipan (E)	Renato L. Villapando	P.O.Box 731, CTC Bldg. Beach Rd., San Jose, Saipan Commonwealth of Northern Marianas Islands, MP 96950 Tel. 234-18-48/49
San Francisco (CG)	Alfredo A. Almendrala, Jr.	447 Sutter St., 6/F Philippine Center Bldg. San Francisco, CA 94108 Tel. (415) 433-66-66 to 69
Santiago (E)	Rodolfo A. Arizala	La Gloria 17 Esquina, Apoquindo Las Condes, Santiago Tel. 208-14-00; 208-13-13 208-19-39
Seoul (E)	Francisco L. Benedicto	590-8, 9 Bangbae-dong, Seocho-ku Seoul, Republic of Korea Tel. 533-46-78
Singapore (E)	Alicia C. Ramos	20 Nassim Road Rep. of Singapore 1025 Tel. 737-39-77; 235-37-05
Stockholm (E)	Aladin G. Villacorte	Skeppsbron 22 111 30 Stockholm, Sweden P.O.Box 2219 103 15 Stockholm Tel. (08) 20-91-29/87; 23-56-65
Sydney (CG)	Fernando G. Santos	55 York St., 1st Floor Sydney 2000, NSW P.O.Box C1568 Sydney 2000 NSW, Australia Tel. (02) 299-66-33
Tehran (E)	Oscar G. Valenzuela	No. 2 and 21 Corner Bahar Crossroad Zafaranieh St. Vali-Asr Avenue, Tehran P.O. Box 19395-4797 Tel. (9821) 801-96-19
Tel-Aviv (E)	Rosalinda de Perio Santos	13/F, Textile Center Bldg. No. 2 Kaufman St., Tel-Aviv, 68012 Israel Tel. (03) 510-22-31/32
Tokyo (E)	Domingo L. Siazon, Jr.	11-24 Nampeidai-machi Shibuya-ku

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		Tokyo, Japan 150 Tel. (03) 3496-27-31 3463-42-45 3496-65-55
Toronto (CG)	Clemencio F. Montesa	151 Bloor St. West Suite 365 Toronto, Ontario, Canada M5S Tel.(416) 922-71-81
Tripoli (E)	Willy G. Gaa	Km. 7, Gargarish Andalous P.O.Box 12508, Tripoli Socialist People's Libyan Arab, Jumihiriya Tel. 83-19-25
Vancouver (CG)	Lourdes G. Morales	Suite 301-8 Roger's Bldg. 470 Granville St.,Vancouver B.C Canada V6C IV5 Tel. (604) 685-76-45; 685-16-19 685-85-76
Vatican (E)	Oscar S. Villadolid	Via Paolo VI, No. 29 00193 Roma, Italia The Holy See Tel. (0039-6) 6830-8020 683-32-05
Vienna (E)	Reynaldo O. Arcilla	Billrothstrasse 2/2/21 A-1190, Vienna, Austria Tel. (43-1) 369-84-48; 369-87-98
Washington (E)	Raul Ch. Rabe	1600 and 1617 Massachucetts A NW Washington D.C. 20036 Tel. (202) 483-14-14; 467-93-00
Wellington (E)	Vesta I. Cuyugan	50 Hobson Street Thorndon, Wellington P.O.Box 12-042 New Zealand Tel. 72-99-21; 72-98-48
Yangon (E)	Rosario V. Cariño	No. 56 Promo Road 6 1/2 Mile, Yangon Socialist Republic of the Union of Myanmar Tel. 640-10/21/24

Note: E - Embassy
CG - Consulate General
M - Mission
EO - External Office

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Source:

3.1 Nolledo, Jose, 1973 Constitution; Benitez, Conrado, *History of the Philippines,* Manila; Zaide, Gregorio F., *Philippine Political and Cultural History*, Manila; *1986 Constitution*.
3.2 *1986 Constitution;* Batasan Pambansa; Supreme Court, Court of Appeals.
3.3 Department of Interior and Local Government; Local Government Code; Malacañang Records Division.
3.4 Department of Foreign Affairs.

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Chapter 4
Defense, Crime and Delinquency

This chapter presents the different government agencies responsible for the defense of the country against internal and external threats and the preservation of peace and order. It also describes the structure of the Philippine Criminal Justice System, provides statistics on crime, and presents a brief discussion about delinquency.

4.1 The Department of National Defense

The Department of National Defense (DND) was organized by Executive Order No. 230 on November 1, 1939 to implement the National Defense Act (Commonwealth Act No. 1) passed by the National Assembly on December 31, 1935, and Commonwealth Act No. 340 creating the department.

On December 31, 1972, the DND underwent changes under the provisions of the Integrated Reorganization Plan - Chapter 11 Part XIX of Letter of Implementation No. 19.

The DND was mandated with the responsibility of providing the necessary protection of the state against external and internal threats; planning, directing and supervising the National Defense Program; and rendering assistance necessary and conducive to economic growth and development.

It exercises executive supervision over the Armed Forces of the Philippines (AFP), the Government Arsenal (GA), the Office of Civil Defense (OCD), the Philippine Veterans Affairs Office (PVAO), and the National Defense College of the Philippines (NDCP). These bureaus/offices support the department in the accomplishment of its thrusts and directions, such as: intensification and maintenance of general offense against antagonists through the National Reconciliation and Development Program and the Peace and Order Council; consolidation of AFP and prevention of coup attempts as punishable under Article of War No. 105 and Republic Act No. 6968; modernization and development of the armed forces through Self-Reliant Defense Posture Program; acceleration of momentum against armed threats and establishment of strategic control over them; protection and reinforcement of gains in internal security/stability efforts; strengthening inter-agency, civilian-military coordination; and civilianization of the department proper as well as the bureaus/offices under it.

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4.1.1 The Armed Forces of the Philippines

As the DND's premier bureau, the Armed Forces of the Philippines (AFP) is responsible for upholding the sovereignty, supporting the constitution and defending the territory of the Republic of the Philippines (including the 200 nautical miles exclusive zone) against all enemies - foreign and domestic; advancing the national aims, interests and policies; planning the organization such as maintenance, development and deployment of its regular and citizen reserve forces for national security.

The AFP is headed by the Chief of Staff who has command of all elements of the armed forces and executes the President's (Commander-in-Chief) command functions in relation to national defense development programs and armed forces missions; and prescribes, in accordance with the policies of the Secretary of National Defense, the organization, powers, duties, and functions of the various AFP staff, services and offices. For more information see the 1987 Constitution, Sections 4 and 5 of Article XVI, which outlines the structure, composition, limitation, role and responsibility of the Philippine Armed Forces.

The AFP's mandates are carried out by its three major services: the Philippine Army (PA), the Philippine Air Force (PAF), and the Philippine Navy (PN).

The Philippine Army. The Army's role is and has always been to serve and protect the people through its mission which is to organize, train and equip army forces, both regular and reserve, for the conduct of prompt and sustained action, strengthen bases of operations and specifically to defeat enemy forces, seize, occupy and defend land areas. The army is undertaking a positive and determined program designed to put more meaning and substance to its commitments in national goals involving military preparedness and socio-economic assistance.

The Philippine Air Force. While air defense is its chief mission, the PAF has been performing varied services, both military and civilian in nature. It has become one of the most vital arms of the military in its contribution to national development. It takes care of the safety of Philippine skies and assists in the implementation of rural development projects by providing air transportation.

Officers and men of the PAF are consistently being trained to maintain operational readiness at all times.

The Philippine Navy. The Philippine Navy has three major types of command namely: the Fleet, the Marines, and the Coast Guard.

The Fleet provides assets for naval defense and protects the territorial integrity of the country. The Marines, otherwise known as the naval infantry are used to project forces ashore through amphibious assaults and to conduct ground combat operations in support of counterinsurgency operations and other allied activities. Because of their renowned discipline and fighting capabilities, they have been detailed to critical areas to maintain peace and

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order. They provide a ready force for the security of the National Capital Region. On the other hand, the Coast Guard is tasked with the protection of life and property at sea, maintenance of aids to navigation, conduct of search and rescue operations and prevention of the traffic and contraband through ports and harbors.

4.2 The Philippine Criminal Justice System

The criminal justice system is the machinery which the Philippine society uses in the prevention and control of crime. It operates by preventing the commission of crimes; enforcing the laws; protecting life, individual rights and property; removing dangerous persons from the community; deterring people from indulging in criminal activities; investigating, apprehending, prosecuting and sentencing those who cannot be deterred from violating the rules of society; and rehabilitating offenders before returning them to the community.

The system has four separate and formally organized components, namely: police (law enforcement agencies), prosecution, courts, and corrections. This system is known as formal criminal justice system.

Outside the formal organization, the community is the basic element and considered the fifth component of the entire criminal justice system. Without the support of the citizenry, the system by itself cannot succeed. Individuals, private groups and public entities when performing related criminal justice activities become part of the system. A lawmaking body becomes a component of the system at the time it is engaged in the process of enacting a proposed law intended to improve law enforcement or correctional methods. Likewise, any executive agency of the government such as education, welfare, labor, health, community development, or any other public office becomes a part of the system while engaging in activities directly or indirectly contributing to the prevention or control of crime. Private associations or unions, neighborhood action groups and individual citizens become important functionaries of the system if involved in such type of activity.

The formal criminal justice system plus the other public and private agencies and citizens therefore make up the so-called larger criminal justice system. It is primarily responsible for the prevention and reduction of crimes. This requires coordination and teamwork among police, courts, correction agencies and community/citizenry.

4.2.1 Law Enforcement Agencies

Law enforcement agencies are the chief implementors of laws and ordinances for the prevention of crimes, protection of lives and properties and maintenance of peace and order.

The Philippine National Police. As stipulated in Section 6, Article XVI, of the 1987 Constitution "The state shall establish and maintain one police force, which

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shall be national in scope and civilian in character, to be administered and controlled by a National Police Commission. The authority of the local executives over the police units in their jurisdiction shall be provided by law."

On December 13, 1990, Republic Act No. 6975 was enacted establishing the Philippine National Police (PNP) as a bureau under the supervision of the new National Police Commission of the reorganized Department of Interior and Local Government. The bureau consists of members of the police forces of the abolished Integrated National Police (INP) pursuant to Presidential Decree No. 765, and the officers and enlisted personnel of the then Philippine Constabulary (PC). It also includes those assigned with the Narcotics Command (NARCOM) or the Criminal Investigation Service (CIS); and those of the technical services of the AFP assigned with the PC and civilian operatives of the CIS. The regular operatives of the abolished National Police Commission (NAPOLCOM) Inspection, Investigation and Intelligence Branch may be absorbed by the PNP. In addition, the Bureau took over the functions of the National Action Committee on Anti-Hijacking (NACAH) of the DND, Philippine Air Force Security Command (PAFSECOM), as well as the police functions of the Coast Guard.

The PNP has the following powers and functions: enforce all laws and ordinances relative to the protection of lives and properties; maintain peace and order and take all necessary steps to ensure public safety; investigate and prevent crimes; effect the arrest of criminals, bring them to justice and assist in their prosecution; exercise the general powers to arrest, search and seize in accordance with the Constitution and pertinent laws; detain an arrested person for a period not beyond what is prescribed by law, informing the person so detained of all his rights under the Constitution; and issue licenses for the possession of firearms and explosives in accordance with law.

The Bureau's powers and functions are exercised and implemented by a Director General assisted by two deputy director generals, one for administration and the other for operation.

The PNP is composed of national, regional, provincial, and district offices, and city or municipal stations.

At the national level, the PNP maintains its office in Metropolitan Manila which houses the directorial service staffs, and special support units. The head of the Directorial Staff is known as the Chief Director while the heads of the various Directorial Staff Divisions are called Deputy Directors. The Inspectorate Division is headed by an Inspector General with the rank of Chief Superintendent. Likewise, the administrative and operational support divisions are also headed by chief superintendents.

On the average, the manning levels of the PNP is approximately in accordance with a police-to-population ratio of one policeman for every five hundred persons. The actual strength by cities and municipalities depend on the state of peace and order, population density, and actual demands of the service in a particular area. But the provision states that the minimum police-to-population

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ratio should not be less than one policeman for every one thousand persons, and that urban areas must have a higher minimum police-to-population ratio.

Local government officials are deputized as representatives of the new NAPOLCOM in their respective territorial jurisdictions.

The provincial governor has the power to choose the provincial director from a list of three eligibles recommended by the PNP regional director and as chairman of the provincial peace and order council, he shall oversee the implementation of the provincial public safety plan taking into consideration the integrated community safety plans.

The city and municipal mayors have the power to exercise vast operational supervision and control over PNP units in their respective jurisdictions. They shall develop and establish an integrated area or community public safety plan embracing priorities of action and program thrusts for implementation by the local PNP stations, in coordination with the local peace and order council of which they are the chairmen under Executive Order No. 309. They shall also sponsor periodic seminars to members of the PNP assigned or detailed in their respective area of jurisdiction to keep them abreast with local ordinances and legislations; impose disciplinary penalties for minor offenses committed by members of the PNP assigned to their respective jurisdiction after due notice and summary hearings; choose the chief of police from a list of five eligibles recommended by the provincial police director, preferably from the same province, city or municipality; recommend the transfer, reassignment or detail of PNP members outside of their respective city or town residences; and recommend, from a list of eligibles previously screened by the peace and order council, the appointment of new members of the PNP to be assigned to their respective cities or municipalities without which no such appointments shall be attested.

But during the thirty-day period immediately preceding and the thirty days following any national, local or barangay elections, the city and municipal mayors shall cease to exercise such powers. During this period, the local forces shall be under the supervision and control of the Commission on Elections.

The National Police Commission. On September 8, 1966, the National Police Commission (NAPOLCOM) was created by Republic Act No. 4864 as the supervisory agency to oversee the training and professionalization of local police forces. Directly under the Office of the President at its inception, the NAPOLCOM was transferred to the Department of National Defense pursuant to Presidential Decree No. 765. Then under Executive Order No. 1040 the Commission was subsequently returned to the Office of the President and was given the administrative power to control and supervise over all units of the then Integrated National Police throughout the country.

On December 13, 1990, pursuant to Republic Act No. 6975, a new NAPOLCOM was created under the supervision of the Department of Interior and Local Government.

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The new Commission has the power and function to exercise administrative control over the Philippine National Police; conduct surveys and compile statistical data for the proper evaluation of the efficiency and effectiveness of all police units in the country; recommend to the President a crime prevention program within sixty days before the commencement of each calendar year and establish a system of uniform crime reporting.

The NAPOLCOM is composed of a commission proper which consists of the offices of the chairman and four regular commissioners, one of whom will be designated by the President as the vice-chairman and at the same time the executive officer of the commission; of the secretary of DILG who will be the ex-officio chairman of the commission; and of the staff services, such as planning and research service, legal affairs service, crime prevention and coordination service, administrative service, inspection and monitoring service, and installations and logistics service.

The National Bureau of Investigation. The National Bureau of Investigation (NBI) was created on November 13, 1936. Then known as the Division of Investigation, its name was changed to the Bureau of Investigation on June 19, 1947, and on October 4 of the same year it became the National Bureau of Investigation.

The NBI is an agency under the Department of Justice responsible for investigating violations of Philippine laws.

Its main functions are the following: investigate or detect crimes and other offenses; act as a national clearing house of criminal records and other information for the benefit and use of all prosecuting and law enforcement agencies in the Philippines; identify records of all persons without criminal conviction and records of identifying marks, characteristics and ownership or possession of all firearms and test bullets fired from them; extend its services to all prosecuting and law enforcement agencies of the courts or whenever officially requested, in the investigation of cases, civil or administrative which are of interest to the government; establish and maintain an up-to-date scientific crime laboratory and conduct research for the furtherance of scientific knowledge in criminal investigation; perform other related functions such as those assigned by the Secretary of Justice; and coordinate with other national or local police agencies in the maintenance of peace and order.

The Bureau of Fire Protection. The Bureau of Fire Protection is the agency concerned with the prevention and investigation of fire related crimes. It is primarily responsible for the enforcement of the Fire Code and other related laws: prevention and suppression of all destructive fires on buildings, houses and other structures, forests, land transportation vehicles and equipment, ships or vessels docked at piers or wharves or anchored in major seaports, petroleum industry installations, plane crashes and other similar incidents; and investigate all causes of fire and file the proper complaints with the city or provincial prosecutor if necessary. In 1992, the Bureau of Fire Protection recorded 7,309

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fire incidents, causing damages to properties estimated at 3,334.90 million pesos, 139 injuries and 387 cases of deaths. Total cases of fires decreased by 10.0 percent while damages to properties increased by 48.5 percent over the previous year. (Table 4.1).

4.2.2 Prosecution

Through prosecution, the guilt of criminal offenders is established. This function includes the preliminary investigation on complaints by private persons in order to determine if the evidences are sufficient to charge a person before a court of competent jurisdiction. This responsibility lies on the Department of Justice through the provincial fiscals and the state prosecutors over whom it has supervision and control.

4.2.3 The Courts

The prosecution arm of the government works hand in hand with the courts, which determine and fix the nature and extent of punishment and retribution. The courts play a dual role in the criminal justice system as participants and supervisors of its dispensation. In their role as participants, the courts determine the guilt or innocence of the accused. As supervisors, the courts act as guardians of human rights. Chapter 3 of this Yearbook (Constitution, Government and Foreign Relations) provides more information about Philippine courts.

4.2.4 Correctional Institutions

Correctional agencies perform a function just as important as that of law enforcement, prosecution and the courts. Correction aims to make the community safer by reducing the incidence of crimes. The reformation of offenders prevents their return to crime.

Correctional institutions seek to integrate the offenders back into the community so that they may have productive, satisfying and peaceful lives as citizens.

The correctional system refers to the implementation of the order of the court which is designed to protect society and to rehabilitate convicted felons. It covers three distinct areas: institutionalization, probation and parole.

Institutionalization is the confinement or imprisonment of a convicted felon to protect society from the continuation of his predations and to deter others from committing similar offenses.

Under probation, a convicted felon is exempted from jail confinement but is made to undergo rehabilitation within the community. Any sentenced offender eighteen (18) years of age and above can apply for probation if not otherwise disqualified, before serving the imprisonment sentence. Disqualifications may be accounted by any of the following: those who are sentenced to serve a maximum term of imprisonment of more than six (6) years under P. D. No. 1990; those who are convicted of subversion or any crime against the national security or public order; those who have been previously convicted by final

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judgment of an offense punished by imprisonment of not less than one month and one day and/or a fine of not less than two hundred pesos; those who have been once on probation; and those who are already serving sentence at the time the substantive provisions of P. D. No. 1990 became applicable. An offender may not be disqualified on account of these factors but may be disqualified at the discretion of the court upon unfavorable investigation of the probation officer regarding the case.

The duration of probation depends on the number of sentenced years of imprisonment of an offender. This varies from not more than two years for those sentenced to imprisonment of one year or less and not more than six years for those sentenced to more than one year in prison.

Once probation is granted, the probationer must present himself to his probation officer within three (3) days. He should report to his probation officer once a month, should not commit another offense and must comply with any conditions imposed by the court.

When a felon who is sent to jail is released before serving his entire sentence and his rehabilitation continues outside the prison walls, he is granted parole.

Government agencies involved in the reformation and rehabilitation of crime offenders are the Bureau of Jail Management and Penology and the Bureau of Corrections. These are guided by the same objective of bringing back offenders into the society to become productive and law-abiding citizens.

The Bureau of Jail Management and Penology. In accordance with Republic Act No. 6975, the Bureau of Jail Management and Penology was created consisting initially of officers and uniformed members of the then Jail Management and Penology Service. Under the new setup, the bureau, headed by a chief, exercises supervision and control over all city and municipal jails. Each city or municipal jail is headed by a city or municipal jail warden. In the case of large cities and municipalities, a district jail with subordinate jails headed by a district jail warden may be established as necessary.

The Bureau of Corrections. Directly under the Department of Justice, the Bureau of Corrections is the prime entity in pursuing the objectives of confining and rehabilitating national prisoners. It has custodial responsibility to prevent overcrowding of inmates in prisons, enforce discipline, minimize crimes of violent nature, minimize escapes, and escort inmates outside the prison compounds as directed or approved by competent authorities. It also has rehabilitation responsibility of providing inmates with basic human needs, education and training programs, medical and dental service, religious guidance and advisory services, recreation and sports, library services, and work programs.

There are seven prison facilities under the supervision of the Bureau that help rehabilitate social offenders. These are the New Bilibid Prison, Iwahig Prison and Penal Farm, Davao Prison and Penal Farm, Sablayan Prison and Penal Farm, San Ramon Prison and Penal Farm, Leyte Regional Prison, and

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the Correctional Institute for Women. For the number of prisoners in these correctional institutions and penal farms, see Table 4.2.

4.2.5 The Community

The community is fifth and essential component of the criminal justice system. Being a community problem, crime must be solved by the community at its level through the active participation of civil officials and the citizenry for the promotion of public safety.

Presidential Decree No. 528 laid the groundwork for the decentralization of government effort in the prevention of crime and lawlessness in the community involving the barangay (the basic unit of the Philippine political system). Then P. D. No. 299 gave the barangays ample authority and power to discharge their peace-keeping responsibilities and to act as auxiliaries of the law. Still, the institutionalization of the Barangay Justice System by P. D. No. 1508 empowered barangay officials to handle petty and less serious crimes.

The Peace and Order Council. Created by virtue of Executive Order No. 309 (as amended), the Peace and Order Council was organized at the national, regional, provincial, city and municipality levels in order to establish a unified and strongly coordinated mechanism which could carry out a national program addressing the problems of insurgency, rebellion, criminality, terrorism, or disruption of public order which threaten national unity and security. These threats to peace and national harmony must be fully understood through a serious scrutiny of the causes of these problems. It is guided by the general objectives of establishing and maintaining a system of coordinated government efforts and citizens' participation in the promotion, preservation and maintenance of peace and order throughout the country.

4.3 Crime

Crimes, under the Revised Penal Code (1990), are classified as public and private. Public crimes are those which directly endanger the society and its constituents such as those committed against national security, laws of the nation, fundamental laws of the state, public order, public interest and public morals as well as those crimes related to opium and other prohibited drugs and those committed by public officers in the performance of their duty as civil servants. Private crimes are those which afflict individuals or persons directly without producing danger to the members of society, such as crimes against the following: persons (destruction of life, parricide, murder, homicide, infanticide and abortion, physical injuries); personal liberty and security; property, chastity, civil status of persons and honor.

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The Commission on Human Rights. The Commission on Human Rights is an independent body constituted in line with the provision on the 1987 Constitution, Article II, Section 11 that stresses the government's commitment to human rights: "The State values the dignity of the human person and guarantees full respect for human rights."

Pursuant to the aforesaid constitutional mandate, President Corazon C. Aquino signed Executive Order 163 on May 5, 1987, creating the Commission which is tasked to promote the protection of, respect for, and enhancement of the people's inherent human rights, including all civil and political rights.

To fulfill its mission, the Commission has identified two main approaches: *human rights protection* and *human rights promotion. Protection* involves investigation of all cases of human rights violations and delivery of free legal aid and financial services to all victims, including referral of cases to the proper agencies. *Promotion* refers to the Commission's function of informing and educating the public in human rights values, principles and laws.

Since its creation up to 1988, the Commission has filed a total of 2,137 human rights complaints and cases, 212 of which had been finally resolved and 163 were pending final resolution or approval by the Commission. Through its nationwide network of 13 regional offices, it has rendered legal assistance to some 1,300 walk-in clients and had given P4.5 million in financial and medical assistance to victims of human rights violations. A witness protection program was also etablished to ensure the safety of complainants. Furthermore, the Commission has visited more than 500 jails all over the country, and through the efforts of its lawyers, over 170 detainees or prisoners have been released.

While constantly monitoring compliance to international treaty obligations on human rights, the Commission also works closely with various government agencies, as well as local and foreign nongovernment organizations, to reinforce public and individual awareness of human rights. It carries out a continuing program of research, education and information -- utilizing the TV, broadcast and print media, and distributing human rights materials in the form of primers, brochures, posters, pamphlets, flyers and video tapes.

In addition to this information drive and as part of its human rights promotion, the Commission actively conducts human rights advocacy courses for police and military personnel (through the Philippine National Police and Armed Forces of the Philippines) as well as training seminars for public school teachers, students and paramilitary groups nationwide. The program has particularly heightened the consciousness of the military and police on human rights values as reflected in the cooperation they extend to such activities of the Commission as investigation and documentation of human rights cases.

4.3.1 Crime (Incidence) Situation

Crime occurrences are presented in Tables 4.3 to 4.6. The 1993 crime volume decreased by 7.67 percent from 104,719 in 1992. Crime rate was recorded at 195, 164 and 148 per 100,000 population in 1991, 1992 and 1993

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respectively, and showed a decreasing trend over the three years. The National Capital Region (NCR) consistently accounted for the highest incidence of crime in the three-year period. Central Visayas, Southern Tagalog and Western Visayas also displayed a significant number of crime cases during the same period.

Index and Nonindex Crimes. Index crimes are crimes of serious nature which occur with sufficient frequency and regularity to be used as an index of actual level of compilation in the Philippines. Index crimes include murder, homicide, physical injuries, robbery, theft and rape. Crimes other than these are classified as nonindex crimes.

There are about 58,684 index crimes recorded in 1993; this decreased by 12.87 percent over the 1992 figure of 67,354. As a consequence, crime rate also went down to 90 crimes per 100,000 population. Crime rates (per 100,000 population) in 1991, 1992 and 1993 were computed at 124, 106 and 90 respectively.

On the other hand, nonindex crime volume also decreased by 15.20 percent in 1992, but increased slightly by 1.70 percent in 1993. Nonindex crime rates were recorded at 71, 59 and 58 per 100,000 population in 1991, 1992 and 1993, respectively. See Tables 4.4. and 4.5.

Theft was the most prevalent index crime in 1991, and physical injury in 1992 and 1993. In Metro Manila alone, theft accounted for an average of 32.84 percent, and physical injury with 18.06 percent of the total index crimes committed during the three year period under review. See Table 4.5.

4.3.2 Anti-Crime Campaign

The government's preemptive efforts against agitators, criminal offenders and law violators are continuously pursued to ensure stability and peace and order in the society.

Counter Insurgency Campaign. The military and police had launched an all-out general offensive against insurgency. Counter insurgency constitutes three areas of concern, namely; anti- communist, anti-seccessionist and anti-ultra-rightist.

In the field of anti-communist insurgency, the government had caused serious setbacks to the insurgents with the reduction of the movement's regular strength by 19.46 percent from 14,800 in 1991 to 11,920 in 1992 which declined further to 8,350 in 1993 and 8,020 in March 1994. Likewise, the communist-affected (influenced and/or infiltrated) barangays dropped by 72.08 percent from 3,625 in 1991 to 1,012 in March 1994. The government also captured key communist leaders consisting of six members of the central committee, three functional territorial staff officers, nine members of the territorial commissions, two regional leaders, and four provincial/front committee members. The communist setbacks could be attributed to their own strategic/tactical blunders and internal rifts, the constriction and disruption of their financial and logistical

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machineries and the government's effective implementation of its community-based implementation of anti-insurgency.

These positive gains of the government against the leftist movement, however, resulted in the killing of 1,473 military personnel, 960 civilians and 3,479 New People's Army for the period 1991-1993.

Campaign Against Organized/Syndicated Crime Groups. The collective effort of law enforcers to thwart the operations of organized/syndicated crime groups resulted to a decrease in the number of groups involved in these activities as well as in terms of its strength/members and firearms/gun-power from 1987 to 1992. The continued campaign against these crime groups resulted to the decline in the total number of organized syndicated crime groups by 11.99 percent, 7.58 percent in strength (members) and 10.76 percent in possessed firearms in 1992. See Table 4.7.

Campaign Against Drug Abuse. Drug abuse is the use of any chemical substance, licit or illicit, which results in an individual's physical, mental, emotional or social impairment. The government's effort in fighting drug abuse is channelled through the Dangerous Drugs Board (DDB), created under R.A. No. 6425) with the assistance of drug law enforcers.

The DDB's drug abuse preemptive campaign is continuously pursued in its two main activities, namely, the Drug Supply Reduction and the Drug Demand Reduction programs.

The Drug Supply Reduction Program aims to disrupt the illicit drug distribution system by regulatory control and exempt preparations; dangerous drugs plant eradication; intelligence information and data on drug abuse problem; drug/evidence monitoring and destruction; and inter-agency coordination/cooperation.

The Drug Demand Reduction Program aims to lessen, if not eliminate, the number of drug victims and would-be victims through preventive education, training and information. With the theme "Unity of All Against Drug Abuse", the active participation of the school and community or citizenry (all sectors) are being tapped and encouraged. Drug abuse-related programs are being expanded/organized, such as: the Youth Outreach Program Against Drug Abuse (YOPADA), After-Care and Follow-up of Drug Dependents, Citizen Drug Watch Foundation, and other community-based programs.

Even with increased consciousness to stop drug abuse, it still persistently exists. In 1992, the total number of primary drug abusers who were admitted/confined in the different rehabilitation centers registered 2,948, a decrease of 11.37 percent from the 3,326 registered cases a year ago. Of the total 2,948 users, 60.1 percent were persons aged 15 to 29 years old distributed as follows; 15-19 years old (15.9 percent), 20-24 years old (24.9 percent) and 25-29 years old (20.3 percent). The most frequently abused drug was the stimulants group (like "shabu" or methampetamine), followed by cannabis/cannabis resins

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group (e.g. marijuana), and third was the cough syrup. Refer to Tables 4.8 to 4.9 for more details.

4.4 Delinquency

Delinquency is a social menace that requires moral obligation or duty. It is an act against the wishes and expectations of other people. It involves persons, of whatever age, whose attitude toward other individuals, the community or lawful authority is such that he/she may be propelled to commit crimes. Today, delinquency often refers to young people.

To prevent and minimize the number of delinquents in the country, social welfare programs were instituted by the Department of Social Welfare and Development such as Child and Youth Welfare Program, Family Welfare Program, and Community Welfare Program.

The Child and Youth Welfare Program is designed to care, protect, rehabilitate children and youth in difficult situations and ensure their social adjustment and total growth and development. Delinquent youths are offered special services, intended to prevent minors (below 18 years of age) from entering the juvenile justice system and divert their attention to more gainful and productive activities for them to acquire socially acceptable behavior.

The 1992 highlights of accomplishments under the Child and Youth Welfare Program were on the following: monitoring the implementation of RA 6972 (an act Establishing a Day Care Center in Every Barangay); the operationalization of the Philippine Republic Act 7610 (Special Protection Act for Children) and the devolution of services to the local government units in accordance with the Local Government Code (RA 7160).

The Family Welfare Program is designed to assist socially disadvantaged families to develop their capability in defining needs and formulating solutions to bring about desired social change. It offers Parent Effectiveness, Responsible Parenthood, and Family Casework Services.

The Family Life Development Program enriches and strengthens the family to fulfill its functions to its members and to the community. Promotion and strengthening of the family as the basic unit of the Philippine society is the overriding principle in the implementation of the Family Welfare Program.

The Community Welfare Program, on the other hand, is intended to assist socially disadvantaged communities in developing their capability in defining needs and formulating solutions as well as setting up viable community structures which bring about desired social change.

As a continuing effort to enable DSWD's targetted depressed barangays to function effectively, Community Organizing was used as an effective tool for a comprehensive and integrated delivery of social services. This is based on the belief that people have inherent capacity to act on their problems given the means and opportunities to do so. Local initiatives and leadership were likewise considered important factors for active partnership in development.

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Sources:

4.1	Department of National Defense.
4.2	Philippine National Police; National Police Commission; National Bureau of Investigation.
4.2.4	Department of Justice; Bureau of Prisons.
4.3.1-4.3.	Philippine National Police; National Statistics Dangerous Drugs Board.
4.4	Department of Social Welfare and Development.

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Table 4.1 Data on Fires by Geographic Area: 1988-1992

Causes/casualties/ damages	1988	1989	1990	1991	1992
Philippines	4,818	6,019	7,309	8,062	7,309
Causes					
Accidental	3,617	4,435	5,329	5,579	5,556
Arson	112	178	268	235	150
Undetermined	1,089	1,406	1,712	2,248	1,603
Casualties					
Injured	269	250	341	350	139
Killed	105	90	152	142	387
Damage to property *	1,265.88	1,231.75	2,069.24	2,245.71	3,334.90
National Capital Region	3,583	4,154	4,205	4,487	3,618
Causes					
Accidental	2,911	3,166	3,330	3,506	2,966
Arson	5	12	17	19	7
Undetermined	667	976	858	962	645
Casualties					
Injured	170	147	156	169	165
Killed	35	46	78	43	36
Damage to property*	673.71	567.45	1,076.53	1,136.49	1,138.29
Areas outside Metro Manila	1,235	1,865	3,104	3,575	3,691
Causes					
Accidental	706	1,269	1,999	2,078	2,590
Arson	107	166	251	216	143
Undetermined	422	430	854	1,286	958
Casualties					
Injured	99	103	185	181	232
Killed	70	44	74	50	101
Damaged to property*	592.17	664.30	992.71	1,109.22	2,196.59

* In million pesos.

Source: Bureau of Fire Protection, Statistics Division.

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Table 4.2 Number of Prisoners in Penal Institutions: 1984-1992

Penal institutions	1984	1985	1986	1987	1988	1989	1990	1991	1992
Total	14,302	13,412	13,718	12,254	12,654	13,136	13,808	10,626	14,003
New Bilibid Prison	3,185	3,095	2,906	3,737	3,456	4,031	7,406	3,862	8,939
Camp Sampaguita	4,300	3,805	4,202	2,725	3,260	3,040	a	a	a
Camp Bukang Liwayway	764	789	976	472	620	391	-	-	-
Medium Security Prisoners	1,693	21,473	1,118	2,134	1,769	2,365	-	-	-
Youth Rehabilitation Center	378	330	362	42	373	-	-	-	-
Metro Manila Jail	845	2,751	778	46	-	-	-	-	-
Reception and Diagnostic Center	620	2,462	968	31	498	288	-	-	-
Correctional Institute for Women	194	200	201	219	244	269	305	334	394
San Ramon Prison and Penal Farm	779	682	682	557	618	626	759	910	871
Iwahig Prison and Penal Farm	2,460	2,091	2,009	1,879	2,165	2,064	2,090	2,058	239
Davao Prison and Penal Farm	2,014	2,146	2,257	1,988	1,898	2,049	1,897	2,092	2,161
Sablayan Prison and Penal Farm	844	787	820	720	651	676	703	753	720
Leyte Regional Prison	384	473	495	264	177	215	464	498	585
Army Camps and other stations	142	133	146	165	185	166	184	119	94

a Included in New Bilibid Prison.

Source: Bureau of Prisons.

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Table 4.3 Crime Volume and Crime Rate by Region: 1991-1993
(Crime rate = per 100,000 population)

Region	1991 Volume	1991 Population	1991 Crime rate	1992 Volume	1992 Population	1992 Crime rate	1993 Volume	1993 Population	1993 Crime rate
Philippines	121,326	62,161,662	195	104,719	63,683,767	164	96,686	65,253,461	148
National Capital Region (NCR)	20,463	8,188,934	250	17,375	8,457,531	205	19,001	8,734,937	218
Cordillera Administrative Region (CAR)	2,208	1,172,522	188	2,313	1,199,872	193	2,502	1,227,949	204
I. Ilocos	3,157	3,620,413	87	4,638	3,691,609	126	4,132	3,764,221	110
II. Cagayan Valley	2,876	2,387,749	120	3,194	2,435,831	131	3,033	2,484,921	122
III. Central Luzon	10,011	6,503,120	154	7,666	6,672,078	115	7,143	6,845,539	104
IV. Southern Tagalog	10,014	8,381,959	119	9,824	8,645,070	114	9,334	8,922,144	105
V. Bicol	7,625	3,956,955	193	7,131	4,004,863	178	5,738	4,053,441	142
VI. Western Visayas	15,608	5,488,965	284	9,818	5,586,322	176	7,683	5,685,436	135
VII. Central Visayas	14,470	4,683,314	309	11,633	4,775,372	244	9,431	4,869,363	194
VIII. Eastern Visayas	6,340	3,082,378	206	7,100	3,109,879	228	4,178	3,137,696	133
IX. Western Mindanao	6,899	3,576,726	193	5,707	3,655,861	156	5,303	3,736,934	142
X. Northern Mindanao	8,513	3,168,958	269	7,379	3,254,981	227	5,480	3,343,611	164
XI. Southern Mindanao	7,721	3,479,237	222	5,622	3,576,891	157	8,601	3,677,512	234
XII. Central Mindanao	3,517	2,348,053	150	3,816	2,426,110	157	3,747	2,506,773	149
Autonomous Region in Muslim Mindanao (ARMM)	1,904	2,122,379	90	1,503	2,191,497	69	1,380	2,262,984	61

Sources: Philippine National Police; National Statistics Office.

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Table 4.4 Crime Volume and Crime Rate by Type of Crime: 1991-1993
(Crime rate = per 100,000 population)

Type	1991 Volume	1991 Crime rate	1992 Volume	1992 Crime rate	1993 Volume	1993 Crime rate
Total	121,326	195	104,719	164	96,686	148
Index crimes	77,261	124	67,354	106	58,684	90
Murder	8,707	14	8,293	13	7,758	12
Homicide	8,069	13	7,912	12	7,123	11
Physical injury	21,862	35	20,462	32	18,722	29
Robbery	13,817	22	11,164	18	9,856	15
Theft	22,780	37	17,374	27	12,940	20
Rape	2,026	3	2,149	3	2,285	4
Nonindex crimes	44,065	71	37,365	59	38,002	58

Source: Philippine National Police.

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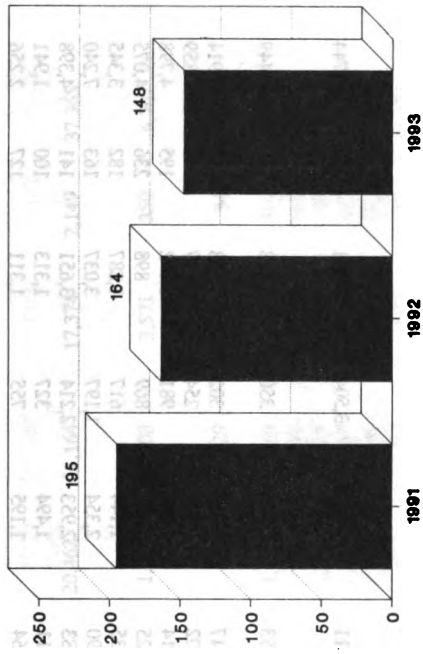
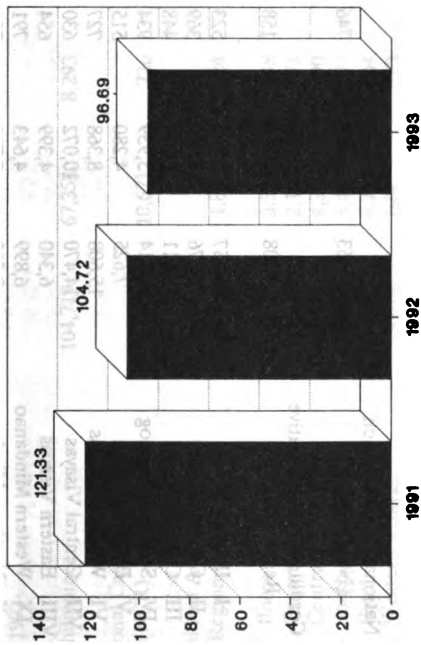
Figure 4.1 Crime Volume and Crime Rate: 1991 - 1993



Crime Rate

(Per 100,000 population)



Crime Volume

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Table 4.5 Crime Volume by Type of Crime and Region: 1991-1993

Region	Grand total	Total	Murder	Homicide	Index crimes Physical injury	Robbery	Theft	Rape	Nonindex crimes
1991									
Philippines	121,326	77,261	8,707	8,069	21,862	13,817	22,780	2,026	44,065
National Capital Region (NCR)	20,463	12,719	746	1,311	2,463	3,504	4,331	364	7,744
Cordillera Administrative Region (CAR)	2,208	1,759	158	153	586	350	478	34	449
I. Ilocos	3,157	2,243	523	247	951	302	168	52	914
II. Cagayan Valley	2,876	2,017	369	302	838	254	207	47	859
III. Central Luzon	10,011	5,213	448	614	1,883	981	1,092	195	4,798
IV. Southern Tagalog	10,014	5,939	934	1,225	1,777	869	898	236	4,075
V. Bicol	7,625	4,280	515	535	1,144	617	1,287	182	3,345
VI. Western Visayas	15,608	8,368	727	890	2,354	1,197	3,037	163	7,240
VII. Central Visayas	14,470	10,072	630	483	2,953	2,214	3,651	141	4,398
VIII. Eastern Visayas	6,340	4,399	654	511	1,494	327	1,313	100	1,941
IX. Western Mindanao	6,899	4,643	791	464	1,195	755	1,311	127	2,256
X. Northern Mindanao	8,513	5,790	751	529	1,585	745	2,041	139	2,723
XI. Southern Mindanao	7,721	5,858	448	421	1,450	1,041	2,314	184	1,863
XII. Central Mindanao	3,517	2,592	586	338	845	388	385	50	925
Autonomous Region in Muslim Mindanao (ARMM)	1,904	1,369	427	46	344	273	267	12	535

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Table 4.5 Crime Volume by Type of Crime and Region: 1991-1993 (continued)

Region	Grand total	Index crimes Total	Murder	Homicide	Physical injury	Robbery	Theft	Rape	Nonindex crimes
1992									
Philippines	104,719	67,354	8,293	7,912	20,462	11,164	17,374	2,149	37,365
National Capital Region (NCR)	17,375	10,671	726	1,154	1,762	3,108	3,571	350	6,704
Cordillera Administrative Region (CAR)	2,313	1,896	124	164	586	429	559	34	417
I. Ilocos	4,638	3,320	598	703	1,156	369	277	217	1,318
II. Cagayan Valley	3,194	2,108	374	322	961	219	167	65	1,086
III. Central Luzon	7,666	4,208	490	549	1,572	727	697	173	3,458
IV. Southern Tagalog	9,824	5,475	897	1,043	1,885	687	748	215	4,349
V. Bicol	7,131	4,136	464	439	1,414	554	1,063	202	2,995
VI. Western Visayas	9,818	6,092	613	889	2,107	742	1,598	143	3,726
VII. Central Visayas	11,633	7,841	581	416	2,582	1,398	2,745	119	3,792
VIII. Eastern Visayas	7,100	4,588	563	519	1,668	309	1,396	133	2,512
IX. Western Mindanao	5,707	3,791	766	396	1,061	555	922	91	1,916
X. Northern Mindanao	7,379	4,937	645	471	1,496	676	1,497	152	2,442
XI. Southern Mindanao	5,622	4,348	480	420	1,240	724	1,334	150	1,274
XII. Central Mindanao	3,816	2,897	603	389	760	485	569	91	919
Autonomous Region in Muslim Mindanao (ARMM)	1,503	1,046	369	38	212	182	231	14	457

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Table 4.5 Crime Volume by Type of Crime and Region: 1991-1993 (concluded)

Region	Grand total	Index crimes							Nonindex crimes
		Total	Murder	Homicide	Physical injury	Robbery	Theft	Rape	
1993									
Philippines	96,686	58,684	7,758	7,123	18,722	9,856	12,940	2,285	38,002
National Capital Region (NCR)	19,001	11,424	759	1,355	2,062	3,321	3,531	396	7,577
Cordillera Administrative Region (CAR)	2,502	2,073	137	156	721	414	610	35	429
I. Ilocos	4,132	2,524	502	226	1,144	347	224	81	1,608
II. Cagayan Valley	3,033	1,676	318	277	741	172	124	44	1,357
III. Central Luzon	7,143	3,351	417	436	1,151	650	520	177	3,792
IV. Southern Tagalog	9,334	5,341	803	1,071	2,098	640	454	275	3,993
V. Bicol	5,738	2,914	456	385	802	363	673	235	2,824
VI. Western Visayas	7,683	5,041	757	795	1,991	516	793	189	2,642
VII. Central Visayas	9,431	6,005	409	385	2,339	989	1,703	180	3,426
VIII. Eastern Visayas	4,178	2,922	575	413	953	229	611	141	1,256
IX. Western Mindanao	5,303	3,721	808	505	1,008	524	751	125	1,582
X. Northern Mindanao	5,480	3,577	479	305	1,123	482	1,035	153	1,903
XI. Southern Mindanao	8,601	4,519	419	395	1,578	688	1,292	147	4,082
XII. Central Mindanao	3,747	2,758	625	397	815	360	467	94	989
Autonomous Region in Muslim Mindanao (ARMM)	1,380	838	294	22	196	161	152	13	542

Source: Philippine National Police.

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Table 4.5a Crime Rate by Type of Crime and Region: 1991-1993

Region	Grand total	Index crimes Total	Murder	Homicide	Physical injury	Robbery	Theft	Rape	Nonindex crimes
1991									
Philippines	195	124	14	13	35	22	37	3	71
National Capital Region (NCR)	250	155	9	16	30	43	53	4	95
Cordillera Administrative Region (CAR)	188	150	13	13	50	30	41	3	38
I. Ilocos	87	62	14	7	26	8	5	1	25
II. Cagayan Valley	120	84	15	13	35	11	9	2	36
III. Central Luzon	154	80	7	9	29	15	17	3	74
IV. Southern Tagalog	119	71	11	15	21	10	11	3	49
V. Bicol	193	108	13	14	29	16	33	5	85
VI. Western Visayas	284	152	13	16	43	22	55	3	132
VII. Central Visayas	309	215	13	10	63	47	78	3	94
VIII. Eastern Visayas	206	143	21	17	48	11	43	3	63
IX. Western Mindanao	193	130	22	13	33	21	37	4	63
X. Northern Mindanao	269	183	24	17	50	24	64	4	86
XI. Southern Mindanao	222	168	13	12	42	30	67	5	54
XII. Central Mindanao	150	110	25	14	36	17	16	2	39
Autonomous Region in Muslim Mindanao (ARMM)	90	65	20	2	16	13	13	1	25

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Table 4.5a Crime Rate by Type of Crime and Region: 1991-1993 (continued)

Region	Grand total	Index crimes							Nonindex crimes
		Total	Murder	Homicide	Physical injury	Robbery	Theft	Rape	
1992									
Philippines	164	106	13	12	32	18	27	3	59
National Capital Region (NCR)	205	126	9	14	21	37	42	4	79
Cordillera Administrative Region (CAR)	193	158	10	14	49	36	47	3	35
I. Ilocos	126	90	16	19	31	10	8	6	36
II. Cagayan Valley	131	87	15	13	39	9	7	3	45
III. Central Luzon	115	63	7	8	24	11	10	3	52
IV. Southern Tagalog	114	63	10	12	22	8	9	2	50
V. Bicol	178	103	12	11	35	14	27	5	75
VI. Western Visayas	176	109	11	16	38	13	29	3	67
VII. Central Visayas	244	164	12	9	54	29	57	2	79
VIII. Eastern Visayas	228	148	18	17	54	10	45	4	81
IX. Western Mindanao	156	104	21	11	29	15	25	2	52
X. Northern Mindanao	227	152	20	14	46	21	46	5	75
XI. Southern Mindanao	157	122	13	12	35	20	37	4	36
XII. Central Mindanao	157	119	25	16	31	20	23	4	38
Autonomous Region in Muslim Mindanao (ARMM)	69	48	17	2	10	8	11	1	21

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Table 4.5a Crime Rate by Type of Crime and Region: 1991-1993 (concluded)

Region	Grand total	Index crimes: Total	Murder	Homicide	Physical injury	Robbery	Theft	Rape	Nonindex crimes
1993									
Philippines	148	90	12	11	29	15	20	4	58
National Capital Region (NCR)	218	131	9	16	24	38	40	5	87
Cordillera Administrative Region (CAR)	204	169	11	13	59	34	50	3	35
I. Ilocos	110	67	13	6	30	9	6	2	43
II. Cagayan Valley	122	67	13	11	30	7	5	2	55
III. Central Luzon	104	49	6	6	17	9	8	3	55
IV. Southern Tagalog	105	60	9	12	24	7	5	3	45
V. Bicol	142	72	11	9	20	9	17	6	70
VI. Western Visayas	135	89	13	14	35	9	14	3	46
VII. Central Visayas	194	123	8	8	48	20	35	4	70
VIII. Eastern Visayas	133	93	18	13	30	7	19	4	40
IX. Western Mindanao	142	100	22	14	27	14	20	3	42
X. Northern Mindanao	164	107	14	9	34	14	31	5	57
XI. Southern Mindanao	234	123	11	11	43	19	35	4	111
XII. Central Mindanao	149	110	25	16	33	14	19	4	39
Autonomous Region in Muslim Mindanao (ARMM)	61	37	13	1	9	7	7	1	24

Source: Philippine National Police.

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Table 4.6 Crime Volume and Crime Rate in Metro Manila by Type of Crime: 1991-1993
(Crime rate = per 100,000 population)

Type	1991 Volume	1991 Crime rate	1992 Volume	1992 Crime rate	1993 Volume	1993 Crime rate
Total	20,463	250	17,375	205	19,001	218
Index crimes	12,719	155	10,671	126	11,424	131
Murder	746	9	726	9	759	9
Homicide	1,311	16	1,154	14	1,355	16
Physical injury	2,463	30	1,762	21	2,062	24
Robbery	3,504	43	3,108	37	3,321	38
Theft	4,331	53	3,571	42	3,531	40
Rape	364	4	350	4	396	5
Nonindex crimes	7,744	95	6,704	79	7,577	87

Source: Philippine National Police.

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Table 4.7 Number of Syndicated/Organized Crime Group by Type of Activity: 1989-1992

Activity	1989 Groups	1989 Members	1989 Firearms	1990 Groups	1990 Members	1990 Firearms	1991 Groups	1991 Members	1991 Firearms	1992 Groups	1992 Members	1992 Firearms
Total	993	6,498	2,025	1,276	6,941	2,244	1,534	9,964	3,400	1,350	9,209	3,034
Bank robbery	8	42	37	16	80	37	23	160	110	7	46	22
Robbery/Hold-up	363	2425	936	480	2,587	1041	433	3070	1,180	510	3,071	1072
Kidnap for Ransom	32	270	*	36	270	*	40	500	200	37	601	327
Extortion/Protection Racket	62	435	70	71	488	101	67	700	330	52	425	225
Carnapping	92	669	310	107	701	327	117	810	310	170	1,263	369
Drug Trafficking	61	448	27	80	502	48	189	810	210	216	1,531	280
Piracy	17	78	17	18	78	17	9	80	60	19	302	119
Hijacking	41	364	145	41	364	145	27	250	30	15	125	64
Illegal Gambling	60	318	73	165	525	73	170	890	30	48	213	10
Gunrunning/Traffic of Explosives	59	286	134	66	231	166	98	520	160	48	317	93
Smuggling	23	57	23	22	66	23	69	80	40	21	76	42
Prostitution/White Slavery	2	13	3	2	13	3	16	30	*	1	2	-
Gun for Hire	34	182	96	26	186	104	45	480	270	17	142	40
Cattle rustling	48	324	78	61	345	98	95	730	310	60	509	191
Porch Climbing	11	64	17	11	64	17	22	160	60	12	50	7
Illegal Fishing	10	69	*	7	66	*	13	60	*	18	20	-
Illegal Logging	7	33	*	21	40	*	38	170	20	26	88	27
Swindling/Estafa	7	56	*	9	59	*	10	70	10	28	89	13
Theft	19	136	13	9	68	*	17	130	50	9	116	44
Hired Killing	-	-	-	-	-	-	-	-	-	10	156	87
Shoplifting	2	13	*	2	13	*	1	1	*	-	-	-
Pickpocketing	12	78	15	10	78	15	21	200	10	5	27	2

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Table 4.7 Number of Syndicated/Organized Crime Group by Type of Activity: 1989-1992 (concluded)

Activity	1989			1990			1991			1992		
	Groups	Members	Firearms	Groups	Members	Firearms	Groups	Members	Firearms	Groups	Members	Firearms
Illegal Recruitment	4	18	6	3	19	6	3	8	*	21	40	-
Armed Bands	4	29	8	1	7	6	-	-	-	-	-	-
Counterfeiting	5	16	5	5	16	5	2	5	*	-	-	-
Snatching/Slashing	10	75	12	7	75	12	9	50	10	-	-	-

* Undetermined.

Note: Total may not add up because a certain group maybe involved with one or more syndicated/organized crime group.

Source: Philippine National Police.

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Table 4.8 Number of Drug Dependents by Age and Sex: 1989-1992

Age bracket	1989		1990		1991		1992	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1,848	100.0	2,625	100.0	3,326	100.0	2,948	100.0
14 and below	51	2.8	87	3.3	155	4.7	141	4.8
15-19	503	27.2	592	22.6	592	17.8	589	20.0
20-24	688	37.2	887	33.8	972	29.2	804	27.3
25-29	365	19.8	586	22.3	722	21.7	647	21.9
30-34	161	8.7	296	11.3	456	13.7	393	13.3
35-39	40	2.2	96	3.7	232	7.0	190	6.4
40 and Above	20	1.1	44	1.7	99	3.0	102	3.5
Not Specified	20	1.1	37	1.4	98	2.9	82	2.8
Male	1,711	92.6	2,377	90.6	2,964	89.1	2,591	87.9
14 and below	42	2.3	70	2.7	114	3.4	107	3.6
15-19	455	24.6	509	19.4	494	14.9	470	15.9
20-24	657	35.6	831	31.7	900	27.1	734	24.9
25-29	344	18.6	549	20.9	665	20.0	598	20.3
30-34	145	7.8	272	10.4	414	12.4	350	11.9
35-39	33	1.8	82	3.1	209	6.3	170	5.8
40 and above	17	0.9	31	1.2	80	2.4	87	3.0
Not Specified	18	1.0	33	1.3	88	2.6	75	2.5
Female	137	7.4	248	9.4	362	10.9	357	12.1
14 and below	9	0.5	17	0.6	41	1.2	34	1.2
15-19	48	2.6	83	3.2	98	2.9	119	4.0
20-24	31	1.7	56	2.1	72	2.2	70	2.4
25-29	21	1.1	37	1.4	57	1.7	49	1.7
30-34	16	0.9	24	0.9	42	1.3	43	1.5
35-39	7	0.4	14	0.5	23	0.7	20	0.7
40 and above	3	0.2	13	0.5	19	0.6	15	0.5
Not Specified	2	0.1	4	0.2	10	0.3	7	0.2

Source: Dangerous Drugs Board.

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Table 4.9 Primary Drugs Abused by Users Confined in the Different Rehabilitation Centers : 1990-1992

Drug category	1990		1991		1992	
	Number	Percent	Number	Percent	Number	Percent
Total	3,968	100.0	6,697	100.0	5,091	100.0
Marijuana (Cannabis)	1,180	29.7	2,156	32.2	1,665	32.7
Shabu (Stimulant)	771	19.4	1,845	27.5	1,680	33.0
Corex P (Cough/Cold Prep)	272	6.9	380	5.7	287	5.6
Menthodex (Cough/Cold Prep)	361	9.1	367	5.5	294	5.8
Diazepan (Benzodiazepine)	284	7.2	353	5.3	164	3.2
Hycodin (Cough/Cold Prep)	196	4.9	260	3.9	157	3.1
Hylorin (Cough/Cold Prep)	134	3.4	196	2.9	-	-
Barbitin (Cough/Cold Prep)	151	3.8	-	-	-	-
Ligaflex (Analgesic)	165	4.2	196	2.9	-	-
Pseudoflex (Cough/Cold Prep)	196	4.9	-	-	251	4.9
Mercodol (Cough/Cold Prep)	-	-	-	-	108	2.1
Phydol (Cough/Cold Prep)	258	6.5	300	4.5	306	6.0
Brownies (Cannabis)	-	-	435	6.5	-	-
Seeds (Cannabis)	-	-	209	3.1	-	-
Rugby (Inhalants)	-	-	-	-	179	3.5

Source: Dangerous Drugs Board.

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Chapter 5
Demography

5.1 Growth of Philippine Population

A knowledge of how population growth behaved in the past and how it is likely to behave in the future is of great importance because of the problem of allocating resources. The different rates at which population in different parts of the world grow, largely determine the distribution of the world population, with its political, economic and strategic implications.

The change in population is brought about by processes of fertility, mortality and migration. These factors do not only affect the size of the population but its structure and composition as well.

Like in any other developing countries, Philippine population is characterized by a high birth rate and gradually declining mortality rate. International migration on the other hand, is relatively nil. Thus, the growth in population is greatly attributed to the natural increase or the excess of births over deaths.

Data on population and vital events such as live births, deaths, fetal deaths and marriages are taken from population censuses, demographic surveys and civil registration. However, due to the inadequacy of the country's vital registration system, the assessment of the national and regional trends of vital rates is seriously affected. The fluctuations in vital event totals may not necessarily reflect differentials in fertility and mortality levels, rather, they may be due to variations in the registration coverage.

This section describes the country's population growth trend from the past to the present. Also presented is a set of population projections using the moderate fertility and moderate mortality decline assumption.

5.1.1 The Early Period

Prior to the coming of the Spanish colonizers, censuses were nonexistent, thus little was known about the country's population. It was only in 1570 that the Spanish colonizers attempted to estimate the country's population at about half a million. In 1591, the population was recorded at 667,612, based on the number of tributes comprising an *encomienda*. There were 166,903 tributes counted, each of which supposedly represented four persons.

The succeeding estimates were based mostly from church records since people were distributed among religious orders by parishes. All church attendants were counted and with church records on births, deaths and marriages, population estimates were computed. In 1799, Fr. Buzeta estimated that the "Christian" population numbered 1,502,574.

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Between 1812 and 1819 population growth was estimated based on the number of *cedulas* issued. The *cedulas* (per capita taxes imposed upon all males between certain ages) were multiplied by an arbitrary factor and is presumed to give an approximation of the population. However, like the church estimates, they excluded non-Christians.

Population estimates in 1896 were based on the civil censuses undertaken by the Spanish authorities in 1877 and 1887. Total population in 1896 was 6.26 million, recording an annual growth rate of 0.50 percent from the 1887 census.

Population estimates prior to the 19th century are far from accurate not only because of the methods used to compute them but also due to the exclusion of non-Christians, who even then, formed a substantial component of the population.

5.1.2 Growth in the Present Century

The first census conducted by the Americans in 1903 registered a total of 7.64 million persons. A steady increase in population followed reaching a 2.11 percent average annual increase in 1939. However, in 1948, the population growth rate declined to 2.07 percent due to the internal strife brought about by World War II. After the war, high growth rates were recorded, with 1970 registering the highest at 3.08 percent. Due to the rapidly increasing population, the Population Commission was created in 1969 to formulate policy and program recommendations on population relating them to socio-economic development. As a consequence, population growth slowed down registering lower annual growth rates in the succeeding years.

In 1971, the Philippine Congress passed R. A. 6365, otherwise known as the Population Act, which was later revised by Presidential Decree No. 79, mandating the Commission to propose policies and programs to guide and regulate labor force participation, internal migration and spatial distribution of the population. Average annual growth rate from 1970 to 1975 was only 2.78 percent, 0.30 percent less than that of 1960-1970.

In 1980, the Philippine population was pegged at 48,098,460, with an annual growth rate of 2.71 percent. Then, in 1990 the Census of Population and Housing registered a total population of 60,703,206 which recorded a 2.35 percent average annual growth rate, lower by 0.36 percent from the 1980 level. Given this growth rate, the population is expected to double its size in a span of 29 years.

By population size, the Philippines ranked ninth[1] in Asia and thirteenth largest in the world.

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[1] United Nations, World Population Prospects 1990. Estimate (Medium Variant).

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5.1.3 Projections of the Philippine Population

The National Statistics Office (NSO) conducted the latest census of population and housing in May 1990. However, population projections based on the results of the 1990 Census of Population and Housing (CPH) are not yet available.

The set of population projections presented in Tables 5.2 and 5.2a was based on the 1980 CPH prepared by the NSO, in collaboration with the Inter-Agency Committee on Population and Vital Statistics. This set of population projections was based on several assumptions on mortality, fertility and migration. For future trends of the mortality component, two paths are assumed - moderate mortality decline and rapid mortality decline based on the very likely event that mortality conditions will continue to improve and that life expectancy will be lengthened. Likewise, the three assumptions for fertility are as follows:

1. *Rapid Fertility Decline* - fertility will decline from its 1980 level such that a Net Reproduction Rate (NRR) of 1 will be achieved by the year 2000.
2. *Moderate Fertility Decline* - fertility will decline to an NRR of 1 by the year 2010.
3. *Slow Fertility Decline* - fertility will decline to an NRR of 1 by the year 2020.

International migration on the other hand, is assumed to have an insignificant effect on the national population, while internal migration is admittedly a major factor of growth for regional populations. Only one set of migration assumption is used and that is a continuation of the present pattern of population redistribution but at a progressively decreasing rate. Based on these assumptions, the present set of population projections produced six alternative paths of future national and regional populations:

Series 1 - Rapid fertility and moderate mortality decline
Series 2 - Moderate fertility and moderate mortality decline
Series 3 - Slow fertility and moderate mortality decline
Series 4 - Rapid fertility and rapid mortality decline
Series 5 - Moderate fertility and rapid mortality decline
Series 6 - Slow fertility and rapid mortality decline

Tables 5.2 and 5.2a show the projected population by sex, age group and region based on the 1980 census results, using series 2 (Moderate fertility and moderate mortality decline) assumption.

Medium assumption placed the national population in 1995 at 68.42 million. Males will reach 34.40 million while females 34.02 million, thereby placing the sex ratio at 101.12. The country's two most populous regions, Metro Manila or the National Capital Region (NCR) and Southern Tagalog, is projected to have a population of 8.97 million and 9.15 million, respectively.

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5.2 Population Distribution

The disparity in the spatial distribution of the country's population may be attributed to its geographical, socio-economic and climatic conditions. In this section, the population distribution by region, province and city; distribution by urban and rural; and the population densities of various areas in the country are discussed.

5.2.1 Regional and Provincial Areas

Among the fourteen regions, the bulk of the population was concentrated in Southern Tagalog and National Capital Region (NCR). They comprised 13.61 percent and 13.09 percent, respectively, of the total population in 1990. Central Mindanao, which reported the highest annual growth rate of 3.40 percent, comprised 5.22 percent of the total population. The Cordillera Administrative Region (CAR) contributed the least with 1.89 percent.

Given their average annual growth rates, six regions exceeded the national rate of 2.35 percent. These regions were Central Mindanao (3.40 percent), Southern Tagalog (3.05 percent), Metropolitan Manila Area (2.98 percent), Southern Mindanao (2.91 percent), Central Luzon (2.58 percent) and Northern Mindanao (2.44 percent). The high growth rates in most of these areas may be due to high in-migration rates. On the other hand, Eastern Visayas posted the lowest annual average growth rate of 0.88 percent.

Comparing the annual growth rates for 1975-1980 with those for the period 1970-1975, six regions relatively decreased their rates, with Metro Manila showing the largest decrement, from 4.61 percent in 1970-1975 to 3.58 percent in 1975-1980. Likewise, annual growth rates in ten regions declined from 1975-1980 to 1980-1990. Western Mindanao showed the largest decrement from 4.31 percent in 1975-1980 to 2.25 percent in 1980-1990, followed by Southern Mindanao, from 4.28 percent to 2.91 percent. (Table 5.3).

Variations in population size were also apparent on the provincial level. Population size ranged from 15,026 for Batanes to 2.65 million for Cebu. Of the 73 provinces, eighteen exceeded the millionth mark with Cebu (2.65 million), Negros Occidental (2.26 million), Pangasinan (2.02 million) and Iloilo (1.77 million) maintaining their rank over the last decade. On the other hand, three provinces were among the least populated. These were Siquijor, (73,932), Camiguin (64,247) and Batanes (15,026).

Highest annual average growth rate of 5.81 percent was registered by Rizal. This was followed by Agusan del Sur (4.73 percent), Cavite (4.10 percent) and Lanao del Sur (4.01 percent).

Population of Cities: 1960-1990. A total of 13,003,747 constituted the population of the country's 60 cities in 1990 representing 21.42 percent of the country's total population. This showed an absolute increment of 2.82 million or 27.73 percent more than the 1980 census figure.

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The most populated cities reaching the million benchmark were Quezon City with a population of 1.67 million and the city of Manila with 1.60 million. Other populated cities with more than half a million people were: Davao City with 849,947; followed by Kalookan City (763,415) and Cebu City (610,417). See Table 5.5.

Population of Metropolitan Manila Area. The Metropolitan Manila Area was established on November 7, 1975 through Presidential Decree No. 824, and amended by P.D. No. 1396, providing for its establishment as the National Capital Region under the administration of the Metropolitan Manila Authority. It consists of four cities - Manila, Quezon City, Pasay and Kalookan and the thirteen municipalities of Makati, Malabon, Mandaluyong, Marikina, Muntinlupa, Navotas, Las Piñas, Parañaque, Pasig, Pateros, San Juan, Tagig, and Valenzuela. From an approximately 5 million population in 1975, it has grown to almost 6 million in 1980 and 7.95 million in 1990. It represents 13.09 percent of the total population in 1990 compared to the 12.32 percent share in 1980. This could be attributed to a sustained in-migration of people from the rest of the country. However, the population growth rate of Metro Manila has slowed down from 4.61 percent for the period 1970-1975 to 3.58 percent in 1975-1980 and to 2.98 percent in 1980-1990. Problems related to rapid urbanization such as congestion and acute housing shortage may have contributed to the spillover of some residents of Metro Manila towards neighboring provinces. See Tables 5.3-5.6.

5.2.2 Population Density

The 60,703,206 population of the country resulted to a national density of 202.3 persons per square kilometer in 1990 representing an increase of 42 persons per square kilometer or 26.20 percent over that of 1980. This upward trend has been going on since 1903, when the first census was undertaken. From a population density of 122.3 persons per square kilometer in 1970 the density rose to 202.3 in 1990 as shown on Table 5.4.

The Metropolitan Manila Area, otherwise known as the National Capital Region (NCR), was the most densely populated, with a density of 12,497.5 persons per square kilometer, about 200 times greater than that of Cordillera Administrative Region, the region which registered the lowest (62.7 persons per square kilometer). Ilocos, Central Luzon, Bicol, Western Visayas and Central Visayas registered densities higher than the national average (202.3) while Cagayan Valley, Northern Mindanao and Central Mindanao were sparsely populated regions. Southern Tagalog, the country's most populous region, reported a population density of 176.1 persons per square kilometer. (See Table 5.4.)

At the provincial level, Kalinga Apayao registered the lowest density in the country with only 30.0 persons per square kilometer. (See Table 5.4.) By city, Manila, with an area of 38.3 square kilometer registered the highest density of

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41,807.7 persons per square kilometer, lower by 1.79 percent from the 1980 level. Pasay City followed with 26,501.2 persons per square kilometer. Davao City, the largest city in terms of land area had only 384.4 persons per square kilometer. Puerto Princesa with an area of 2,106.7 square kilometers registered the least density of 43.7 persons per square kilometer. In contrast, Mandaue, the smallest city with 11.7 square kilometers had 15,409.0 persons, showing an increase of 5,956.9 persons per square kilometer from 1980. See Table 5.5.

5.2.3 Urban-Rural Population

Since the inception of the urban-rural population in the Philippines in 1939, its definition has undergone several revisions, the latest of which was done in 1970 and was used in the succeeding census enumerations. To differentiate it from the previous definitions which utilized only population density and population size in identifying urban areas, the revised definition of urban population included the criteria on the economic and social functions of barrios, *poblaciones* and central districts resulting in a new definition which states:

1. In their entirety, all municipal jurisdictions which, whether designated as chartered cities, provincial capital or not, have a population density of at least 1,000 persons per square kilometer.
2. *Poblaciones* or central districts of municipalities and cities which have a population density of at least 500 persons per square kilometer.
3. *Poblaciones* or central districts (not included in nos. 1 and 2) regardless of population size which have the following:
   a. Street pattern, i.e., network of streets in either at parallel or right angle orientation.
   b. At least six establishments (commercial, manufacturing, recreational and/or personal services); and
   c. At least three of the following:
      i) a town hall, church or chapel with religious services at least once a month;
      ii) a public plaza, park or cemetery;
      iii) a public place or building where trading activities are carried on at least once a week; and
      iv) a public place or building like school, hospital, puericulture and health center or library.
4. Barrios having at least 1,000 inhabitants which meet the conditions set forth in No. 3 above, and in which the occupation of the inhabitants is predominantly nonfarming/nonfishing.

The Philippines being predominantly rural, has more than half of the population (31,256,195) residing in the rural areas in 1990 while the remaining 29,441,799 lived in urban areas. The proportion of urban population has increased from 37.44 percent in 1980 to 48.50 percent in 1990. Among the regions, Central Luzon has the highest proportion of urban population of 59.77 percent, followed by Southern Tagalog (50.35 percent) and Southern Mindanao (47.29

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percent), while the lowest is Cagayan Valley (24.33 percent) and Central Mindanao (25.30 percent). The influx of rural migrants to more urbanized areas for better employment opportunities may have contributed to the increased population growth in urban areas.

Metropolitan Manila, the most urbanized area in the country, accounted for 27.00 percent of the total urban population as of 1990. Cebu province constituted 4.72 percent and Bulacan, 4.08 percent. The province of Batanes, which used to be wholly rural, shared only 0.02 percent of the total urban population. See Table 5.6.

5.3 Demographic and Social Characteristics

This section provides data on general demographic and social characteristics of the population taken from the 1990 Census of Population and Housing. Data on religion were also taken from the 1990 census. Previous data on religion were from the 1970 census.

5.3.1 Sex and Age Composition and Marital Status

One of the fundamental characteristics of population composition is the age-sex structure. It is a product of the variations of past occurrences in all the factors of population change such as fertility, mortality and migration. As such, its analysis often yields important clues for the reproduction dynamics of a population.

Sex and age, together with marital status composition, form the primary determinants of vital events.

Sex Ratio. Sex composition is one of the most important characteristics describing a population. It affects directly the incidence of births, deaths and marriages, and the explanation of the differential in migrant status, occupational distribution and virtually all other distributions which are of demographic nature. *Sex ratio* is defined as the number of males per 100 females. Thus, a sex ratio of more than one hundred indicates that there are more males than females.

Table 5.7 shows the sex ratio of the population by region and province for 1975, 1980 and 1990. A slight predominance of the male over the female population in 1990 was evident. Sex ratio was 101.1 compared to 102.3 in 1975 and 100.7 in 1980. All the regions had predominantly male population, except in Metro Manila where females outnumbered the males with a sex ratio of 94.2. For the past fifteen years, Metro Manila continuously showed the lowest sex ratio. In 1990, Metro Manila registered a sex ratio of 94.2 males for every 100 females. One possibility is that more female than male migrants flock to this area because of the ample job opportunities more suited to females like clerical and other service jobs. In contrast, male migrants tend to concentrate in the Mindanao regions which generally have sex ratios higher than the national level.

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At the provincial level, seven (7) provinces posted a relatively high sex ratio. These were Palawan (107.5), Aurora and Agusan del Sur (107.4), Quirino and Samar (106.8) and Occidental Mindoro (106.7). On the other hand, Lanao del Sur registered the least proportion of males (90.9).

There were generally more females than males in the urban areas, while males outnumbered the females in rural areas in both the 1980 and the 1990 population censuses. See Tables 5.7 and 5.8.

Age Structure. The Philippines has a relatively young population considering that its population below 15 years old accounts for about 14 percent of the total population. The median age in years, however, has increased from 17.1 in 1960 to 18.7 in 1990. Bicol Region posted the lowest median age both in 1980 and in 1990 at 15.7 and 16.7, respectively. On the other hand, NCR posted the highest median age at 20.5. (See Tables 5.8 and 5.9).

A measure of the impact of the age composition on the economic activity of the population is the dependency ratio, that is, the number of dependents (0-14 and 65 years and over) for every 100 persons in the productive segment of the country's population (15-64 years old). Dependency ratio in 1990 was relatively low at 75.5 compared to 83.3 in 1980. A reduction in the dependency ratio implies reduction in the burden borne by the working group. Table 5.8 shows that dependency ratio was higher in rural than in urban areas. Bicol Region registered the highest at 90.5 while National Capital Region reported the lowest at 56.1.

Marital Status. Changes in the rate and age of marriage affect the level of fertility and mortality. They also affect labor force participation, urban-rural distribution, school attendance, number of families and other socio-economic phenomena. Tables 5.10 and 5.10a present the marital status of the population 10 years old and over by sex, age group, region and province for 1980 and 1990. About half (48.67 percent) of the population, 10 years old and over were married; 46.58 percent were never married; 3.84 percent were widowed; 0.64 percent were divorced or separated; and 0.28 percent did not specify their marital status. There were more unmarried males than females comprising 24.48 percent of total population 10 years old and over. On the contrary, there are more females who are widowed and divorced or separated. For married persons, the sex ratio was 99 males to 100 females. Some 66.25 percent of the married population were between 20-44 years old, 31.54 percent were 45 years old and over, while 2.21 percent were teenagers. For the never-married persons, 66.27 percent were between 10-19 years of age and the least number (0.62 percent) belonged to the age group 65 years and over. Of the divorced or separated persons, 54.45 percent were between ages 25-44 years and 34.47 percent were 45 years and over.

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5.3.2 Language

Mother tongue is defined as the language or dialect spoken at home or at birth of the child or the language of the child if only he had the power of speech that early. It also refers to the language or dialect spoken most of the time by members of the household. In cases where two or more languages or dialects are spoken by household members, the one often used in conversation among members of the household when most of them are gathered together is considered as the language or dialect generally spoken in the household.

Mother tongue, as defined, determines the size of the various cultural or ethnic groups in the country. There were more than 988 dialects in the country based on the results of the 1990 Census of Population and Housing.

The eight leading dialects spoken by private households aggregated to 86.24 percent. Tagalog, the most popular dialect, was spoken by 27.93 percent of the total number of private households, outranking Cebuano (24.30 percent) which was the major Philippine dialect in 1960 and 1975. Other major dialects are Ilocano, spoken by 9.78 percent; Hiligaynon (Ilongo), 9.34 percent; Bicol, by 5.81 percent; Lineyte-Samarnon (Waray), 4.03 percent; Pampanga, 3.13 percent and Pangasinan, 1.92 percent.

Table 5.11 shows the major mother tongues of the population for the censal years 1960, 1970, 1975, 1980 and 1990, while Table 5.11a shows the distribution of languages or dialects generally spoken in private households by region in 1990.

5.3.3 Religion

The Philippines, having been under different colonial powers, adapted several religions. Most predominant is Christianity which in itself is composed of various sects. The Roman Catholics make up the bulk of the Christian population. The Protestants are also of various denominations such as Baptist, Evangelical, Lutheran, Methodist and a host of others. In the local scene are the *Iglesia ni Kristo* and the Aglipayans (Philippine Independent Church) who are closely allied with Episcopalians of America and the Anglicans of England. Islam is professed by the Muslims while a negligible portion embraces Buddhism.

The 1990 Census of Population revealed that 82.92 percent of the country's population were Roman Catholics. Protestants ranked second (5.43 percent). This was followed by Islam (4.57 percent), Aglipay (2.63 percent), *Iglesia Ni Kristo* (2.34 percent) and Born Again Christians (0.53 percent). See Table 5.12. See also *Philippine Yearbook 1983* and other past issues for a detailed discussion of these religions.

5.4 Vital Components of Population Change

Population change has three components: births, deaths and migration. As people are born, die or move, their total number in an area may change. Vital

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statistics are essential in planning, operating and evaluating programs on transport, agricultural production, employment, housing and health, among others. As such, these processes are closely monitored and are registered in the Civil Registry books of every city and municipality all over the country.

5.4.1 History of the Vital Statistics Registration System

During the early Spanish regime, records of vital events were compiled and kept by the Catholic clergies in their parochial archives. It was not until December 1889 when institutions of civil registry and civil marriage were formally established by the Civil Code of Spain. From then on, civil registration became official.

In 1901, the Bureau of Archives was created (Act No. 273) and one of its duties was to keep the civil registry records. When the Bureau became a division of the National Library (Act 3022) in March 1922, all municipal secretaries were required to submit quarterly reports on all registration matters to the Chief of the Division of Archives. This started the centralization of the civil registry records. These records were on births, deaths and marriages from January 1, 1922 to December 31, 1931. Statistics on the same events from 1880 to 1899 were kept in the Spanish Document Section of the Division.

In 1940, the Bureau of the Census and Statistics (now the National Statistics Office) was created by virtue of Commonwealth Act 591 and was made responsible for civil registration. Pursuant to Act No. 3753, the Director of the then Bureau of the Census and Statistics is the ex-officio Civil Registrar-General and all local civil registrars are under his supervision. In a city, the local civil registrar is the city health officer or whoever is designated in the city charter, while in a municipality, it is the municipal treasurer. However, during the Marcos regime, the duties and responsibilities of the local civil registrars were transferred to the office of the Municipal Planning and Development Coordinator in case of municipalities, and to the City Civil Registrar in case of cities, as provided by the Local Government Code (*Batas Pambansa Blg. 337*). At the national level, the Civil Registry and Vital Statistics Division of the NSO assists the Civil Registrar-General in organizing, coordinating and implementing the civil registry functions. The division is responsible for the maintenance of an archive of all registered documents in the entire country and for the compilation, organization, analysis and publication of vital statistics taken from the registry records.

5.4.2 Summary of Philippine Vital Statistics

A summary of Philippine Vital Statistics from 1903 to 1990 is shown in Table 5.13. The steady increase in the country's population could be attributed to the increasing number of live births and stable death rates resulting in a progressively growing natural increase reaching the rate of 24.1 per thousand population in 1980 from a negative 5.9 percent in 1903. Live births, numbering 284,800 in 1903 had risen to 1,456,860 in 1980. There was, however, a gradual reduction

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of live birth rates in the latter period (1980-1990). Live birth rates decreased from 30.3 live births per thousand population in 1980 to 26.9 in 1990 owing to the reduction in the number of persons of marriageable ages and the relative prevalence of contraceptive practices in the country.

Death rates, on the other hand, settled at an average of 6.8 deaths per thousand in the seventies and 5.9 in the eighties after exhibiting substantial declines in the earlier decades. Infant mortality rates had likewise gone down during the same period. Meanwhile, the rate of marriage at the national level reached its peak at 15.5 per thousand population in 1979 and it dropped to 14.7 in 1980 and down to 13.9 in 1990. For the regional summary, refer to Table 5.13. Data on these vital events were based on actual registration without any adjustments for underregistration.

5.4.3 Fertility

Fertility is a demographic phenomenon greatly responsible for setting population trends. More often, it is viewed as the main variable in population change with the negative notion of it being the crux of the country's population problem. Table 5.13a shows the number of live births in the period 1980-1990. In 1980, live births reached 1,456,860 indicating a rate of 30.3 births per thousand population. An increasing trend in the number of live births was shown in the 80s with its peak registered in 1987 at 1,582,469 with a rate of 27.6 births per thousand population. In 1990, a much higher number of live births was registered at 1,631,069 with a corresponding birth rate of 26.9. Birth rates, however, showed a generally declining trend during the period. Metropolitan Manila Area posted relatively high birth rates from 1980 to 1990 averaging 34.0 as compared with other regions. Central Mindanao registered the lowest average of only 18.1.

The increase in sex ratio as depicted in Table 5.14 showed an increasing proportion of male births from 1980 to 1989. There were 813,925 male births in 1989 against 751,329 female births or a sex ratio of 108 males to 100 females.

In 1990, the Philippines posted a daily average of 4,468.7 live births, an increase of 13.49 percent from the 1985 average. By month, October posted the highest daily average of 414.0 followed by September with 413.4 and December with 402.1.

The number and percent distribution of live births by age of mother is presented in Table 5.14a. Mothers aged 20-29 consistently delivered the highest number of live births from 1985 to 1990. In 1990, there were 287 cases of live births occurring to mothers below 15 years of age, down from 415 cases in 1985. Table 5.14b presents the registered number of live births by sex and region. Metropolitan Manila Area recorded the highest number of live births from 1980 to 1990, registering 281,817 in 1990. Southern Tagalog followed with 226,957 registered live births. Central Mindanao remained at the bottom line reporting 46,091 in 1990 from the 47,621 reported live births in 1989.

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5.4.4 Mortality

Mortality refers to deaths as a component of population change. Eventually death occurs to every population member, but the rate at which it occurs depends on many factors, such as age, sex, race, occupation and social class and its incidence can reveal much about a population's standard of living and health care. Normally, it is believed to reduce population than contribute to its growth. Recent demographic studies reveal that in countries undergoing rapid population increase, it is mainly a sharply declining death rate rather than an increasing birth rate that brings about population explosion.

The Philippines has continuously exhibited a stable death rate from the seventies to the early part of the eighties, thus attributing an increasing birth rate for the country's fast population growth. In 1983, national death rate was recorded at 6.3 deaths per thousand population, the highest since 1980. It declined to 5.5 in 1988 and went down further to 5.2 in 1990, or a total death of 313,890. Since 1980, high death rates were particularly noticeable in three regions; Ilocos, Bicol and Central Visayas. The lowest death rates on the other hand were registered in Central Mindanao, Southern, Northern and Western Mindanao. See Table 5.13.

Table 5.15 shows that since 1985, there were more reported male deaths than females. During the six year period, the highest death sex ratio was registered in 1990 at about 145 males per 100 females. A daily average of 860 deaths was reported during the same year, lower than the 1987 level of 918.5. As for monthly distributions, very slight variations were noted as each month registered an almost equal percentage in death occurrences.

Table 5.15a shows that there is a lesser chance of survival during infancy than in subsequent years of childhood and young adulthood. Infant deaths was observed to be declining annually during the period 1984-1990 from a high 56,897 in 1984 to 39,633 in 1990. In 1990, a total of 739,633 infant deaths, that is deaths of persons aged under one year, was recorded, accounted for 12.63 percent of the total deaths for the year, almost 8 percent lower than 1989 registered infant deaths. Death at the ages 70 years and over also figured prominently comprising 28.9 percent or a total of 90,660 in 1990.

The state of health is also of interest in the study of mortality. Among the ten registered leading causes of death (Table 5.15b), pneumonia remained the number one killer until 1989, taking the heaviest toll of 46,268 or 14.21 percent of total deaths, but placed behind in 1990, where diseases of the heart was the primary cause of death. Death by accidents caused 8,053 deaths representing 2.57 percent in 1990.

Pneumonia continued to be the leading cause of death among infants numbering 9,383 in 1990 or 23.67 percent of the total for the year as shown in Table 5.15c.

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5.4.5 Marriages

Marriage is the main variable in family formation, composition, change and dissolution. With the family playing an important role in demographic analysis, marriage eventually is considered a basic component of population change alongside fertility, mortality and migration.

The New Family Code of the Philippines (NFCP) was effected on August 3, 1988. The new family code provides that "18 years of age be the minimum legal age of both man and woman to contract marriage" (Article 5, NFCP).

Marriage occurrences fluctuated during the period 1982-1990. The number of marriages in 1983 slightly declined by 0.04 percent but rose by 6.59 percent in 1990.

The registered number of marriages in the Philippines reached its peak in 1990 posting a total of 422,041. The largest percentage of 13.19 percent (55,650) occurred during the first month of the year, January, followed by the month of May with 11.44 percent (48,291) of the total number of marriages. June the traditional wedding month ranked third with 10.09 percent (42,586). December was also a popular wedding month accounting for 9.67 percent of total marriages for the year. See Table 5.16.

Among the regions, Metropolitan Manila Area reported the highest number of marriages accounting for 21.3 percent of total marriages in 1990. Southern Tagalog and Central Luzon likewise reported substantial number of marriages with 57,815 and 53,269, respectively. See Table 5.13a.

Nearly all marriages in the Philippines are first marriages. In 1990, a total of 418,566 single females or 99.18 percent of total number of brides entered matrimonial ties, whereas bachelors numbered 413,787 accounting for 98.04 percent of the total number of grooms.

Remarriages is not a popular trend in the Philippines as it is in other nations. It can be seen that only 8,245 or 1.95 percent of the total number of grooms were composed of widowed and divorced or separated males, while only 3,467 or 0.82 percent for the total number of brides. (Refer to Tables 5.16a and 5.16b).

Mean age at marriage in 1990 (computed from figures in Table 5.16c) was 23.7 years for the bride and 26.1 years for the groom as males generally marry later than females. There also seemed to be a definite pattern in the number of persons marrying at certain age levels. As seen in Table 5.16c, brides outnumbered grooms by a wide margin in the age group 20 and below. The disparity between the figures registered by both sexes became very small in the 20-24 age category. However, as the age bracket (30 and over) went up, there were relatively more grooms than brides. These patterns indicate that young men tend to marry women about their age in contrast to older ones who prefer relatively younger ones. On the other hand, women tend to marry men about their age or older.

Roman Catholics make up the bulk of Filipinos, thus majority of them adhere to Roman Catholic marriage ceremonies. The church had solemnized 202,161 (47.90 percent) marriages in 1990. On the other hand, marriages by civil

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ceremony was on the downward trend between 1987 and 1989, but the number increased to 122,365 or 6.62 percent in 1990. A total of 97,500 marriages was performed under other religious rites. See Table 5.16c.

Registered intermarriages by nationality are presented in Table 5.16d. The number of Filipino marriages in 1990 made up the largest portion of all marriages. Among foreign grooms who wed Filipinas were Americans with 4,601, followed by Japanese, 4,300. For Filipino grooms, only 1,257 married foreign brides.

5.4.6 Migration

Population change not only results from natural increase or decrease (the balance of births and deaths) but is also affected by migration. The term *migration* is defined as the movement of people from one place to another to settle permanently for a certain period of time. Since most concerns about population size relate to the relatively permanent population of an area, it is the people who move to change their residence who are the subject of migration research. A knowledge of their number and characteristics is important in the analysis of the changes in an area's population structure and labor force. It also helps one to understand the nature and extent of the problem in social and cultural assimilation that often results in areas with heavy immigration or in-migration.

International Migration. One reason why international migration do not have a great effect on population growth or decline in most countries is that they experience both immigration and emigration which often offset each other. In the Philippines, restrictions such as the imposition of quotas and the establishment of qualifications that potential immigrants must possess has made international migration insignificant as a component of population growth.

Since 1975, there has been a generally increasing trend in the number of Filipinos permanently settling in foreign countries. Records showed that from 14,492 emigrants during the year, migration rose consistently, until it took a dip in 1983 when a sharp decrease of 21.26 percent was registered. It further dropped by 2.19 percent in 1984 but increased in 1985 posting a total of 45,269 emigrants. This trend continued on its upward course eventually reaching a total of 58,066 in 1988, the highest ever recorded since 1975. In 1990, the number of emigrants rose to 63,208 or 13.47 percent but slightly declined by 0.85 percent in 1991 (62,671). This cumulated to 793,385 the number of Filipino emigrants within the sixteen-year period (1975-1991). Majority of the registered emigrants were relatively of the younger generation. Some 17.93 percent of the 1991 emigrants were aged 14 and below while those coming from the 15 to 29 bracket constituted 35.62 percent. Emigrants belonging to age range 30-34 also comprised a sizeable portion at 11.40 percent. (See Tables 5.17 and 5.17a).

Among occupational groupings, professional and technical groups continued to move out in big numbers, with a total of 7,534 or 12.02 percent in 1991.

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This number however, declined slightly by 2.07 percent from the 1990 total of 7,693. The bulk or about 42 thousand of total emigrants representing 67.48 percent belonged to the "others" (housewives, retirees, students, minors, unemployed etc.) category. As in previous years, the United States of America remained to be the leading receiving country absorbing 70.18 percent of the total number of emigrants in 1991. It was followed by Canada and Australia with 11.54 percent and 9.14 percent, respectively. See Tables 5.17, to 5.17b for more details.

Table 5.18 shows the distribution of registered foreign nationals in the country for the period 1986-1990. A cumulative total of 3,768,329 aliens was reported. Highest number of aliens registered was in 1989 at 921,786. As of September 1990, there were 631,109 aliens registered, of whom 23.44 percent were Americans and 21.87 percent were Japanese. Chinese and British nationals also contributed a sizeable portion comprising 11.14 percent and 8.74 percent, respectively. Indonesian nationals accounted for only 0.63 percent in 1990, the least among alien nationals.

Internal Migration. Internal migration brings about not only demographic but also socio-economic implications. The flow of people from rural areas to urban industrial districts is very prevalent in the Philippines. Such movement not only reflects the extent of socio-economic development but is also certain to cause changes in such demographic behavior as fertility and mortality, together with changes in population structure as a whole. Table 5.19 shows the number of inter-regional migrants by sex and region of origin and destination between the period 1975-1980. This table shows more female migrants than males. Of the total number of persons(1,148,297) who moved across regional boundaries, 53.64 percent were females and 46.36 percent were males. Mindanao regions generally had more male than female in-migrants due to their absorbtive capacity. National Capital Region (NCR) which absorbed the highest number of in-migrants (32.99 percent), had more female than male in-migrants, 60.07 percent and 39.93 percent, respectively. Next to NCR were Southern Tagalog with 15.94 percent and Central Luzon with 8.87 percent of the total migrants. The high percentages in these two regions may be attributed to their proximity to the capital region.

Table 5.20 presents the net migration rate for each region. Only six regions were in-migration areas, as shown by their positive rates. National Capital Region posted the highest rate (3.70) while Eastern Visayas recorded the lowest (-3.13).

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Sources:

5.1-5.4.5 National Statistics Office, Population Census, Population Studies, and Civil Registry and Vital Statistics Sections.

5.4.6 National Statistics Office, Population Studies Section; Commission on Filipinos Overseas; Commission on Immigration and Deportation; Shyrock, Henry S. and Jacob S. Siegel and Associate. *The Methods and Materials of Demography.* Volume 2., Washington D.C., 1980.

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Table 5.1 Growth of Philippine Population: 1799-1990

Year	Population	Average annual rate of increase	Source of data
1799	1,502,574	-	Fr. Buzeta
1800	1,561,251	3.91	Fr. Zuñiga
1812	1,933,331	1.80	Cedulas
1819	2,106,230	1.23	Cedulas
1829	2,593,287	2.10	Church
1840	3,096,031	1.62	Local officials
1850	3,857,424	2.22	Fr. Buzeta
1858	4,290,381	1.34	Bowring
1870	4,712,006	0.78	Guia de Manila
1877	5,567,685	2.41	Census
1887	5,984,727	0.72	Census
1896	6,261,339	0.50	Prof. Plehn's estimate based on census records
1903	7,635,426	2.87	Census
1918	10,314,310	2.03	Census
1939	16,000,303	2.11	Census
1948	19,234,182	2.07	Census
1960	27,087,685	2.89	Census
1970	36,684,486	3.08	Census
1975	42,070,660	2.78	Census
1980	48,098,460	2.71	Census
1990	60,703,206	2.35	Census

Note: Population from 1799 to 1896 excludes non-Christians.

Sources: National Statistics Office. *1975 Integrated Census and Its Economic Activities (ICPEA), Volume II, National Summary, Phase I; 1980 Census of Population and Housing, Volume 2, National Summary. 1990 Census of Population and Housing.*

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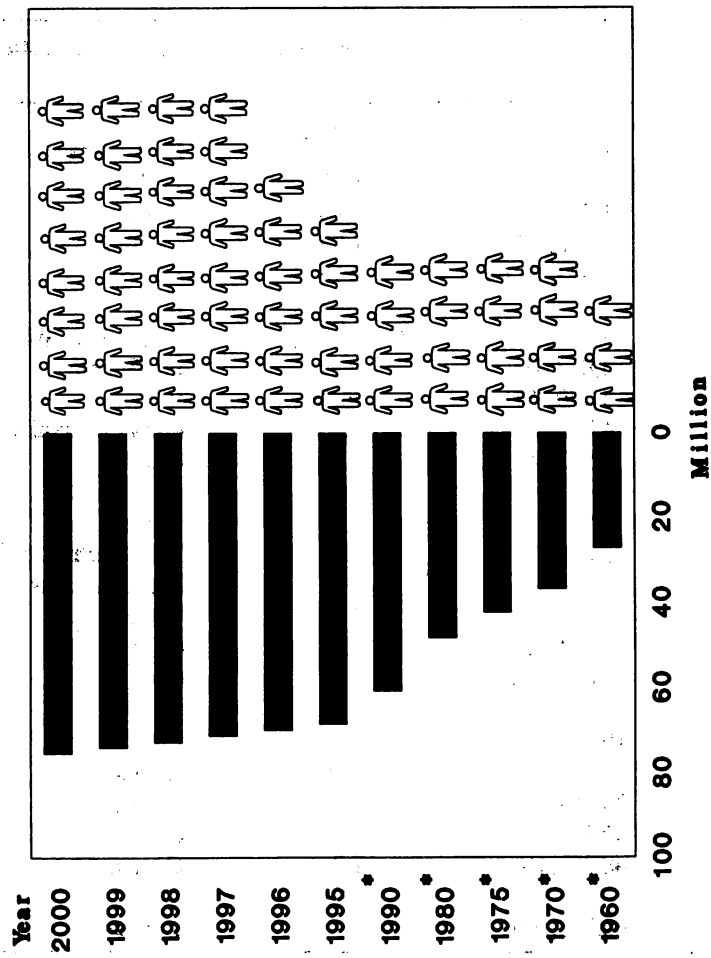
Figure 5.1 Growth Pattern of Philippine Population: 1960 - 2000



Note: Based on Series 2: Moderate Fertility and Mortality Decline Population Projection

* Censal Year

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Table 5.2 Population Projections for the Philippines by Region and Province: 1991-2000
(Series 2: Moderate fertility and moderate mortality decline)
(Thousands)

Region/province	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Philippines	62,868	64,259	65,649	67,038	68,424	69,804	71,175	72,536	73,880	75,219
National Capital Region (NCR)	8,178	8,380	8,579	8,776	8,971	9,162	9,350	9,535	9,716	9,895
I. Ilocos	4,372	4,452	4,531	4,611	4,690	4,768	4,846	4,923	4,999	5,073
Abra	198	202	206	210	213	217	220	224	227	231
Benguet	477	488	499	510	521	532	543	553	563	573
Ilocos Norte	471	479	487	495	503	511	519	526	534	541
Ilocos Sur	552	563	574	586	597	608	619	631	642	652
La Union	581	594	606	619	631	644	656	668	680	692
Mt. Province	118	120	121	122	123	124	125	126	127	128
Pangasinan	1,974	2,006	2,038	2,070	2,101	2,133	2,164	2,195	2,225	2,255
II. Cagayan Valley	2,912	2,979	3,046	3,114	3,182	3,250	3,318	3,385	3,452	3,518
Batanes	14	15	15	15	15	16	16	16	16	17
Cagayan	900	918	935	953	970	988	1,005	1,022	1,039	1,056
Ifugao	138	141	143	146	148	151	153	156	158	161
Isabela	1,164	1,192	1,221	1,250	1,279	1,308	1,337	1,365	1,394	1,422
Kalinga-Apayao	244	250	256	261	267	273	279	284	290	296
Nueva Vizcaya	328	337	345	354	362	371	379	387	396	404
Quirino	123	127	131	136	140	144	149	153	158	162
III. Central Luzon	6,282	6,423	6,564	6,704	6,844	6,984	7,122	7,259	7,395	7,529
Bataan	466	480	493	507	521	535	548	562	576	589
Bulacan	1,477	1,513	1,549	1,585	1,621	1,657	1,693	1,728	1,763	1,798
Nueva Ecija	1,352	1,379	1,406	1,432	1,459	1,486	1,512	1,538	1,563	1,589

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Table 5.2 Population Projections for the Philippines by Region and Province: 1991-2000 (continued)
(Series 2: Moderate fertility and moderate mortality decline)
(Thousands)

Region/province	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Pampanga	1,559	1,596	1,633	1,670	1,707	1,744	1,781	1,817	1,854	1,889
Tarlac	842	856	870	884	898	911	925	938	951	964
Zambales	586	599	612	625	638	651	663	675	688	699
IV. Southern Tagalog	8,313	8,522	8,732	8,942	9,152	9,361	9,570	9,777	9,983	10,188
Aurora	157	163	168	174	179	185	191	197	203	208
Batangas	1,492	1,522	1,551	1,581	1,610	1,638	1,667	1,695	1,723	1,750
Cavite	1,151	1,188	1,226	1,264	1,301	1,339	1,376	1,414	1,451	1,488
Laguna	1,363	1,401	1,438	1,475	1,512	1,549	1,585	1,621	1,657	1,693
Marinduque	215	219	223	227	231	235	238	242	246	250
Occidental Mindoro	297	304	311	317	324	331	338	345	351	358
Oriental Mindoro	604	618	633	648	663	678	693	708	723	738
Palawan	520	534	548	563	577	592	607	622	637	651
Quezon	1,471	1,502	1,534	1,565	1,597	1,628	1,659	1,690	1,721	1,752
Romblon	227	231	234	237	240	243	246	249	252	255
Rizal	817	842	867	892	918	943	968	994	1,019	1,044
V. Bicol	4,484	4,581	4,678	4,776	4,873	4,970	5,067	5,163	5,260	5,355
Albay	1,024	1,044	1,064	1,084	1,103	1,123	1,142	1,161	1,180	1,199
Camarines Norte	409	418	428	438	448	458	467	477	487	496
Camarines Sur	1,438	1,472	1,505	1,538	1,572	1,606	1,639	1,673	1,706	1,740
Catanduanes	216	220	224	228	232	236	240	244	248	252
Masbate	745	760	775	790	805	821	836	851	865	880
Sorsogon	652	667	682	697	712	727	742	757	772	787
VI. Western Visayas	5,789	5,905	6,021	6,136	6,250	6,363	6,474	6,584	6,693	6,800
Aklan	411	419	427	435	443	450	458	466	473	480

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Table 5.2 Population Projections for the Philippines by Region and Province: 1991-2000 (continued)
(Series 2: Moderate fertility and moderate mortality decline)
(Thousands)

Region/province	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Antique	442	452	461	470	479	489	498	507	516	525
Capiz	642	656	670	684	699	713	726	740	754	767
Iloilo	1,792	1,825	1,857	1,889	1,920	1,951	1,982	2,012	2,041	2,070
Negros Occidental	2,502	2,554	2,606	2,658	2,709	2,760	2,810	2,860	2,909	2,957
VII. Central Visayas	4,701	4,786	4,870	4,954	5,037	5,120	5,201	5,282	5,362	5,441
Bohol	957	971	986	1,000	1,015	1,029	1,044	1,058	1,072	1,086
Cebu	2,622	2,670	2,718	2,766	2,814	2,860	2,907	2,953	2,998	3,042
Negros Oriental	1,039	1,059	1,079	1,100	1,120	1,140	1,159	1,179	1,198	1,217
Siquijor	84	85	86	88	89	90	92	93	94	96
VIII. Eastern Visayas	3,420	3,481	3,542	3,603	3,665	3,727	3,789	3,850	3,912	3,973
Leyte	1,582	1,608	1,634	1,660	1,685	1,711	1,736	1,762	1,787	1,812
Southern Leyte	387	397	406	416	426	436	446	456	466	476
Eastern Samar	409	419	428	438	448	458	468	478	487	497
Northern Samar	501	514	527	540	554	568	581	595	609	623
Samar	541	544	547	549	552	555	557	560	563	565
IX. Western Mindanao	3,262	3,330	3,398	3,466	3,534	3,603	3,671	3,739	3,806	3,874
Basilan	264	270	276	281	287	293	298	304	309	315
Sulu	454	462	470	478	486	494	502	510	517	525
Tawi-tawi	250	255	261	267	274	280	286	292	298	304
Zamboanga del Norte	744	758	772	786	800	814	828	841	855	869
Zamboanga del Sur	1,551	1,585	1,619	1,653	1,688	1,722	1,757	1,791	1,826	1,861
X. Northern Mindanao	3,706	3,797	3,889	3,981	4,074	4,167	4,260	4,354	4,447	4,540
Agusan del Norte	489	501	513	525	537	549	562	574	586	598

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Table 5.2 Population Projections for the Philippines by Region and Province: 1991-2000 (concluded)
(Series 2: Moderate fertility and moderate mortality decline)
(Thousands)

Region/province	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Agusan del Sur	370	380	391	402	413	424	436	447	459	470
Bukidnon	850	872	894	916	938	961	983	1,006	1,028	1,051
Camiguin	64	64	65	65	66	66	67	67	67	68
Misamis Occidental	487	496	505	513	522	530	539	547	555	563
Misamis Oriental	957	983	1,009	1,035	1,061	1,088	1,114	1,140	1,167	1,193
Surigao del Norte	489	500	512	524	536	548	560	573	585	597
XI. Southern Mindanao	4,436	4,538	4,641	4,744	4,848	4,952	5,055	5,158	5,261	5,364
Davao	926	944	962	981	999	1,017	1,035	1,053	1,071	1,088
Davao del Sur	1,539	1,577	1,614	1,652	1,690	1,728	1,765	1,802	1,839	1,876
Davao Oriental	447	458	468	479	490	501	512	523	534	546
South Cotabato	1,019	1,043	1,067	1,091	1,115	1,140	1,164	1,189	1,213	1,237
Surigao del Sur	505	517	529	541	554	566	579	591	604	616
XII. Central Mindanao	3,013	3,085	3,158	3,231	3,304	3,378	3,452	3,527	3,601	3,675
Lanao del Norte	617	632	647	662	677	692	707	722	737	751
Lanao del Sur	505	516	526	537	547	558	569	580	591	602
Maguindanao	689	704	718	733	748	763	778	793	808	823
Cotabato	769	789	808	828	847	867	887	907	926	946
Sultan Kudarat	432	445	458	471	485	498	512	525	539	553

Note: Details may not add up to totals due to rounding.

Sources: National Statistics Office and Inter-Agency Committee on Population and Vital Statistics. *Revised Population Projection for the Philippines and Its Regions, 1980-2030.* Paper presented at the 6th National Population Welfare Congress, 17 November 1983.

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Table 5.2a Projected Population of the Philippines by Age Group and Sex: 1991-2000
(Series 2: Moderate fertility and moderate mortality decline)
(Thousands)

Age group	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Both sexes	62,868	64,259	65,649	67,038	68,424	69,804	71,175	72,536	73,886	75,224
0 - 4	8,550	8,611	8,661	8,698	8,726	8,742	8,748	8,744	8,731	8,709
5 - 9	7,925	8,050	8,164	8,266	8,356	8,434	8,500	8,554	8,596	8,629
10 - 14	7,561	7,623	7,673	7,707	7,748	7,884	8,009	8,124	8,228	8,319
15 - 19	6,696	6,870	7,059	7,259	7,443	7,516	7,580	7,630	7,666	7,708
20 - 24	5,985	6,100	6,216	6,341	6,480	6,637	6,811	7,000	7,200	7,385
25 - 29	5,280	5,412	5,546	5,676	5,802	5,920	6,035	6,152	6,278	6,418
30 - 34	4,601	4,722	4,842	4,963	5,087	5,215	5,348	5,482	5,613	5,738
35 - 39	3,891	4,028	4,159	4,286	4,411	4,534	4,655	4,775	4,896	5,020
40 - 44	3,035	3,192	3,355	3,517	3,672	3,817	3,954	4,084	4,211	4,336
45 - 49	2,382	2,471	2,572	2,686	2,814	2,956	3,110	3,271	3,431	3,583
50 - 54	1,993	2,043	2,093	2,148	2,214	2,291	2,378	2,477	2,589	2,713
55 - 59	1,557	1,624	1,696	1,764	1,826	1,880	1,929	1,977	2,031	2,095
60 - 64	1,222	1,254	1,287	1,325	1,370	1,426	1,489	1,555	1,620	1,678
65 - 69	893	927	964	1,000	1,035	1,066	1,095	1,125	1,159	1,201
70 - 74	634	645	658	674	695	719	748	779	809	838
75 - 79	411	420	427	433	441	449	458	468	480	496
80 - 84	172	185	197	208	217	224	229	234	239	245
85 - 89	63	63	64	66	69	74	79	84	89	93
90 +	16	17	18	18	19	19	19	20	20	22
Male	31,585	32,290	32,995	33,699	34,403	35,103	35,800	36,492	37,178	37,859
0 - 4	4,375	4,407	4,433	4,453	4,468	4,477	4,481	4,480	4,474	4,464

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Table 5.2a Projected Population of the Philippines by Age Group and Sex: 1991-2000 (continued)
(Series 2: Moderate fertility and moderate mortality decline)
(Thousands)

Age group	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
5 - 9	4,048	4,112	4,171	4,224	4,270	4,311	4,345	4,374	4,396	4,414
10 - 14	3,863	3,888	3,908	3,925	3,955	4,025	4,089	4,149	4,202	4,249
15 - 19	3,441	3,533	3,630	3,728	3,807	3,838	3,863	3,884	3,902	3,932
20 - 24	3,060	3,125	3,187	3,251	3,324	3,407	3,499	3,596	3,694	3,773
25 - 29	2,593	2,684	2,778	2,868	2,951	3,024	3,089	3,151	3,216	3,289
30 - 34	2,208	2,267	2,330	2,400	2,476	2,560	2,651	2,744	2,834	2,917
35 - 39	1,918	1,970	2,018	2,066	2,118	2,174	2,233	2,296	2,366	2,442
40 - 44	1,531	1,605	1,682	1,754	1,821	1,879	1,930	1,978	2,027	2,079
45 - 49	1,203	1,249	1,300	1,356	1,418	1,486	1,560	1,634	1,706	1,772
50 - 54	995	1,021	1,047	1,076	1,111	1,150	1,195	1,245	1,300	1,360
55 - 59	762	796	833	869	901	930	955	980	1,008	1,041
60 - 64	586	601	617	636	659	687	719	753	786	816
65 - 69	414	431	450	468	485	500	514	528	544	565
70 - 74	291	274	298	304	313	324	338	353	368	382
75 - 79	186	189	192	194	196	199	201	204	209	216
80 - 84	77	82	86	91	94	96	98	100	102	104
85 - 89	28	28	28	28	29	31	33	35	36	38
90 +	7	7	7	8	8	8	8	8	8	8
Female	31,283	31,969	32,655	33,339	34,021	34,701	35,375	36,044	36,708	37,365
0 - 4	4,175	4,205	4,228	4,246	4,258	4,265	4,267	4,264	4,257	4,245
5 - 9	3,877	3,938	3,993	4,042	4,086	4,123	4,155	4,180	4,200	4,215
10 - 14	3,698	3,735	3,765	3,782	3,793	3,859	3,920	3,976	4,026	4,070

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Table 5.2a Projected Population of the Philippines by Age Group and Sex: 1991-2000 (concluded)
(Series 2: Moderate fertility and moderate mortality decline)
(Thousands)

Age group	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
15 - 19	3,255	3,337	3,429	3,531	3,636	3,679	3,717	3,746	3,764	3,776
20 - 24	2,925	2,975	3,029	3,090	3,156	3,230	3,312	3,404	3,506	3,611
25 - 29	2,687	2,728	2,768	2,808	2,851	2,897	2,947	3,002	3,062	3,129
30 - 34	2,394	2,455	2,512	2,564	2,611	2,656	2,697	2,738	2,778	2,822
35 - 39	1,973	2,059	2,142	2,220	2,293	2,361	2,422	2,479	2,531	2,579
40 - 44	1,504	1,586	1,674	1,763	1,852	1,939	2,024	2,106	2,184	2,257
45 - 49	1,179	1,222	1,273	1,330	1,396	1,469	1,550	1,636	1,724	1,812
50 - 54	998	1,022	1,045	1,071	1,103	1,140	1,183	1,232	1,289	1,353
55 - 59	795	828	863	896	925	951	974	997	1,022	1,053
60 - 64	636	653	670	689	712	739	770	803	834	862
65 - 69	478	496	514	532	550	566	581	597	615	636
70 - 74	343	351	360	370	382	395	410	426	441	456
75 - 79	225	230	235	239	244	250	256	263	271	280
80 - 84	96	103	111	117	123	127	131	134	137	141
85 - 89	35	35	36	38	40	43	46	50	53	55
90 +	10	10	11	11	11	11	12	12	13	13

Note: Details may not add up to totals due to rounding.

Source: National Statistics Office and Inter-Agency Committee on Population and Vital Statistics. *Revised Population Projections for the Philippines and Its Regions, 1980-2030.* Paper presented at the 6th National Population Welfare Congress, 17 November 1983.

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Table 5.3 Population and Growth Rate by Region and Province: Censal Years 1970, 1975, 1980 and 1990

Region/province	Population 1970	1975	1980	1990	Annual average growth rate 1970-1975	1975-1980	1980-1990
Philippines	36,684,486	42,070,660	48,098,460	60,703,206	2.78	2.71	2.35
National Capital Region (NCR)	3,966,695	4,970,006	5,925,884	7,948,392	4.62	3.58	2.98
Cordillera Administrative Region (CAR)	-	-	-	1,146,191	-	-	2.28
Abra	-	-	-	184,743	-	-	1.44
Benguet	-	-	-	485,857	-	-	3.19
Ifugao	-	-	-	147,281	-	-	2.83
Kalinga-Apayao	-	-	-	211,775	-	-	1.36
Mt. Province	-	-	-	116,535	-	-	1.24
I. Ilocos	2,990,561	3,269,391	3,540,893	3,550,642	1.80	1.61	1.96
Abra	145,508	147,010	160,198	-	0.21	1.73	-
Benguet	263,550	302,065	354,751	-	2.77	3.27	-
Ilocos Norte	343,427	371,724	390,666	461,661	1.60	1.00	1.68
Ilocos Sur	385,139	419,776	443,591	519,966	1.74	1.11	1.60
La Union	373,682	414,635	452,578	548,742	2.10	1.77	1.95
Mt. Province	93,112	94,096	103,052	-	0.21	1.83	-
Pangasinan	1,386,143	1,520,085	1,636,057	2,020,273	1.86	1.48	2.13
II. Cagayan Valley	1,691,459	1,933,177	2,215,522	2,340,545	2.71	2.76	0.55
Batanes	11,398	11,870	12,091	15,026	0.82	0.37	2.20
Cagayan	581,237	644,075	711,476	829,867	2.07	2.01	1.55
Ifugao	92,487	104,707	111,368	-	2.51	1.24	-

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Table 5.3 Population and Growth Rate by Region and Province: Censal Years 1970, 1975, 1980 and 1990 (continued)

Region/province	Population 1970	1975	1980	1990	Annual average growth rate 1970-1975	1975-1980	1980-1990
Isabela	648,123	730,386	870,604	1,080,341	2.42	3.57	2.18
Kalinga-Apayao	136,249	163,225	185,063	-	3.68	2.54	-
Nueva Vizcaya	172,198	213,151	241,690	301,179	4.36	2.54	2.22
Quirino	49,767	65,763	83,230	114,132	5.73	4.82	3.21
III. Central Luzon	3,615,496	4,210,136	4,802,793	6,199,017	3.09	2.67	2.58
Bataan	216,210	263,269	323,254	425,803	4.02	4.19	2.79
Bulacan[1]	737,975	899,529	1,096,046	1,505,219	4.04	4.03	3.22
Nueva Ecija	851,294	947,995	1,069,409	1,312,680	2.18	2.44	2.07
Pampanga	907,275	1,042,164	1,181,590	1,532,615	2.81	2.54	2.64
Tarlac	559,708	640,899	688,457	859,708	2.75	1.44	2.25
Zambales	343,034	416,280	444,037	562,992	3.96	1.30	2.40
IV. Southern Tagalog	4,457,008	5,213,843	6,118,620	8,263,099	3.19	3.25	3.05
Aurora	b	90,060	107,145	139,573	-	3.54	2.68
Batangas	926,308	1,032,009	1,174,201	1,476,783	2.18	2.62	2.32
Cavite	520,180	628,321	771,320	1,152,534	3.85	4.19	4.10
Laguna	699,736	803,750	973,104	1,370,232	2.81	3.90	3.48
Marinduque	144,109	162,804	173,715	185,524	2.47	1.31	0.66
Occidental Mindoro	144,032	185,787	222,431	282,593	5.22	3.67	2.42
Oriental Mindoro	328,364	388,744	446,938	550,049	3.43	2.83	2.10
Palawan	236,635	300,065	371,782	528,287	4.86	4.38	3.58
Quezon	983,324	1,025,902	1,129,277	1,372,455	0.85	1.94	1.97
Rizal[2]	307,238	414,192	555,533	977,448	6.16	6.05	5.81
Romblon	167,082	182,209	193,174	227,621	1.75	1.18	1.65

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Table 5.3 Population and Growth Rate by Region and Province: Censal Years 1970, 1975, 1980 and 1990 (continued)

Region/province	Population 1970	1975	1980	1990	Annual average growth rate 1970-1975	1975-1980	1980-1990
V. Bicol	2,966,881	3,193,721	3,476,982	3,910,001	1.48	1.71	1.18
Albay	673,981	728,827	809,177	903,785	1.58	2.11	1.11
Camarines Norte	262,207	288,406	308,007	390,982	1.92	1.32	2.41
Camarines Sur	948,436	1,023,819	1,099,346	1,305,919	1.54	1.43	1.74
Catanduanes	162,302	172,780	175,247	187,000	1.26	0.28	0.65
Masbate	492,908	533,387	584,520	599,355	1.59	1.85	0.25
Sorsogon	427,047	446,502	500,685	522,960	0.89	2.32	0.44
VI. Western Visayas	3,618,326	4,146,390	4,525,615	5,393,333	2.76	1.77	1.77
Aklan	263,358	293,349	324,563	380,497	2.18	2.04	1.60
Antique	289,172	308,484	344,879	406,361	1.30	2.26	1.65
Capiz	394,041	445,716	492,231	584,091	2.49	2.01	1.73
Negros Occidental	1,503,782	1,785,792	1,930,301	2,256,908	3.50	1.57	1.58
Iloilo	1,167,973	1,313,049	1,433,641	1,765,476	2.37	1.77	2.10
Guimaras[3]	-	-	-	(117,990)	-	-	-
VII. Central Visayas	3,032,719	3,387,274	3,787,374	4,594,124	2.24	2.26	1.95
Bohol	683,297	759,370	806,013	948,403	2.13	1.20	1.64
Cebu	1,634,182	1,818,410	2,091,602	2,646,517	2.16	2.84	2.38
Negros Oriental	652,264	740,417	819,399	925,272	2.57	2.05	1.22
Siquijor	62,976	69,077	70,360	73,932	1.87	0.37	0.50
VIII. Eastern Visayas	2,381,409	2,599,728	2,799,534	3,172,502	1.77	1.49	0.88
Eastern Samar	271,000	287,149	320,637	329,335	1.16	2.23	0.27
Northern Samar	306,114	354,665	378,516	383,654	2.99	1.31	0.13
Leyte	1,110,626	1,203,118	1,302,648	1,485,828	1.61	1.60	1.32
Biliran[4]	-	-	-	(118,012)	-	-	-

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Table 5.3 Population and Growth Rate by Region and Province: Censal Years 1970, 1975, 1980 and 1990 (continued)

Region/province	Population 1970	1975	1980	1990	Annual average growth rate 1970-1975	1975-1980	1980-1990
Samar	442,244	478,378	501,439	533,733	1.58	0.95	0.63
Southern Leyte	251,425	276,418	296,294	321,940	1.91	1.40	0.83
IX. Western Mindanao	1,869,014	2,047,882	2,528,506	3,157,865	1.84	4.31	2.25
Basilan	143,829	171,027	201,407	238,308	(3.52)	3.32	1.70
Sulu	315,421	240,001	360,588	469,971	(5.32)	8.48	2.68
Tawi-tawi	110,196	143,487	194,651	228,204	5.42	6.29	1.60
Zamboanga del Norte	409,379	460,515	588,015	676,862	3.68	3.69	1.42
Zamboanga del Sur	890,189	1,002,852	1,183,845	1,544,520	2.41	3.37	2.70
X. Northern Mindanao	1,952,735	2,314,205	2,758,985	3,509,753	3.46	3.58	2.44
Agusan del Norte	278,053	300,735	365,421	465,458	1.58	3.97	2.45
Agusan del Sur	174,682	213,216	265,030	420,763	4.07	4.45	4.73
Bukidnon	414,762	532,818	631,634	843,891	5.14	3.46	2.94
Camiguin	53,913	52,547	57,126	64,247	(0.51)	1.69	1.18
Misamis Occidental	319,855	356,319	386,328	424,365	2.18	1.63	0.94
Misamis Oriental	472,756	560,490	690,032	865,051	3.46	4.25	2.29
Surigao del Norte	238,714	298,080	363,414	425,978	4.54	4.04	1.60
XI. Southern Mindanao	2,200,726	2,714,558	3,346,803	4,458,829	4.29	4.28	2.91
Surigao del Sur	258,680	302,305	377,647	452,098	3.17	4.55	1.82
Davao	442,543	589,697	725,153	1,056,301	5.91	4.22	3.83
Davao Oriental	247,995	299,426	339,931	394,697	3.84	2.57	1.50
Davao del Sur	785,398	936,263	1,133,599	1,482,745	3.58	3.90	2.72
South Cotabato	466,110	586,867	770,473	1,072,988	4.72	5.60	3.37

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Table 5.3 Population and Growth Rate by Region and Province: Censal Years 1970, 1975, 1980 and 1990 (concluded)

Region/province	Population 1970	1975	1980	1990	Annual average growth rate 1970-1975	1975-1980	1980-1990
XII. Central Mindanao	1,941,457	2,070,349	2,270,949	3,171,713	1.29	1.87	3.40
Lanao del Norte	349,942	381,234	461,049	614,092	1.73	3.87	2.91
Lanao del Sur	455,508	499,882	404,971	599,982	1.88	(4.12)	4.01
Maguindanao	476,338	478,119	536,546	757,739	0.07	2.33	3.51
Cotabato	468,354	472,302	564,599	763,995	0.16	3.63	3.07
Sultan Kudarat	191,315	238,812	303,784	435,905	4.53	4.93	3.68

Note: The redistribution of provinces in Regions I and II is due to the creation of Cordillera Administrative Region as governed by Executive Order 220.

[a] Includes 2,876 homeless population and 2,336 Filipinos in Philippine Embassies/Consulates and Missions abroad.
[b] Included in Quezon.
[1] Excluding Valenzuela.
[2] Excluding cities and municipalities covered by Metro Manila.
[3] Subprovince. Included in Iloilo.
[4] Subprovince. Included in Leyte.

Source: National Statistics Office. *Census Reports, 1970, 1975, 1980 and 1990.*

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Table 5.4 Land Area and Population Density by Region and Province: Censal Years 1970, 1975, 1980 and 1990

Region/province	Land area (Square kilometer)	Population 1970	1975	1980	1990	Density per square kilometer 1970	1975	1980	1990
Philippines	300,000.0	36,684,486	42,070,660	48,098,460	60,703,206[a]	122.3	140.2	160.3	202.3
National Capital Region (NCR)	636.0	3,966,695	4,970,006	5,925,884	7,948,392	6,236.9	7,814.5	9,317.4	12,497.5
Cordillera Administrative Region (CAR)	18,293.7	-	-	-	1,146,191	-	-	-	62.7
Abra	3,975.6	-	-	-	184,743	-	-	-	46.5
Benguet	2,655.4	-	-	-	485,857	-	-	-	183.0
Ifugao	2,517.8	-	-	-	147,281	-	-	-	58.5
Kalinga-Apayao	7,047.6	-	-	-	211,775	-	-	-	30.0
Mt. Province	2,097.3	-	-	-	116,535	-	-	-	55.6
I. Ilocos	12,840.2	2,990,561	3,269,391	3,540,893	3,550,642	138.7	151.6	164.2	276.5
Abra	-	145,508	147,010	160,198	-	36.6	37.0	40.3	-
Benguet	-	263,550	302,065	354,751	-	99.3	113.8	133.6	-
Ilocos Norte	3,399.3	343,427	371,724	390,666	461,661	101.0	109.4	114.9	135.8
Ilocos Sur	2,579.6	385,139	419,776	443,591	519,966	149.3	162.7	172.0	201.6
La Union	1,493.1	373,682	414,635	452,578	548,742	250.3	277.7	303.1	367.5
Mt. Province	-	93,112	94,096	103,052	-	44.4	44.9	49.1	-
Pangasinan	5,368.2	1,386,143	1,520,085	1,636,057	2,020,273	258.2	283.2	304.8	376.3
II. Cagayan Valley	26,837.6	1,741,226	1,933,177	2,215,522	2,340,545	46.5	53.1	60.9	87.2
Batanes	209.3	11,398	11,870	12,091	15,026	54.5	56.7	57.8	71.8
Cagayan	9,002.7	581,237	644,075	711,476	829,867	64.6	71.5	79.0	92.2
Ifugao	-	92,487	104,707	111,368	-	36.7	41.6	44.2	-
Isabela	10,664.5	648,123	730,386	870,604	1,080,341	60.8	68.5	81.6	101.3

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Table 5.4 Land Area and Population Density by Region and Province: Censal Years 1970, 1975, 1980 and 1990 (continued)

Region/province	Land area (Square kilometer)	Population 1970	1975	1980	1990	Density per square kilometer 1970	1975	1980	1990
Kalinga-Apayao	-	136,249	163,225	185,063	-	19.3	23.2	26.3	-
Nueva Viscaya	3,903.9	221,965	213,151	241,690	301,179	44.1	54.6	61.9	77.1
Quirino	3,057.2	49,767	65,763	83,230	114,132	16.3	21.5	27.2	37.3
III. Central Luzon	18,230.8	3,713,952	4,210,136	4,802,793	6,199,017	198.3	230.9	263.4	340.0
Bataan	1,373.0	216,210	263,269	323,254	425,803	157.5	191.7	235.4	310.1
Bulacan	2,625.0	836,431	899,529	1,096,046	1,505,219	281.1	342.7	417.5	573.4
Nueva Ecija	5,284.3	851,294	947,995	1,069,409	1,312,680	161.1	179.4	202.4	248.4
Pampanga	2,180.7	907,275	1,042,164	1,181,590	1,532,615	416.0	477.9	541.8	702.8
Tarlac	3,053.4	559,708	640,899	688,457	859,708	183.3	209.9	225.5	281.6
Zambales	3,714.4	343,034	416,280	444,037	562,992	92.4	112.1	119.5	151.6
IV. Southern Tagalog	46,924.4	6,994,459	5,213,843	6,118,620	8,263,099	95.0	111.1	130.4	176.1
Aurora	3,239.5	-	-	107,145	139,573	24.6	27.4	33.1	43.1
Batangas	3,165.8	926,308	1,032,009	1,174,201	1,476,783	292.6	326.0	370.9	466.5
Cavite	1,287.6	520,180	628,321	771,320	1,152,534	404.0	488.0	599.0	895.1
Laguna	1,759.7	699,736	803,750	973,104	1,370,232	397.6	456.8	553.0	778.7
Marinduque	959.2	144,109	162,804	173,715	185,524	150.2	169.7	181.1	193.4
Occ. Mindoro	5,879.8	144,032	185,787	222,431	282,593	24.5	31.6	37.8	48.1
Or. Mindoro	4,364.7	328,364	388,744	446,938	550,049	75.2	89.1	102.4	126.0
Palawan	14,896.3	236,635	300,065	371,782	528,287	15.9	20.1	25.0	35.5
Quezon	8,706.6	983,324	1,115,962	1,129,277	1,372,455	103.7	117.8	129.7	157.6
Rizal	1,308.9	2,844,689	414,192	555,533	977,448	234.7	316.4	424.4	746.8
Romblon	1,355.9	167,082	182,209	193,174	227,621	123.2	134.4	142.5	167.9

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Table 5.4 Land Area and Population Density by Region and Province: Censal Years 1970, 1975, 1980 and 1990 (continued)

Region/province	Land area (Square kilometer)	Population 1970	1975	1980	1990	Density per square kilometer 1970	1975	1980	1990
V. Bicol	17,632.5	2,966,881	3,193,721	3,476,982	3,910,001	168.3	181.1	197.2	221.7
Albay	2,552.6	673,981	728,827	809,177	903,785	264.0	285.5	317.0	354.1
Camarines Norte	2,112.5	262,207	288,406	308,007	390,982	124.1	136.5	145.8	185.1
Camarines Sur	5,266.8	948,436	1,023,819	1,099,346	1,305,919	180.1	194.4	208.7	248.0
Catanduanes	1,511.5	162,302	172,780	175,247	187,000	107.4	114.3	115.9	123.7
Masbate	4,047.7	492,908	533,387	584,520	599,355	121.8	131.8	144.4	148.1
Sorsogon	2,141.4	427,047	446,502	500,685	522,960	199.4	208.5	233.8	244.2
VI. Western Visayas	20,223.2	3,618,326	4,146,390	4,525,615	5,393,333	178.9	205.0	223.8	266.7
Aklan	1,817.9	263,358	293,349	324,563	380,497	144.9	161.4	178.5	209.3
Antique	2,522.0	289,172	308,484	344,879	406,361	114.7	122.3	136.7	161.1
Capiz	2,633.2	394,041	445,716	492,231	584,091	149.6	169.3	186.9	221.8
Negros Occ.	7,926.1	1,503,782	1,785,792	1,930,301	2,256,908	189.7	225.3	243.5	284.7
Iloilo	5,324.0	1,167,973	1,313,049	1,433,641	1,647,486	219.4	246.6	269.3	349.1
Guimaras[1]	(604.6)	-	-	-	(117,990)	-	-	-	(195.2)
VII. Central Visayas	14,951.5	3,095,695	3,387,274	3,787,374	4,594,124	202.8	226.6	253.3	307.3
Bohol	4,117.3	683,297	759,370	806,013	948,403	166.0	184.4	195.8	230.3
Cebu	5,088.4	1,634,182	1,818,410	2,091,602	2,646,517	321.2	357.4	411.0	520.1
Negros Oriental	5,402.3	715,240	740,417	819,399	925,272	120.7	137.1	151.7	171.3
Siquijor	343.5	62,976	69,077	70,360	73,932	183.3	201.1	204.8	215.2
VIII. Eastern Visayas	21,431.7	2,381,409	2,599,728	2,799,534	3,054,490	111.1	121.3	130.6	142.5
Eastern Samar	4,339.6	271,000	287,149	320,637	329,335	62.4	66.2	73.9	75.9
Samar	5,591.0	442,244	478,378	501,439	533,733	79.1	85.6	89.7	95.5
Northern Samar	3,498.0	306,114	354,665	378,516	383,654	87.5	101.4	108.2	109.7

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Table 5.4 Land Area and Population Density by Region and Province: Censal Years 1970, 1975, 1980 and 1990 (continued)

Region/province	Land area (Square kilometer)	Population 1970	1975	1980	1990	Density per square kilometer 1970	1975	1980	1990
Southern Leyte	1,734.8	251,425	276,418	296,294	321,940	144.9	159.3	170.8	185.6
Leyte	6,268.3	1,110,626	1,203,118	1,302,648	1,367,816	177.2	191.9	207.8	239.4
Biliran[2]	(555.5)	-	-	-	(118,012)	-	-	-	(212.4)
IX. Western Mindanao	18,685.1	1,869,014	2,047,882	2,528,506	3,158,469	100.0	109.6	135.3	169.0
Basilan	1,327.2	143,829	171,027	201,407	238,308	108.4	128.9	151.7	179.6
Sulu	1,600.4	315,421	240,001	360,588	469,971	197.1	150.0	225.3	293.7
Tawi-tawi	1,087.4	110,196	143,487	194,651	228,204	101.3	132.0	179.0	209.9
Zamboanga del Norte	6,618.1	409,379	490,515	588,015	676,862	61.9	74.1	88.8	102.3
Zamboanga del Sur	8,052.0	890,189	1,002,852	1,183,845	1,545,124	110.6	124.5	147.0	191.8
X. Northern Mindanao	28,327.8	1,952,735	2,314,205	2,758,985	3,509,753	68.9	81.7	97.4	123.9
Agusan del Norte	2,590.3	278,053	300,735	365,421	465,458	107.3	116.1	141.1	193.2
Agusan del Sur	8,965.5	174,682	213,216	265,030	420,763	19.5	23.8	29.6	46.9
Bukidnon	8,293.8	414,762	532,818	631,634	843,891	50.0	64.2	76.2	101.7
Camiguin	229.8	53,913	52,547	57,126	64,247	234.6	228.7	248.6	279.6
Misamis Occ.	1,939.3	319,855	356,319	386,328	424,365	164.9	183.7	199.2	218.8
Misamis Or.	3,570.1	472,756	560,490	690,032	865,051	132.4	157.0	193.3	242.3
Surigao del Norte	2,739.0	238,714	298,080	363,414	425,978	87.2	108.8	132.7	155.5
XI. Southern Mindanao	31,692.9	2,200,726	2,714,558	3,346,803	4,458,829	69.4	85.7	105.6	140.7
Surigao del Sur	4,552.2	258,680	302,305	377,647	452,098	56.8	66.4	83.0	99.3
Davao	8,129.8	442,543	589,697	725,153	1,056,301	54.4	72.5	89.2	129.9
Davao Oriental	5,164.5	247,995	299,426	339,931	394,697	48.0	58.0	65.8	76.4
Davao del Sur	6,377.6	785,398	936,263	1,133,599	1,482,745	123.1	146.6	177.7	232.5
South Cotabato	7,468.8	466,110	586,867	770,473	1,072,988	62.4	78.6	103.2	143.7

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Table 5.4 Land Area and Population Density by Region and Province: Censal Years 1970, 1975, 1980 and 1990 (concluded)

Region/province	Land area (Square kilometer)	Population 1970	1975	1980	1990	Density per square kilometer 1970	1975	1980	1990
XII. Central Mindanao	23,293.2	2,609,110	2,070,349	2,270,949	3,171,713	83.3	88.9	97.5	136.2
Lanao del Norte	3,092.0	349,942	381,234	461,049	614,092	113.2	123.3	149.1	198.6
Lanao del Sur	3,872.9	455,508	499,882	404,971	599,982	117.6	129.1	104.6	154.9
Maguindanao	5,047.6	476,338	478,119	536,546	757,739	83.4	94.7	106.3	150.1
Cotabato	6,565.9	1,136,007	472,302	564,599	763,995	71.3	71.9	86.0	116.3
Sultan Kudarat	4,714.8	191,315	238,812	303,784	435,905	52.3	50.6	64.4	92.5

Note: The redistribution of provinces in Regions I and II is due to the creation of Cordillera Administrative Region as governed by Executive Order 220.

[a] Includes 2,876 homeless population and 2,336 Filipinos in Philippine Embassies/Consulates and Missions abroad.
[1] Subprovince. Included in Iloilo.
[2] Subprovince. Included in Leyte.

Source: National Statistics Office. *Census Reports, 1970, 1975, 1980 and 1990.*

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Table 5.5 Land Area and Population Density by City: Censal Years 1970, 1975, 1980 and 1990

City	Land area (Square kilometer)	Population 1970 (May 6)	1975 (May 1)	1980 (May 1)	1990[a] (May 1)	Density per square kilometer 1970	1975	1980	1990
Total	18,803.3	7,606,966	8,725,077	10,180,557	13,003,747	404.6	464.0	541.4	691.6
Angeles	60.3	134,544	151,164	188,834	236,686	2,231.2	2,506.9	3,131.6	3,925.1
Bacolod	156.1	187,300	223,392	262,415	364,180	1,199.9	1,431.1	1,681.1	2,333.0
Bago	402.1	71,653	89,213	99,631	122,863	178.2	221.9	247.8	305.6
Baguio	48.9	84,538	97,449	119,009	183,142	1,728.8	1,992.8	2,433.7	3,745.2
Bais	316.9	40,095	45,672	49,301	59,591	126.5	144.1	155.6	188.0
Batangas	283.0	108,868	125,363	143,570	184,970	384.7	443.0	507.3	653.6
Butuan	526.3	131,094	132,682	172,489	227,829	249.1	252.1	327.7	432.9
Cabanatuan	192.7	99,890	115,258	138,298	173,065	518.4	598.1	717.7	898.1
Cadiz	516.5	124,108	127,653	129,632	119,772	240.3	247.2	251.0	231.9
Cagayan de Oro	412.8	128,319	165,220	227,312	339,598	310.8	400.2	550.7	822.7
Calbayog	903.0	94,323	102,619	106,719	115,390	104.5	113.6	118.2	127.8
Canlaon	160.7	23,598	29,152	28,785	37,165	146.8	181.4	179.1	231.3
Cavite	11.8	75,739	82,456	87,666	91,641	6,418.6	6,987.8	7,429.3	7,766.2
Cebu	280.9	347,116	413,025	490,281	610,417	1,235.7	1,470.4	1,745.4	2,173.1
Cotabato	176.0	61,184	67,097	83,871	127,065	347.6	381.2	476.5	722.0
Dagupan	37.2	83,582	90,092	98,344	122,247	2,246.8	2,421.8	2,643.7	3,286.2
Danao	107.3	47,662	50,260	56,967	73,358	444.2	468.0	530.9	683.7
Dapitan	215.0	37,781	46,261	54,694	60,213	175.7	215.2	254.4	280.1
Davao	2,211.3	392,473	484,678	610,375	849,947	177.5	219.2	276.0	384.4
Dipolog	220.0	46,368	48,403	61,919	79,887	210.8	220.0	281.4	363.1
Dumaguete	55.8	52,000	52,765	63,411	80,262	931.9	945.6	1,136.4	1,438.4
General Santos	423.0	70,961	91,154	149,396	250,389	167.8	215.5	353.2	591.9
Gingoog	404.6	66,522	66,577	79,937	82,582	161.9	164.5	197.6	204.1
Iligan	730.5	104,493	118,778	167,358	226,568	143.0	162.6	229.1	310.2

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Table 5.5 Land Area and Population Density by City: Censal Years 1970, 1975, 1980 and 1990 (continued)

City	Land area (Square kilometer)	Population 1970 (May 6)	1975 (May 1)	1980 (May 1)	1990[a] (May 1)	Density per square kilometer 1970	1975	1980	1990
Iloilo	56.0	209,738	227,027	244,827	309,505	3,745.3	4,054.0	4,371.9	5,526.9
Iriga	119.6	77,382	75,885	66,113	74,269	647.0	634.5	552.8	621.0
Kalookan	55.8	274,453	397,201	467,816	763,415	4,918.5	7,118.3	8,383.8	13,681.3
La Carlota	137.3	38,321	40,984	45,812	56,443	279.1	298.5	333.7	411.1
Laoag	107.5	61,727	66,259	69,648	83,756	574.2	616.4	647.9	779.1
Lapu-Lapu	58.1	69,268	79,484	98,723	146,194	1,192.2	1,368.1	1,699.2	2,516.2
Legazpi	153.7	84,090	88,378	99,766	121,116	547.1	575.0	649.1	788.0
Lipa	209.4	93,971	106,094	121,166	160,117	448.8	506.7	578.6	764.6
Lucena	68.5	77,006	92,336	107,880	150,624	1,124.2	1,348.0	1,574.9	2,198.9
Mandaue	11.7	58,579	75,904	110,590	180,285	5,006.8	6,487.5	9,452.1	15,409.0
Manila	38.3	1,330,788	1,479,116	1,630,485	1,601,234	34,746.4	38,619.2	42,571.4	41,807.7
Marawi	22.6	55,708	63,332	53,812	91,901	2,465.0	2,802.3	2,381.1	4,066.4
Naga	77.5	79,846	83,337	90,712	115,329	1,030.3	1,075.3	1,170.5	1,488.1
Olongapo	103.3	107,785	147,109	156,430	193,327	1,043.4	1,424.1	1,514.3	1,871.5
Ormoc	464.3	84,563	89,466	104,978	129,456	182.1	192.7	226.1	278.8
Oroquieta	194.9	38,575	42,497	47,328	52,500	197.9	218.0	242.8	269.4
Ozamis	144.2	64,643	71,559	77,832	91,503	448.3	496.2	539.8	634.6
Pagadian	378.8	57,615	66,062	80,861	106,307	152.1	174.4	213.5	280.6
Palayan	35.6[b]	8,382	12,140	14,959	20,393	235.4	341.0	420.2	572.8
Pasay	13.9	206,283	254,999	287,770	368,366	14,840.5	18,345.3	20,702.9	26,501.2
Puerto Princesa	2,106.7	37,774	45,709	60,234	92,147	17.9	21.7	28.6	43.7
Quezon City	166.2	754,452	956,864	1,165,865	1,669,776	4,539.4	5,757.3	7,014.8	10,046.8
Roxas	102.0	67,648	71,305	81,183	103,171	663.2	699.1	795.9	1,011.5
San Carlos (Negros Occ.)	451.3	90,058	90,982	91,627	105,713	199.6	201.6	203.0	234.2
San Carlos (Pangasinan)	166.4	84,333	90,882	101,243	124,529	506.8	546.2	608.4	748.4

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Table 5.5 Land Area and Population Density by City: Censal Years 1970, 1975, 1980 and 1990 (concluded)

City	Land area (Square kilometer)	Population 1970 (May 6)	1975 (May 1)	1980 (May 1)	1990[a] (May 1)	Density per square kilometer 1970	1975	1980	1990
San Jose	180.5	70,314	58,387	64,254	82,836	389.6	323.5	356.0	458.9
San Pablo	214.0	105,517	116,607	131,655	161,630	493.1	544.9	615.2	755.3
Silay	214.8	69,200	104,887	111,131	101,031	322.2	488.3	517.4	470.3
Surigao	245.3	51,496	66,027	79,745	100,379	209.9	269.2	325.1	409.2
Tacloban	100.9	76,531	80,707	102,523	136,891	758.5	799.9	1,016.1	1,356.7
Tagaytay	74.0	10,907	13,388	16,322	23,739	147.4	178.7	217.9	320.8
Tagbilaran	30.3	33,005	37,335	42,683	56,363	1,089.3	1,232.2	1,408.7	1,860.2
Tangub	119.2	30,918	40,461	40,401	42,926	259.4	339.4	338.9	360.1
Toledo	174.5	67,727	76,521	91,668	119,970	388.1	438.5	525.3	687.5
Trece Martires	39.1	6,522	7,179	8,579	15,686	166.8	183.6	219.4	401.2
Zamboanga	1,414.7	199,901	265,023	343,722	442,345	141.3	187.3	243.0	312.7

[a] Converted into the municipality of Isabela under P.D. 840 dated December 11, 1975.
[b] Area tentative due to amendment of R.A. No. 4475.

Source: National Statistics Office. *Census Reports, 1970, 1975, 1980 and 1990.*

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Table 5.6 Urban and Rural Population by Region and Province: 1980 and 1990

Area/province	Total population 1990	Total population 1980	Urban 1990	Urban 1980	Rural 1990	Rural 1980
Philippines	60,703,206[a]	48,098,460	29,441,799	18,008,749	31,256,195	30,088,711
National Capital Region (NCR)	7,948,392	5,925,884	7,948,392	5,925,884	-	-
Manila	1,601,234	1,630,485	1,601,234	1,630,485	-	-
Kaloocan City	763,415	467,816	763,415	467,816	-	-
Pasay City	368,366	287,770	368,366	287,770	-	-
Quezon City	1,669,776	1,165,865	1,669,776	1,165,865	-	-
Las Piñas	297,102	136,514	297,102	136,514	-	-
Makati	453,170	372,631	453,170	372,631	-	-
Malabon	280,027	191,001	280,027	191,001	-	-
Mandaluyong	248,143	205,366	248,143	205,366	-	-
Marikina	310,227	211,613	310,227	211,613	-	-
Muntinlupa	278,411	136,679	278,411	136,679	-	-
Navotas	187,479	126,146	187,479	126,146	-	-
Parañaque	308,236	208,552	308,236	208,552	-	-
Pasig	397,679	268,570	397,679	268,570	-	-
Pateros	51,409	40,288	51,409	40,288	-	-
San Juan	126,854	130,088	126,854	130,088	-	-
Tagig	266,637	134,137	266,637	134,137	-	-
Valenzuela	340,227	212,363	340,227	212,363	-	-
Cordillera Administrative Region (CAR)	1,146,191	-	360,423	-	785,768	-
Abra	184,743	-	44,169	-	140,574	-
Benguet	485,857	-	259,437	-	226,420	-
Ifugao	147,281	-	16,002	-	131,279	-
Kalinga-Apayao	211,775	-	30,867	-	180,908	-
Mt. Province	116,535	-	9,948	-	106,587	-

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Table 5.6 Urban and Rural Population by Region and Province: 1980 and 1990 (continued)

Area/province	Total population 1990	Total population 1980	Urban 1990	Urban 1980	Rural 1990	Rural 1980
I. Ilocos	3,550,642	3,540,893	1,342,490	810,117	2,208,152	2,730,776
Abra	-	160,198	-	26,808	-	133,390
Benguet	-	354,751	-	122,436	-	232,315
Ilocos Norte	461,661	390,666	131,261	103,646	330,400	287,020
Ilocos Sur	519,966	443,591	123,476	78,428	396,490	365,163
La Union	548,742	452,578	160,678	72,555	388,064	380,023
Mt. Province	-	103,052	-	3,886	-	99,166
Pangasinan	2,020,273	1,636,057	927,075	433,806	1,093,198	1,233,699
II. Cagayan Valley	2,340,545	2,215,522	569,450	369,754	1,771.095	1,845,768
Batanes	15,026	12,091	5,058	3,096	9,968	8,995
Cagayan	829,867	711,476	190,877	116,402	638,990	595,074
Ifugao	-	111,368	-	10,125	-	101,243
Isabela	1,080,341	870,604	252,307	146,176	828,034	724,428
Kalinga-Apayao	-	185,063	-	19,394	-	165,669
Nueva Vizcaya	301,179	241,690	82,161	58,440	219,018	183,250
Quirino	114,132	83,230	39,047	16,121	75,085	67,109
III. Central Luzon	6,199,017	4,802,793	3,705,258	2,009,527	2,493,759	2,793,266
Bataan	425,803	323,254	317,246	143,513	108,557	179,741
Bulacan	1,505,219	1,096,046	1,202,022	577,578	303,197	518,468
Nueva Ecija	1,312,680	1,069,409	513,054	278,259	799,626	791,150
Pampanga	1,532,615	1,181,590	1,052,204	622,992	480,411	558,598
Tarlac	859,708	688,457	254,784	124,733	604,924	563,724
Zambales	562,992	444,037	365,948	262,452	197,044	181,585
IV. Southern Tagalog	8,263,099	6,118,620	4,160,133	2,268,828	4,102,966	3,849,792
Aurora	139,573	107,145	60,731	27,113	78,842	80,032

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Table 5.6 Urban and Rural Population by Region and Province: 1980 and 1990 (continued)

Area/province	Total population 1990	Total population 1980	Urban 1990	Urban 1980	Rural 1990	Rural 1980
Batangas	1,476,783	1,174,201	399,908	199,220	1,076,875	974,981
Cavite	1,152,534	771,320	874,532	461,187	278,002	310,133
Laguna	1,370,232	973,104	1,012,499	594,024	357,733	379,080
Marinduque	185,524	173,715	30,250	24,021	155,274	149,694
Occ. Mindoro	282,593	222,431	91,818	41,897	190,775	180,534
Or. Mindoro	550,049	446,938	140,582	66,964	409,467	379,974
Palawan	528,287	371,782	166,993	84,612	361,294	287,170
Quezon	1,372,455	1,129,277	452,628	329,098	919,827	800,179
Rizal	977,448	555,533	879,774	416,636	97,674	138,897
Romblon	227,621	193,174	50,418	24,056	177,203	169,118
V. Bicol	3,910,001	3,476,982	1,214,501	761,891	2,690,292	2,715,091
Albay	903,785	809,177	283,295	160,417	620,490	648,760
Camarines Norte	390,982	308,007	132,840	89,025	258,142	218,982
Camarines Sur	1,305,919	1,099,346	460,123	263,984	845,796	835,362
Catanduanes	187,000	175,247	52,253	40,699	134,747	134,548
Masbate	599,355	584,520	150,103	92,044	449,252	492,476
Sorsogon	522,960	500,685	140,432	115,722	382,528	384,963
VI. Western Visayas	5,393,333	4,525,615	1,931,229	1,283,755	3,462,104	3,240,860
Aklan	380,497	324,563	92,447	39,424	288,050	285,139
Antique	406,361	344,879	117,536	71,230	288,825	273,649
Capiz	584,091	492,231	164,832	66,427	419,259	425,804
Negros Occidental	2,256,908	1,930,301	1,030,469	712,159	1,226,439	1,218,142
Iloilo	1,647,486	1,433,641	511,966	395,515	1,135,520	1,038,126
Guimaras[1]	117,990	b	13,979	b	104,011	b

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Table 5.6 Urban and Rural Population by Region and Province: 1980 and 1990 (continued)

Area/province	Total population 1990	Total population 1980	Urban 1990	Urban 1980	Rural 1990	Rural 1980
VII. Central Visayas	4,594,124	3,787,374	1,857,115	1,216,992	2,737,009	2,570,382
Bohol	948,403	806,013	240,609	122,914	707,794	683,099
Cebu	2,646,517	2,091,602	1,389,567	930,430	1,256,950	1,161,172
Negros Oriental	925,272	819,399	217,999	155,718	707,273	663,681
Siquijor	73,932	70,360	8,940	7,930	64,992	62,430
VIII. Eastern Visayas	3,054,490	2,799,534	952,389	611,200	2,102,101	2,188,334
Eastern Samar	329,335	320,637	126,352	84,020	202,983	236,617
Northern Samar	383,654	378,516	135,957	88,562	247,697	289,954
Samar	533,733	501,439	137,260	73,783	396,473	427,656
Southern Leyte	321,940	296,294	66,150	45,034	255,790	251,260
Leyte	1,367,816	1,302,648	455,872	319,801	911,944	982,847
Biliran[1]	118,012	c	30,798	c	87,214	c
IX. Western Mindanao	3,157,865	2,528,506	970,719	439,649	2,187,146	2,088,857
Basilan	238,308	201,407	43,690	28,749	194,618	172,658
Sulu	469,971	360,588	81,172	65,559	388,799	295,029
Tawi-tawi	228,204	194,651	43,410	22,221	184,794	172,430
Zamboanga del Norte	676,862	588,015	146,067	90,732	530,795	497,283
Zamboanga del Sur	1,544,520	1,183,845	656,380	232,388	888,140	951,457
X. Northern Mindanao	3,509,753	2,758,985	1,514,157	748,903	1,995,596	2,010,082
Agusan del Norte	465,458	365,421	219,463	136,967	245,995	228,454
Agusan del Sur	420,763	265,030	102,956	51,363	317,807	213,667
Bukidnon	843,891	631,634	261,905	98,443	581,986	533,191
Camiguin	64,247	57,126	21,798	15,187	42,449	41,939
Misamis Occidental	424,365	386,328	135,755	66,173	288,610	320,155
Misamis Oriental	865,051	690,032	567,976	271,348	297,075	418,684
Surigao del Norte	425,978	363,414	204,304	109,422	221,674	253,992

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Table 5.6 Urban and Rural Population by Region and Province: 1980 and 1990 (concluded)

Area/province	Total population 1990	Total population 1980	Urban 1990	Urban 1980	Rural 1990	Rural 1980
XI. Southern Mindanao	4,458,829	3,346,803	2,108,693	1,133,338	2,350,136	2,213,465
Surigao del Sur	452,098	377,647	367,425	113,615	688,876	264,032
Davao	1,056,301	725,153	774,131	179,591	708,614	545,562
Davao Oriental	394,697	339,931	151,808	76,582	242,889	263,349
Davao del Sur	1,482,745	1,133,599	607,190	509,429	465,798	624,170
South Cotabato	1,072,988	770,473	208,139	254,121	243,959	516,352
XII. Central Mindanao	3,171,713	2,270,949	802,305	428,911	2,369,408	1,842,038
Lanao del Norte	614,092	461,049	149,947	72,429	464,145	388,620
Lanao del Sur	599,982	404,971	134,675	75,692	465,307	329,279
Maguindanao	757,739	536,546	244,191	129,440	513,548	407,106
Cotabato	763,995	564,599	138,200	87,766	625,795	476,833
Sultan Kudarat	435,905	303,784	135,292	63,584	300,613	240,200

Note: The redistribution of provinces in Regions I and II is due to the creation of Cordillera Administrative Region as governed by Executive Order 220.

[a] Includes 2,876 homeless population and 2,336 Filipinos in Philippine Embasies/Consulates and Missions abroad.
[b] Included in Iloilo.
[c] Included in Leyte.
[1] Subprovince.

Source: National Statistics Office. *Census Reports, 1970, 1975, 1980 and 1990.*

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Table 5.7 Sex Ratio of the Population by Region and Province: Censal Years 1970, 1975 and 1980

Region/province	1975			1980			1990*		
	Male	Female	Males per 100 Females	Male	Female	Males per 100 Females	Male	Female	Males per 100 Females
Philippines	21,276,224	20,794,436	102.3	24,128,755	23,969,705	100.7	30,410,475	30,076,710	101.1
National Capital Region (NCR)	2,430,213	2,539,793	95.7	2,855,712	3,070,172	93.0	3,835,875	4,071,507	94.2
Cordillera Administrative Region (CAR)	-	-	-	-	-	-	577,366	563,775	102.4
Abra	-	-	-	-	-	-	93,258	91,181	102.3
Benguet	-	-	-	-	-	-	243,657	238,453	102.2
Ifugao	-	-	-	-	-	-	73,152	73,878	99.0
Kalinga-Apayao	-	-	-	-	-	-	108,328	103,063	105.1
Mt. Province	-	-	-	-	-	-	58,971	57,200	103.1
I. Ilocos	1,636,953	1,632,438	100.3	1,760,119	1,780,774	98.8	1,776,667	1,770,495	100.3
Abra	74,493	72,517	102.7	80,657	79,541	101.4	-	-	-
Benguet	153,667	148,398	103.6	180,219	174,532	103.3	-	-	-
Ilocos Norte	185,548	186,176	99.7	192,194	198,472	96.8	229,063	23,1621	98.9
Ilocos Sur	208,262	211,514	98.5	217,192	226,399	95.9	257,831	261,442	98.6
La Union	207,009	207,626	99.7	224,120	228,458	98.1	274,803	273,174	100.6
Mt. Province	47,211	46,885	100.7	51,452	51,600	99.7	-	-	-
Pangasinan	760,763	759,322	100.2	814,285	821,772	99.1	1,014,970	1,004,258	101.1
II. Cagayan Valley	990,757	942,420	105.1	1,128,854	1,086,668	103.9	1,191,410	1,144,947	104.1
Batanes	5,990	5,880	101.9	6,037	6,054	99.7	7,596	7,377	103.0
Cagayan	329,120	314,955	104.5	361,173	350,303	103.1	420,230	407,981	103.0
Ifugao	52,611	52,096	101.0	55,813	55,555	100.5	-	-	-

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Table 5.7 Sex Ratio of the Population by Region and Province: Censal Years 1970, 1975 and 1980 (continued)

Region/province	1975			1980			1990*		
	Male	Female	Males per 100 Females	Male	Female	Males per 100 Females	Male	Female	Males per 100 Females
Isabela	377,325	353,061	106.9	445,825	424,779	105.0	551,655	526,897	104.7
Kalinga-Apayao	83,489	79,736	104.7	94,506	90,557	104.4	-	-	-
Nueva Viscaya	108,022	105,129	102.8	122,579	119,111	102.9	153,026	147,540	103.7
Quirino	34,200	31,563	108.4	42,921	40,309	106.5	58,903	55,152	106.8
III. Central Luzon	2,125,706	2,084,430	102.0	2,406,886	2,395,907	100.5	3,118,227	3,070,489	101.6
Bataan	134,138	129,131	103.9	162,003	161,251	100.5	213,064	211,631	100.7
Bulacan	453,210	446,341	101.5	547,016	549,030	99.6	751,320	751,023	100.0
Nueva Ecija	481,654	466,319	103.3	540,749	528,660	102.3	666,622	644,207	103.5
Pampanga	524,942	517,222	101.5	591,826	589,764	100.3	773,513	756,560	102.2
Tarlac	324,315	316,584	102.4	346,567	341,890	101.4	434,742	424,480	102.4
Zambales	207,447	208,833	99.3	218,725	225,312	97.1	278,966	282,588	98.7
IV. Southern Tagalog	2,651,509	2,562,334	103.5	3,095,075	3,023,545	102.4	4,166,935	4,079,405	102.1
Aurora	a	a	a	55,277	51,868	106.6	72,017	67,055	107.4
Batangas	519,793	512,216	101.5	587,647	586,554	100.2	742,708	732,515	101.4
Cavite	313,378	314,943	99.5	384,030	387,290	99.2	574,129	575,974	99.7
Laguna	405,160	398,590	101.6	487,135	485,969	100.2	684,456	683,472	100.1
Marinduque	82,912	79,892	103.8	87,672	86,043	101.9	93,727	91,650	102.3
Occidental Mindoro	97,410	88,377	110.2	115,984	106,447	109.0	145,395	136,265	106.7
Oriental Mindoro	199,657	189,087	105.6	228,390	218,548	104.5	280,180	269,352	104.0
Palawan	158,628	141,437	112.2	199,317	172,465	115.6	271,776	252,717	107.5
Quezon	573,336	542,626	105.7	575,566	553,711	104.0	669,917	669,802	104.5
Romblon	91,941	90,268	101.9	277,656	277,877	99.9	114,234	113,149	101.0
Rizal	209,294	204,898	102.1	96,401	96,773	99.6	488,396	487,454	100.2
V. Bicol	1,631,505	1,562,216	104.4	1,765,624	1,711,358	103.2	1,984,866	1,919,927	103.4

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Table 5.7 Sex Ratio of the Population by Region and Province: Censal Years 1970, 1975 and 1980 (continued)

Region/province	1975			1980			1990*		
	Male	Female	Males per 100 Females	Male	Female	Males per 100 Females	Male	Female	Males per 100 Females
Albay	371,535	357,292	104.0	409,624	399,553	102.5	456,236	446,352	102.2
Camarines Norte	148,611	139,795	106.3	157,706	150,301	104.9	200,727	189,726	105.8
Camarines Sur	521,690	502,129	103.9	557,203	542,143	102.8	662,123	641,785	103.2
Catanduanes	88,412	84,368	104.8	88,896	86,351	103.0	95,288	91,531	104.1
Masbate	270,806	262,581	103.1	295,847	288,673	102.5	304,059	294,754	103.2
Sorsogon	230,451	216,051	106.7	256,348	244,337	104.9	266,433	255,779	104.2
VI. Western Visayas	2,089,470	2,056,920	101.6	2,265,780	2,259,835	100.3	2,702,488	2,670,995	101.2
Aklan	147,163	146,186	100.7	161,816	162,747	99.4	190,573	189,455	100.6
Antique	155,436	153,048	101.6	173,079	171,800	100.7	205,032	200,894	102.1
Capiz	224,352	221,364	101.3	246,541	245,690	100.3	292,995	290,496	100.9
Iloilo	658,462	654,587	100.6	713,326	720,315	99.0	881,908	879,511	100.3
Negros Occidental	904,057	881,735	102.5	971,018	959,283	101.2	1,131,980	1,110,639	101.9
VII. Central Visayas	1,694,131	1,693,143	100.1	1,882,242	1,905,132	98.8	2,291,584	2,290,596	100.0
Bohol	378,441	380,929	99.3	399,261	406,752	98.2	474,552	472,546	100.4
Cebu	905,246	913,164	99.1	1,034,497	1,057,105	97.9	1,314,074	1,323,867	99.3
Negros Oriental	375,754	364,663	103.0	413,386	406,013	101.8	466,002	457,254	101.9
Siquijor	34,690	34,387	100.9	35,098	35,262	99.5	36,956	36,929	100.1
VIII. Eastern Visayas	1,328,481	1,271,247	104.5	1,423,846	1,375,688	103.5	1,553,432	1,488,361	104.4
Leyte	612,220	590,898	103.6	659,174	643,474	102.4	168,678	159,964	105.4
Southern Leyte	141,030	135,388	104.2	150,752	145,542	103.6	751,491	728,629	103.1
Eastern Samar	147,486	139,663	105.6	163,980	156,657	104.7	195,786	187,044	104.7
Northern Samar	181,895	172,770	105.3	192,819	185,697	103.8	273,048	255,733	106.8
Western Samar	245,850	232,528	105.7	257,121	244,318	105.1	164,429	156,991	104.7

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Table 5.7 Sex Ratio of the Population by Region and Province: · Censal Years 1970, 1975 and 1980 (conntinued)

Region/province	1975			1980			1990*		
	Male	Female	Males per 100 Females	Male	Female	Males per 100 Females	Male	Female	Males per 100 Females
IX. Western Mindanao	1,046,853	1,001,029	104.6	1,281,439	1,247,067	102.8	1,594,802	1,558,278	102.3
Basilan	87,415	83,612	104.5	101,481	99,926	101.6	119,557	118,450	100.9
Sulu	121,113	118,888	101.9	179,729	180,859	99.4	232,739	236,769	98.3
Tawi-tawi	73,735	69,752	105.7	98,912	95,739	103.3	113,774	115,053	98.9
Zamboanga del Norte	252,155	238,360	105.8	299,178	288,837	103.6	345,740	330,274	104.7
Zamboanga del Sur	512,435	490,417	104.5	602,139	581,706	103.5	782,992	757,732	103.3
X. Northern Mindanao	1,184,262	1,129,943	104.8	1,402,083	1,356,902	103.3	1,781,888	1,720,439	103.6
Agusan del Norte	152,757	147,978	103.2	185,158	180,263	102.7	236,285	228,504	103.4
Agusan del Sur	111,461	101,755	109.5	137,222	127,808	107.4	217,488	202,432	107.4
Bukidnon	278,057	254,761	109.1	326,305	305,329	106.9	434,110	408,159	106.4
Camiguin	26,823	25,724	104.3	28,900	28,226	102.4	32,930	31,246	105.4
Misamis Occidental	179,589	176,730	101.6	193,390	192,938	100.2	212,226	211,017	100.6
Misamis Oriental	285,432	275,058	103.8	349,278	340,754	102.5	434,210	428,450	101.3
Surigao del Norte	150,143	147,937	101.5	181,830	181,584	100.1	214,639	210,631	101.9
XI. Southern Mindanao	1,401,075	1,313,483	106.7	1,712,175	1,634,628	104.7	2,268,039	2,180,576	104.0
Surigao del Sur	153,699	148,606	103.4	190,890	186,757	102.2	228,864	222,423	102.9
Davao del Norte	309,966	279,731	110.8	377,407	347,746	108.5	543,692	509,475	106.7
Davao Oriental	155,044	144,382	107.4	175,033	164,898	106.1	202,290	192,013	105.4
Davao del Sur	480,307	455,956	105.3	574,665	558,934	102.8	746,028	732,695	101.8
South Cotabato	302,059	284,808	106.1	394,180	376,293	104.7	547,165	523,970	104.4
XII. Central Mindanao	1,065,309	1,005,040	106.0	1,148,920	1,122,029	102.4	1,53,910	1,547,305	101.3
Lanao del Norte	196,098	185,136	105.9	233,534	227,515	102.6	312,179	306,022	102.0
Lanao del Sur	256,153	243,729	105.1	199,174	205,797	96.8	258,867	280,798	92.2
Maguindanao	244,704	233,415	104.8	269,441	267,105	100.9	381,119	376,627	101.2

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Table 5.7 Sex Ratio of the Population by Region and Province: Censal Years 1970, 1975 and 1980 (concluded)

Region/province	1975			1980			1990*		
	Male	Female	Males per 100 Females	Male	Female	Males per 100 Females	Male	Female	Males per 100 Females
North Cotabato	244,535	227,767	107.4	289,665	274,934	105.4	390,840	372,309	105.0
Sultan Kudarat	123,819	114,993	107.7	157,106	146,678	107.1	223,905	211,549	105.8

Note: The redistribution of provinces of Regions I and II is due to the creation of Cordillera Administrative Region as governed by Executive Order No. 220.

a Data include [illegible] in Quezon.
* Refers to household population only.

Source: National Statistics Office. *Census Reports, 1970, 1975, 1980 and 1990.*

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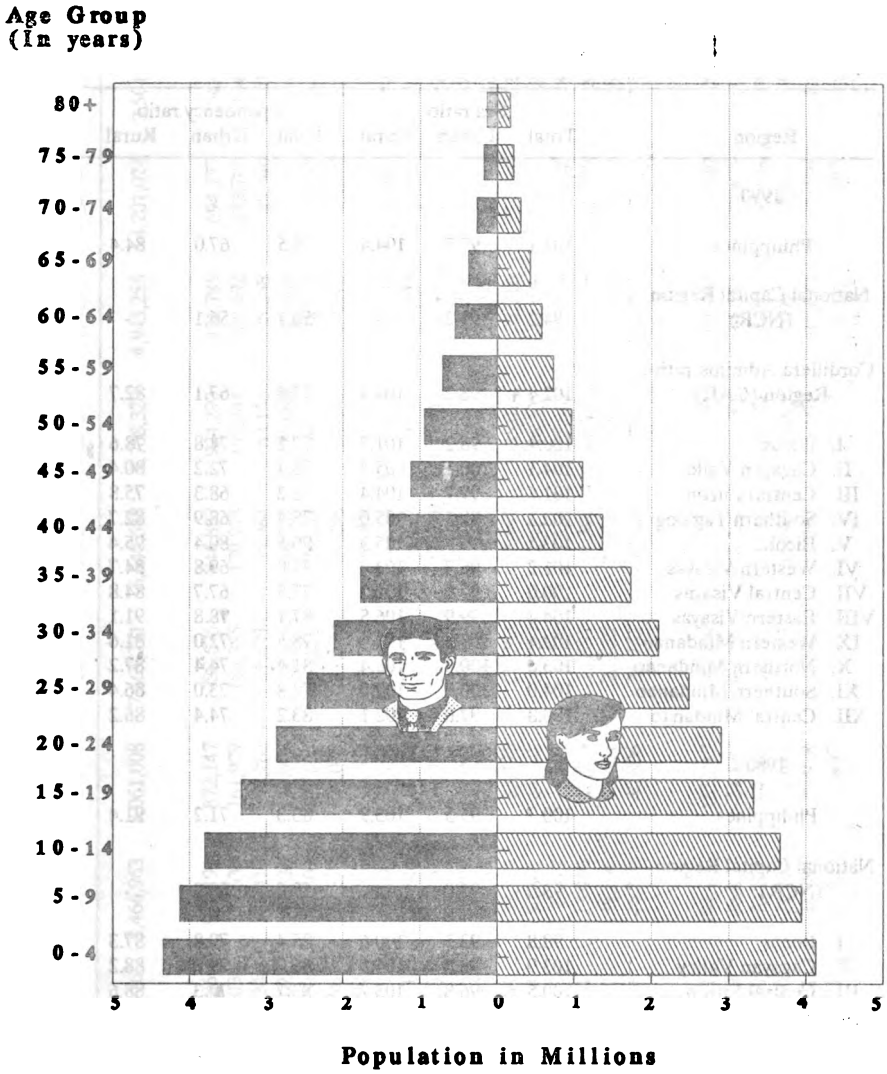

Figure 5.2 Age-Sex Composition of the Household Population of the Philippines: 1990

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Table 5.8 Summary Statistics on Sex Ratio, Dependency Ratio and Median Age, Urban-Rural by Region: 1980 and 1990

Region	Sex ratio Total	Sex ratio Urban	Sex ratio Rural	Dependency ratio Total	Dependency ratio Urban	Dependency ratio Rural	Median age
1990							
Philippines	101.1	97.7	104.4	75.5	67.0	84.4	18.7
National Capital Region (NCR)	94.2	94.2	-	56.1	56.1	-	20.5
Cordillera Administrative Region (CAR)	102.4	98.2	104.4	77.6	67.1	82.7	18.6
I. Ilocos	100.4	98.2	101.7	77.2	74.8	78.6	19.6
II. Cagayan Valley	104.1	100.1	105.3	78.4	72.2	80.4	18.4
III. Central Luzon	101.6	99.7	104.4	71.2	68.3	75.8	19.5
IV. Southern Tagalog	102.1	99.5	105.0	75.4	68.9	82.7	18.9
V. Bicol	103.4	99.7	105.3	90.5	80.4	95.4	16.7
VI. Western Visayas	101.2	96.7	103.7	79.0	69.8	84.7	18.5
VII. Central Visayas	100.0	97.0	102.2	77.5	67.7	84.8	18.9
VIII. Eastern Visayas	104.4	99.9	106.5	87.1	78.8	91.1	17.5
IX. Western Mindanao	102.4	99.5	103.6	78.6	72.0	81.6	17.4
X. Northern Mindanao	103.6	100.0	106.4	81.4	74.4	87.2	17.5
XI. Southern Mindanao	104.0	100.0	107.9	79.8	73.0	86.4	17.5
XII. Central Mindanao	100.8	97.0	102.1	83.2	74.4	86.2	16.9
1980							
Philippines	100.7	95.5	103.9	83.3	71.2	91.4	17.6
National Capital Region (NCR)	93.0	93.0	-	59.0	59.0	-	20.2
I. Ilocos	98.8	93.5	100.6	85.4	79.8	87.3	18.3
II. Cagayan Valley	103.9	98.8	104.8	86.7	79.0	88.2	17.0
III. Central Luzon	100.5	96.8	103.2	83.7	77.3	88.6	17.6
IV. Southern Tagalog	102.4	98.2	104.9	84.0	75.9	89.1	17.7
V. Bicol	103.2	96.6	105.1	97.6	84.5	101.5	15.7
VI. Western Visayas	100.3	93.9	102.9	86.2	76.2	90.5	17.4
VII. Central Visayas	98.8	95.4	100.4	83.1	73.3	88.1	18.4
VIII. Eastern Visayas	103.5	97.8	105.2	93.5	84.2	96.2	16.5
IX. Western Mindanao	102.8	97.4	103.9	90.3	79.7	92.6	15.9
X. Northern Mindanao	103.3	97.9	105.4	87.2	77.4	91.0	16.5
XI. Southern Mindanao	104.7	99.2	107.6	86.7	78.4	91.2	16.5
XII. Central Mindanao	102.4	96.1	103.9	93.2	83.6	95.5	15.5

Source: National Statistics Office, Population Census Section.

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Table 5.9 Age Distribution of Household Population by Five-Year Interval by Region and Province: May 1990

Region/province	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39
Philippines	60,559,116[a]	8,466,963	8,061,008	7,465,731	6,640,648	5,768,329	4,945,255	4,201,024	3,501,620
National Capital Region (NCR)	7,907,386	989,190	872,147	788,675	844,897	924,293	831,785	694,777	543,029
Manila	1,588,203	179,633	161,979	155,385	179,975	197,744	168,492	133,700	104,464
Kalookan City	761,824	102,415	92,282	81,671	78,984	83,158	75,258	65,340	50,875
Pasay City	366,702	47,836	39,936	35,315	38,764	44,688	40,563	32,382	24,428
Quezon City	1,662,950	205,801	179,625	161,052	178,257	198,708	178,264	148,605	114,825
Las Piñas	296,896	37,374	34,089	31,670	32,286	31,640	27,970	25,240	22,233
Makati	450,599	54,571	46,583	40,461	46,606	54,339	52,086	43,760	32,310
Malabon	279,808	36,907	32,198	29,349	28,863	30,122	27,732	24,354	19,422
Mandaluyong	246,131	29,544	25,471	23,526	26,492	29,519	27,423	21,857	16,914
Marikina	309,320	37,681	34,594	32,040	33,604	35,074	30,935	26,184	21,716
Muntinlupa	270,399	36,503	32,685	27,793	27,358	30,106	28,210	25,193	19,369
Navotas	187,322	26,311	22,599	21,090	19,387	19,614	18,078	15,547	12,492
Parañaque	307,384	37,724	33,475	29,762	32,465	35,024	31,716	27,130	22,153
Pasig	397,134	50,861	44,248	39,527	42,473	46,205	42,108	35,460	28,028
Pateros	51,367	6,517	6,017	5,722	5,331	5,661	4,894	4,196	3,456
San Juan	125,961	13,040	11,909	11,591	14,340	15,920	13,848	10,939	8,869
Tagig	265,600	39,896	33,651	26,959	25,192	28,948	28,853	24,993	18,109
Valenzuela	339,786	46,576	40,806	35,762	34,520	37,823	35,355	29,897	23,366
Cordillera Administrative Region (CAR)	1,141,141	164,406	155,817	137,789	122,073	109,143	94,970	79,049	62,988
Abra	184,439	23,838	24,430	22,436	18,391	16,003	14,079	12,431	10,062
Benguet	482,110	70,169	64,269	54,197	51,648	50,531	44,510	37,136	28,541
Ifugao	147,030	21,977	21,643	20,413	16,805	12,625	10,841	8,539	7,579
Kalinga-Apayao	211,391	31,889	29,978	26,829	23,032	19,077	16,673	13,860	11,278
Mt. Province	116,171	16,533	15,497	13,914	12,197	10,907	8,867	7,083	5,528

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Table 5.9 Age Distribution of Household Population by Five-Year Interval by Region and Province: May 1990 (continued)

Region/province	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80 and over
Philippines	2,753,846	2,221,492	1,905,830	1,439,404	1,127,880	807,620	565,340	385,644	301,482
National Capital Region (NCR)	412,423	281,850	239,062	168,960	125,526	80,679	50,928	33,460	25,705
Manila	83,006	57,637	52,444	38,263	29,543	19,198	12,237	8,143	6,360
Kalookan City	38,978	26,957	22,981	15,608	11,207	6,929	4,364	2,826	1,991
Pasay City	18,336	12,925	11,099	7,501	5,268	3,352	1,929	1,357	1,023
Quezon City	85,349	58,866	49,359	35,223	27,211	17,583	11,237	7,036	5,949
Las Piñas	17,463	11,472	8,725	5,823	4,211	2,841	1,771	1,236	852
Makati	23,244	15,334	12,905	10,000	7,573	4,582	2,915	1,814	1,516
Malabon	14,980	10,250	8,468	5,930	4,469	2,852	1,837	1,234	841
Mandaluyong	13,116	9,121	7,770	5,498	3,931	2,521	1,643	1,058	727
Marikina	16,752	11,515	10,080	6,999	4,869	3,097	1,834	1,369	977
Muntinlupa	13,994	8,911	7,023	4,677	3,459	2,114	1,410	900	694
Navotas	9,652	6,635	5,303	3,851	2,780	1,681	1,094	731	477
Parañaque	17,189	11,767	9,845	6,865	4,918	3,205	1,912	1,228	1,006
Pasig	20,921	14,034	11,515	7,757	5,428	3,633	2,275	1,556	1,105
Pateros	2,769	1,839	1,639	1,210	832	541	332	239	172
San Juan	6,783	4,834	4,303	3,154	2,343	1,663	1,082	735	608
Tagig	12,474	8,134	6,267	4,218	3,122	2,080	1,271	823	610
Valenzuela	17,417	11,619	9,336	6,383	4,362	2,807	1,785	1,175	797
Cordillera Administrative Region (CAR)	47,494	39,861	36,636	28,449	22,114	16,798	11,550	6,354	5,650
Abra	7,881	6,640	6,839	5,514	4,878	4,082	3,042	1,983	1,910
Benguet	20,805	16,430	14,382	10,156	7,251	4,925	3,378	1,986	1,796
Ifugao	5,236	4,749	4,499	4,026	3,130	2,427	1,432	659	450
Kalinga-Apayao	9,009	7,942	6,800	5,087	3,697	2,802	1,847	893	698
Mt. Province	4,563	4,100	4,116	3,666	3,158	2,562	1,851	833	796

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Table 5.9 Age Distribution of Household Population by Five-Year Interval by Region and Province: May 1990 (continued)

Region/province	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39
I. Ilocos	3,547,269	453,310	462,299	433,215	381,505	323,537	268,955	229,204	194,111
Ilocos Norte	460,684	53,057	55,718	52,357	47,208	41,958	36,326	30,781	26,345
Ilocos Sur	519,273	59,696	63,739	61,417	54,028	47,926	41,484	34,196	29,153
La Union	548,251	68,541	70,736	65,958	57,688	50,935	43,011	37,748	30,960
Pangasinan	2,019,061	272,016	272,106	253,483	222,581	182,718	148,134	126,479	107,653
II. Cagayan Valley	2,336,350	326,931	316,846	298,932	253,348	211,241	188,723	163,691	134,024
Batanes	14,973	1,781	1,767	1,811	1,808	1,394	1,140	835	697
Cagayan	828,204	113,317	111,842	105,060	87,248	70,302	64,395	57,548	47,773
Isabela	1,078,552	153,841	145,416	139,630	119,460	101,790	88,943	75,755	61,391
Nueva Vizcaya	300,566	41,839	41,405	37,473	32,312	27,335	24,963	21,432	17,714
Quirino	114,055	16,153	16,416	14,958	12,520	10,420	9,282	8,121	6,449

Region/province	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80 and over
I. Ilocos	168,974	137,777	121,835	95,4490	80,733	68,535	51,167	37,832	38,831
Ilocos Norte	22,317	20,064	17,801	13,027	11,005	10,262	8,240	6,692	7,526
Ilocos Sur	23,526	20,369	19,513	14,759	13,339	11,734	9,365	7,040	7,989
La Union	26,206	19,755	18,567	14,624	12,269	10,734	8,335	6,024	6,160
Pangasinan	96,925	77,589	65,954	53,039	44,120	35,805	25,227	18,076	17,156
II. Cagayan Valley	101,529	80,662	76,399	56,826	43,000	32,919	23,428	14,809	13,042
Batanes	606	630	546	488	401	305	275	201	288
Cagayan	36,277	29,565	29,463	22,635	17,567	13,954	9,743	6,081	5,434
Isabela	46,729	36,962	33,226	23,892	17,893	13,192	9,321	5,995	5,116
Nueva Vizcaya	13,026	9,874	9,708	7,359	5,329	4,026	3,069	1,964	1,738
Quirino	4,891	3,631	3,456	2,452	1,810	1,442	1,020	568	466

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Table 5.9 Age Distribution of Household Population by Five-Year Interval by Region and Province: May 1990 (continued)

Region/province	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39
III. Central Luzon	6,188,716	813,863	786,745	751,004	679,160	627,237	521,883	442,618	365,336
Bataan	424,695	58,225	56,155	51,506	43,805	42,221	37645	32,993	26,851
Bulacan	1,502,343	194,799	189,497	177,893	158,018	152,516	128,619	111,522	94,242
Nueva Ecija	1,310,829	169,948	170,010	163,457	145,446	130,016	107,663	90,199	73,093
Pampanga	1,530,073	202,621	192,121	189,584	174,948	162,209	130,062	107,191	87,089
Tarlac	859,222	113,623	110,277	105,395	96,408	83,525	68,351	58,484	48,880
Zambales	561,554	74,647	68,685	63,169	60,535	56,750	49,543	42,229	35,181
IV. Southern Tagalog	8,247,120	1,146,656	1,103,406	1,019,054	875,835	777,927	673,430	593,401	496,848
Aurora	139,072	22,307	19,606	17,845	15,367	12,369	10,606	9,097	7,332
Batangas	1,475,223	188,271	193,661	183,001	161,905	141,828	115,072	100,255	86,159
Cavite	1,150,103	149,119	140,654	130,525	117,729	116,032	103,071	90,961	74,770
Laguna	1,368,708	178,948	172,448	163,211	143,167	135,650	121,635	109,157	91,467
Marinduque	185,377	26,073	26,730	26,304	18,566	13,476	11,254	11,081	10,189
Occ. Mindoro	281,660	44,038	41,840	37,222	30,325	24,589	21,347	18,210	15,129
Or. Mindoro	549,532	86,929	82,944	75,063	59,610	46,795	39,346	34,808	28,777
Palawan	524,493	81,628	77,947	66,426	56,598	46,170	42,111	35,067	28,562
Quezon	1,369,719	200,840	189,710	177,056	147,929	123,991	104,231	91,842	76,145
Rizal	975,850	134,730	125,389	112,438	100,234	98,076	88,651	79,822	67,428
Romblon	227,383	33,773	32,477	29,963	24,405	18,951	15,706	13,101	10,890
V. Bicol	3,904,793	595,460	574,057	539,059	422,951	324,603	261,939	228,735	194,634
Albay	902,588	130,740	131,485	124,321	98,868	75,898	60,064	53,117	46,056
Camarines Norte	390,453	59,923	55,993	52,162	43,094	35,181	29,149	24,801	20,272
Camarines Sur	1,303,908	203,144	193,053	178,923	141,558	109,078	87,988	76,679	65,711
Catanduanes	186,819	26,874	26,115	25,090	19,964	15,452	11,998	9,857	8,431
Masbate	598,813	96,786	90,618	84,426	63,521	47,612	39,149	35,103	28,973
Sorsogon	522,212	77,993	76,793	74,137	55,946	41,382	33,591	29,178	25,191

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Table 5.9 Age Distribution of Household Population by Five-Year Interval by Region and Province: May 1990 (continued)

Region/province	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80 and over
III. Central Luzon	301,178	221,749	193,910	147,737	113,521	84,645	59,615	43,504	35,011
Bataan	20,785	12,922	11,713	9,578	7,466	4,970	3,372	2,502	1,986
Bulacan	76,581	55,321	46,630	35,686	28,185	20,155	14,279	10,352	8,048
Nueva Ecija	59,093	49,191	43,395	32,131	25,028	19,460	14,218	10,280	8,201
Pampanga	73,193	52,035	45,710	35,680	26,262	19,568	13,518	10,086	8,196
Tarlac	41,829	31,382	27,957	21,506	16,458	13,455	9,310	6,707	5,675
Zambales	29,697	20,898	18,505	13,156	10,122	7,037	4,918	3,577	2,905
IV. Southern Tagalog	387,915	299,396	253,721	194,892	148,916	107,826	75,710	52,739	39,448
Aurora	6,072	4,864	4,166	3,158	2,380	1,553	1,074	703	573
Batangas	70,735	54,960	46,713	37,508	29,432	23,310	17,808	13,418	11,187
Cavite	59,414	41,843	37,171	28,372	20,697	15,135	10,381	8,253	5,976
Laguna	66,531	47,919	40,154	31,067	23,746	17,214	11,962	8,584	5,848
Marinduque	9,083	7,742	6,699	5,569	4,397	3,433	2,379	1,369	1,033
Occ. Mindoro	12,231	9,961	8,409	6,220	4,508	3,089	2,155	1,396	991
Or. Mindoro	22,763	18,984	15,859	12,082	9,436	6,577	4,564	2,793	2,202
Palawan	22,491	19,102	15,614	11,538	8,388	5,585	3,681	2,030	1,555
Quezon	59,333	49,659	43,405	33,256	26,485	18,410	12,665	8,458	5,904
Rizal	50,031	34,836	27,365	19,581	14,190	9,590	6,300	4,226	2,963
Romblon	9,231	9,526	8,166	6,541	5,257	3,930	2,741	1,509	1,216
V. Bicol	166,815	145,866	124,845	97,126	82,646	56,270	41,541	27,566	20,680
Albay	40,452	33,894	28,993	22,805	19,966	13,401	10,268	6,983	5,277
Camarines Norte	16,483	13,848	11,448	8,913	7,130	4,893	3,380	2,314	1,469
Camarines Sur	55,775	46,973	40,120	31,327	26,895	18,461	13,315	8,630	6,278
Catanduanes	7,669	7,428	6,850	5,606	5,170	3,684	2,870	1,985	1,776
Masbate	23,941	22,798	20,040	14,795	11,594	7,788	5,618	3,541	2,510
Sorsogon	22,495	20,925	17,394	13,680	11,891	8,043	6,090	4,113	3,370

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Table 5.9 Age Distribution of Household Population by Five-Year Interval by Region and Province: May 1990 (continued)

Region/province	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39
VI. Western Visayas	5,385,222	739,351	726,161	683,719	598,756	483,190	399,498	342,863	295,012
Aklan	380,028	51,009	51,270	48,005	40,545	32,151	26,437	22,959	20,217
Antique	405,926	58,037	55,690	51,366	41,475	31,426	27,990	24,867	21,031
Capiz	583,491	79,898	82,109	77,510	65,993	52,779	42,101	35,517	31,328
Negros Occ.	2,253,173	318,033	307,149	291,176	259,747	207,906	170,325	145,606	124,494
Iloilo	1,644,736	215,428	213,226	200,621	178,418	148,789	123,910	106,593	91,800
Guimaras[1]	(117,868)	(16,946)	(16,717)	(15,041)	(12,578)	(10,139)	(8,735)	(7,321)	(6,142)
VII. Central Visayas	4,582,529	636,569	599,972	561,877	498,086	416,160	352,964	299,012	252,337
Bohol	947,098	125,266	122,135	118,689	102,636	81,187	65,833	56,179	46,442
Cebu	2,638,290	369,505	343,846	316,323	288,972	250,436	212,615	178,847	149,975
Negros Oriental	923,256	132,813	124,628	117,861	99,684	79,541	69,803	59,777	51,783
Siquijor	73,885	8,985	9,363	9,004	6,794	4,996	4,713	4,209	4,137
VIII. Eastern Visayas	3,048,854	449,959	432,383	406,962	324,559	247,211	206,048	178,601	152,478
Eastern Samar	328,693	46,620	45,393	43,025	35,981	27,202	22,273	18,227	14,970
Northern Samar	383,188	59,829	56,688	52,637	40,446	29,265	24,336	20,872	18,616
Samar	531,903	80,096	77,141	71,807	58,066	43,447	34,881	30,285	25,642
Southern Leyte	321,507	43,329	42,339	42,711	33,602	25,918	21,630	18,670	15,970
Leyte	1,365,627	202,851	194,256	180,887	144,040	112,073	95,145	83,851	71,507
Biliran[2]	(117,936)	(17,234)	(16,566)	(15,895)	(12,424)	(9,306)	(7,783)	(6,696)	(5,773)
IX. Western Mindanao	3,150,906	445,725	451,463	417,396	374,506	291,050	252,031	206,064	182,241
Basilan	238,006	32,510	36,180	31,593	27,449	22,089	20,414	15,104	13,899
Sulu	468,856	49,135	69,637	65,909	65,235	41,925	37,029	29,598	31,514
Tawi-tawi	227,731	25,550	32,545	30,617	30,003	22,244	20,144	14,953	14,797
Zamboanga del Norte	676,014	100,539	94,332	87,779	77,042	62,017	52,440	43,540	36,879
Zamboanga del Sur	1,540,299	237,991	218,769	201,498	174,777	142,775	122,004	102,869	85,152

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Table 5.9 Age Distribution of Household Population by Five-Year Interval by Region and Province: May 1990 (continued)

Region/province	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80 and over
VI. Western Visayas	235,561	209,322	185,299	144,113	113,202	87,098	62,612	46,425	33,040
Aklan	17,023	15,576	13,384	10,852	9,009	7,598	5,975	4,472	3,546
Antique	17,505	16,997	15,130	12,455	9,925	8,261	6,008	4,513	3,250
Capiz	23,915	22,143	19,186	15,056	11,919	9,024	6,812	4,589	3,612
Negros Occ.	96,582	85,733	75,644	56,432	42,156	28,863	19,076	14,738	9,513
Iloilo	75,586	64,577	57,934	46,078	37,717	31,256	23,299	17,101	12,403
Guimaras[1]	(4,950)	(4,296)	(4,021)	(3,240)	(2,476)	(2,096)	(1,442)	(1,012)	(716)
VII. Central Visayas	201,216	177,799	157,292	124,656	102,650	75,599	56,269	39,708	30,363
Bohol	41,194	40,593	35,256	28,933	25,526	20,130	15,948	11,708	9,443
Cebu	117,134	97,407	85,594	67,680	54,968	40,135	29,404	20,314	15,135
Negros Oriental	39,394	36,089	33,209	25,112	19,739	13,337	9,314	6,503	4,669
Siquijor	3,494	3,710	3,233	2,931	2,417	1,997	1,603	1,183	1,116
VIII. Eastern Visayas	131,861	123,418	107,013	85,833	72,778	52,672	35,666	24,131	17,281
Eastern Samar	13,659	13,496	11,885	10,479	8,739	6,888	4,431	2,950	2,475
Northern Samar	16,415	16,792	13,460	10,375	8,322	5,934	4,304	2,767	2,130
Samar	22,293	22,331	18,482	14,557	12,284	8,124	5,834	3,670	2,963
Southern Leyte	14,580	13,760	12,627	9,987	8,724	7,083	4,419	3,796	2,362
Leyte	59,557	52,327	46,356	36,928	31,622	22,535	15,165	9,968	6,559
Biliran[2]	(5,357)	(4,712)	(4,203)	(3,507)	(3,087)	(2,108)	(1,513)	(980)	(792)
IX. Western Mindanao	135,824	116,593	91,287	65,798	49,223	30,748	20,127	11,612	9,218
Basilan	9,826	8,599	6,646	4,626	3,881	2,266	1,526	660	738
Sulu	23,466	21,069	13,353	9,196	5,652	3,309	1,644	617	568
Tawi-tawi	10,743	9,210	6,568	4,531	2,845	1,630	804	268	279
Zamboanga del Norte	28,177	25,959	20,935	15,645	11,962	7,544	5,190	3,286	2,748
Zamboanga del Sur	63,612	51,756	43,785	31,800	24,883	15,999	10,963	6,781	4,885

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Table 5.9 Age Distribution of Household Population by Five-Year Interval by Region and Province: May 1990 (continued)

Region/province	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39
X. Northern Mindanao	3,502,674	536,035	484,592	451,777	392,359	322,216	273,589	233,431	190,314
Agusan del Norte	464,789	68,797	64,066	60,536	53,062	43,068	36,166	30,765	25,248
Agusan del Sur	419,920	71,446	62,842	55,051	46,841	38,219	33,357	27,397	21,085
Bukidnon	842,269	146,107	123,514	110,701	93,086	76,897	65,209	56,189	45,059
Camiguin	64,176	8,491	8,355	8,049	6,921	5,471	4,452	3,668	3,163
Misamis Occ.	423,590	56,174	53,160	52,829	47,511	39,803	32,632	27,445	23,206
Misamis Or.	862,660	125,093	114,739	108,649	96,521	81,524	70,481	61,750	50,786
Surigao del Norte	425,270	59,927	57,916	55,962	48,417	37,234	31,292	26,217	21,767
XI. Southern Mindanao	4,448,616	672,009	617,876	573,359	511,294	422,631	354,787	303,995	250,615
Surigao del Sur	451,287	68,111	63,519	58,889	51,739	40,753	33,979	28,645	23,769
Davao	1,053,167	163,849	147,300	136,479	118,896	99,971	84,283	73,440	59,742
Davao Oriental	394,304	59,395	55,295	53,939	46,241	35,950	29,912	24,840	20,711
Davao del Sur	1,478,723	212,188	198,010	184,693	171,898	143,794	120,761	105,576	88,075
South Cotabato	1,071,135	168,466	153,752	139,359	122,520	102,163	85,852	71,494	58,318
XII. Central Mindanao	3,167,540	497,499	477,244	402,913	361,319	287,890	264,653	205,583	187,653
Lanao del Norte	613,259	94,269	88,126	77,520	69,534	56,748	51,301	42,194	36,408
Lanao del Sur	598,800	91,544	96,738	76,637	69,348	53,040	51,875	37,667	39,012
Maguindanao	756,878	121,429	115,794	92,672	87,150	67,151	66,442	48,879	48,109
Cotabato	763,149	121,330	112,084	99,517	85,419	69,905	60,337	48,967	40,705
Sultan Kudarat	435,454	68,927	64,502	56,567	49,868	41,046	34,698	27,876	23,419

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Table 5.9 Age Distribution of Household Population by Five-Year Interval by Region and Province: May 1990 (concluded)

Region/province	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80 and over
X. Northern Mindanao	146,321	123,546	108,792	79,457	60,787	40,631	28,255	18,203	12,369
Agusan del Norte	19,753	16,647	15,040	10,699	8,142	5,321	3,613	2,433	1,433
Agusan del Sur	15,936	13,902	11,454	8,235	6,039	3,568	2,337	1,317	894
Bukidnon	32,410	25,776	22,766	16,009	11,571	7,233	4,885	2,815	2,042
Camiguin	3,009	2,719	2,489	2,064	1,717	1,331	1,048	672	557
Misamis Occ.	19,055	17,403	15,576	11,805	9,411	6,725	5,051	3,439	2,365
Misamis Or.	37,592	29,188	26,749	19,547	15,208	10,153	7,009	4,393	3,278
Surigao del Norte	18,566	17,911	14,718	11,098	8,699	6,,300	4,312	3,134	1,800
XI. Southern Mindanao	187,237	154,243	127,670	91,148	70,623	46,444	31,713	19,614	13,358
Surigao del Sur	18,877	16,934	14,571	10,534	8,218	5,329	3,738	2,244	1,438
Davao	43,023	35,026	29,621	21,044	15,878	10,465	7,007	4,387	2,756
Davao Oriental	16,044	14,562	12,091	8,967	6,678	4,164	2,745	1,684	1,086
Davao del Sur	65,613	51,554	42,223	30,523	24,672	16,248	11,192	6,896	4,807
South Cotabato	43,680	36,167	29,164	20,080	15,177	10,238	7,031	4,403	3,271
XII. Central Mindanao	129,498	109,410	82,069	58,960	42,161	26,756	16,759	9,687	7,486
Lanao del Norte	25,642	20,501	16,824	12,151	8,865	5,483	3,681	2,302	1,710
Lanao del Sur	24,625	20,457	13,762	10,222	6,530	3,886	1,903	876	678
Maguindanao	31,300	27,977	18,196	12,584	8,502	5,007	2,906	1,386	1,394
Cotabato	30,396	25,714	21,451	15,730	12,030	8,085	5,540	3,499	2,440
Sultan Kudarat	17,535	14,761	11,836	8,273	6,234	4,295	2,729	1,624	1,264

[a] Includes 2,876 homeless population and 2,336 Filipinos in Philippine Embassies/Consulates and Missions abroad.
[1] Subprovince. Included in Iloilo.
[2] Subprovince. Included in Leyte.

Source: National Statistics Office. *Census Reports, 1970, 1975, 1980* and *1990.*

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Table 5.10 Marital Status of the Population 10 Years Old and Over by Sex and Age Group: 1980 and 1990

Age group	All persons 10 years old and over			Single			Married		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
1990									
Total	44,031,135	21,975,262	22,055,873	20,511,276	10,778,990	9,732,286	21,428,785	10,652,383	10,776,402
10-14	7,465,732	3,799,408	3,666,324	7,402,763	3,773,840	3,628,923	48,260	18,785	29,475
15-19	6,540,651	3,320,861	3,319,790	6,191,066	3,221,190	2,969,876	424,268	91,084	333,184
20-24	5,768,325	2,866,207	2,902,118	3,712,974	2,097,337	1,615,637	1,995,668	749,799	1,245,869
25-29	4,945,251	2,459,263	2,485,988	1,616,852	937,986	678,866	3,242,506	1,494,398	1,748,108
30-34	4,201,026	2,110,791	2,090,235	635,944	356,449	279,495	3,457,548	1,721,614	1,735,934
35-39	3,501,621	1,768,532	1,733,089	306,365	156,441	149,924	3,070,076	1,575,602	1,494,474
40-44	2,753,843	1,389,855	1,363,988	180,711	82,470	98,241	2,431,714	1,267,766	1,163,948
45-49	2,221,488	1,113,345	1,108,143	118,106	49,992	68,114	1,940,549	1,020,910	919,639
50-54	1,905,828	944,837	960,991	93,473	34,939	58,534	1,609,726	861,355	748,371
55-59	1,439,403	705,646	733,757	68,359	22,090	46,269	1,163,496	635,854	527,642
60-64	1,127,881	547,008	580,873	57,955	16,587	41,368	841,680	478,226	363,454
65-69	807,620	376,777	430,843	43,623	10,890	32,733	551,743	318,184	233,559
70-74	565,339	264,981	300,358	34,157	8,018	26,139	339,959	210,648	129,311
75 -79	385,644	176,680	208,964	25,381	5,382	19,999	199,616	129,454	70,162
80 and over	301,483	131,071	170,412	23,547	5,379	18,168	111,967	78,704	33,272

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Table 5.10 Marital Status of the Population 10 Years Old and Over by Sex and Age Group: 1980 and 1990 (continued)

Age group	Widowed			Divorced/separated			Not stated		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
1990									
Total	1,689,159	396,439	1,292,720	280,136	93,695	186,441	121,779	53,755	68,024
10-14	3,466	1,465	2,001	1,982	654	1,328	9,261	4,664	4,597
15-19	5,286	1,882	3,404	6,104	1,329	4,775	13,927	5,376	8,551
20-24	15,249	4,538	10,711	22,977	5,802	17,175	21,457	8,731	12,726
25-29	30,520	7,968	22,552	35,244	10,014	25,230	20,129	8,897	11,232
30-34	50,333	12,557	37,776	41,644	13,136	28,508	15,557	7,035	8,522
35-39	72,787	17,565	55,222	40,781	13,619	27,162	11,612	5,305	6,307
40-44	98,262	23,318	74,944	34,854	12,574	22,280	8,302	3,727	4,575
45-49	128,506	29,089	99,417	28,286	10,583	17,703	6,041	2,771	3,270
50-54	174,489	37,731	136,758	23,497	8,603	14,894	4,643	2,209	2,434
55-59	188,024	40,117	147,907	16,241	6,013	10,228	3,283	1,572	1,711
60-64	213,893	46,456	167,437	11,795	4,497	7,298	2,558	1,242	1,316
65-69	202,998	43,998	159,000	7,445	2,846	4,599	1,811	859	952
70-74	185,253	43,790	141,463	4,641	1,923	2,718	1,329	602	727
75-79	156,960	40,201	116,759	2,729	1,214	1,515	958	429	529
80 and over	163,133	45,764	117,369	1,916	888	1,028	911	336	575

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Table 5.10 Marital Status of the Population 10 Years Old and Over by Sex and Age Group: 1980 and 1990 (continued)

Age group	All persons 10 years old and over			Single			Married		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
1980									
Total	33,826,817	16,799,303	17,027,514	15,150,676	7,869,898	7,280,778	17,125,242	8,511,080	8,614,162
10-14	5,949,904	3,036,022	2,913,882	5,917,832	3,023,625	2,894,207	23,213	8,181	15,032
15-19	5,255,641	2,566,848	2,688,793	4,778,333	2,470,322	2,308,011	464,921	92,095	372,826
20-24	4,588,224	2,210,308	2,377,916	2,479,823	1,398,397	1,081,426	2,070,356	801,555	1,268,801
25-29	3,854,164	1,918,288	1,935,876	931,095	523,747	407,348	2,868,523	1,378,494	1,490,029
30-34	2,998,581	1,521,082	1,477,499	366,938	191,481	175,457	2,564,382	1,309,609	1,254,773
35-39	2,419,171	1,227,966	1,191,205	188,676	92,871	95,805	2,150,251	1,111,544	1,038,707
40-44	2,077,506	1,046,208	1,031,298	128,470	56,225	72,245	1,842,265	960,296	882,329
45-49	1,660,486	825,018	835,468	90,403	34,805	55,598	1,447,948	758,545	689,403
50-54	1,386,743	682,996	703,747	73,117	24,653	48,464	1,161,447	620,030	541,417
55-59	1,094,560	528,491	566,069	55,379	16,588	38,791	876,850	472,628	404,222
60-64	905,496	441,026	464,470	46,489	12,664	33,825	671,542	381,918	289,624
65-69	718,336	349,270	369,066	38,623	9,814	28,809	495,720	293,156	202,564
70-74	440,304	216,036	224,268	26,007	6,655	19,352	266,335	169,026	97,309
75 and over	477,701	229,744	247,957	29,491	8,051	21,440	221,129	154,003	67,126

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Table 5.10 Marital Status of the Population 10 Years Old and Over by Sex and Age Group: 1980 and 1990 (concluded)

Age group	Widowed			Divorced/separated			Not stated		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
1980									
Total	1,339,895	347,884	992,011	182,244	59,257	122,987	28,760	11,184	17,576
10-14	4,971	2,846	2,125	1,869	454	1,415	2,019	916	1,103
15-19	5,259	2,239	3,020	5,059	1,018	4,041	2,069	1,174	895
20-24	16,021	4,878	11,143	18,861	4,603	14,258	3,163	875	2,288
25-29	26,557	7,788	18,769	25,252	7,399	17,853	2,737	860	1,877
30-34	39,216	11,021	28,195	24,319	7,548	16,771	3,726	1,423	2,303
35-39	56,613	15,768	40,845	22,402	7,481	14,921	1,229	302	927
40-44	83,149	21,651	61,498	20,365	6,931	13,434	2,897	1,105	1,792
45-49	103,650	25,376	78,274	17,471	6,023	11,448	1,014	269	745
50-54	135,505	32,563	102,942	14,690	4,884	9,806	1,984	866	1,118
55-59	150,571	34,857	115,714	11,082	4,207	6,875	678	211	467
60-64	177,188	42,432	134,756	8,481	3,284	5,197	1,796	728	1,068
65-69	177,503	43,665	133,838	5,884	2,498	3,386	606	137	469
70-74	142,849	38,072	104,777	3,265	1,439	1,826	1,848	844	1,004
75 and over	220,843	64,728	156,115	3,244	1,488	1,756	2,994	1,474	1,520

Sources: National Statistics Office. *1980 Census of Population and Housing, Volume 2; National Summary and 1990 Census Reports.*

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Table 5.10a Marital Status of the Population 10 Years Old and Over by Region and Province: May 1990

Region/province	All persons 10 years old and over	Single	Married	Widowed	Divorced/ separated	Others	Not stated
Philippines	44,031,135	20,511,276	21,428,785	1,689,159	280,136	73,141	48,638
National Capital Region (NCR)	6,046,049	2,869,023	2,899,002	187,142	52,973	18,498	19,411
Manila	1,246,591	619,023	561,236	46,187	13,240	3,987	2,918
Kalookan City	567,127	257,389	283,172	17,659	4,996	2,317	1,594
Pasay City	278,930	131,077	132,572	8,162	2,795	1,268	3,056
Quezon City	1,277,524	617,715	604,639	37,591	9,587	3,734	4,258
Las Piñas	225,433	104,663	111,428	6,097	1,901	383	961
Makati	349,445	170,795	162,052	10,858	3,459	1,161	1,120
Malabon	210,703	93,431	106,162	7,020	2,122	1,406	562
Mandaluyong	191,116	92,313	90,306	5,964	1,828	343	362
Marikina	237,045	111,612	115,718	6,938	1,907	357	513
Muntinlupa	201,211	92,381	101,081	4,977	1,413	650	709
Navotas	138,412	59,216	73,101	4,087	1,014	786	208
Parañaque	236,185	110,104	116,096	6,314	1,848	673	1,150
Pasig	302,025	141,934	147,406	8,712	2,546	611	816
Pateros	38,833	17,757	19,353	1,309	326	25	63
San Juan	101,012	51,845	44,212	3,526	1,143	81	205
Tagig	192,053	84,737	99,943	5,202	1,421	408	342
Valenzuela	252,404	113,031	130,525	6,539	1,427	308	574
Cordillera Administrative Region (CAR)	820,918	388,732	389,374	35,836	5,465	436	1,075
Abra	136,171	63,185	64,827	7,307	685	62	105
Benguet	347,672	167,601	166,313	11,202	2,038	156	362
Ifugao	103,410	50,230	46,265	5,330	1,384	93	108

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Table 5.10a Marital Status of the Population 10 Years Old and Over by Region and Province: May 1990 (continued)

Region/province	All persons 10 years old and over	Single	Married	Widowed	Divorced/ separated	Others	Not stated
Kalinga-Apayao	149,296	68,563	72,823	6,902	670	80	258
Mt. Province	84,141	39,063	39,012	5,097	683	44	242
I. Ilocos	2,631,660	1,238,963	1,243,882	130,014	12,995	3,352	2,454
Ilocos Norte	351,909	161,838	167,751	19,931	1,401	869	119
Ilocos Sur	395,838	186,970	184,817	21,595	1,595	174	687
La Union	408,974	193,106	192,320	20,537	2,214	569	228
Pangasinan	1,474,939	697,049	698,994	67,951	7,785	1,740	1,420
II. Cagayan Valley	1,692,573	741,254	872,015	70,630	6,702	916	1,056
Batanes	11,425	6,307	4,492	580	39	2	5
Cagayan	603,045	261,283	309,969	28,989	2,116	278	410
Isabela	779,295	341,610	404,397	29,392	2,814	533	549
Nueva Vizcaya	217,322	96,150	110,767	8,944	1,305	91	65
Quirino	81,486	35,904	42,390	2,725	428	12	27
III. Central Luzon	4,588,108	2,118,141	2,253,283	173,552	32,572	8,806	1,754
Bataan	310,315	140,376	154,756	11,349	2,793	837	204
Bulacan	1,118,047	509,517	555,433	42,043	8,607	2,129	318
Nueva Ecija	970,871	435,633	490,157	37,868	6,008	972	233
Pampanga	1,135,331	547,342	539,496	40,317	7,302	651	223
Tarlac	635,322	293,504	310,958	26,246	3,838	558	218
Zambales	418,222	191,769	202,483	15,729	4,024	3,659	558
IV. Southern Tagalog	5,997,048	2,722,454	2,973,973	237,148	45,817	15,328	2,328
Aurora	97,159	42,643	50,128	3,512	538	328	10

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Table 5.10a Marital Status of the Population 10 Years Old and Over by Region and Province: May 1990 (continued)

Region/province	All persons 10 years old and over	Single	Married	Widowed	Divorced/ separated	Others	Not stated
Batangas	1,093,291	528,543	507,374	47,415	8,043	1,736	180
Cavite	860,330	385,814	426,669	33,931	10,335	2,998	583
Laguna	1,017,312	460,957	504,267	40,291	9,246	2,170	381
Marinduque	132,574	59,284	66,296	6,317	477	172	28
Occ. Mindoro	195,782	86,503	100,900	7,202	866	274	37
Or. Mindoro	379,659	171,918	189,479	14,938	2,022	1,048	254
Palawan	364,918	159,986	189,612	12,572	1,809	804	135
Quezon	979,159	432,398	495,609	41,367	6,360	3,106	319
Rizal	715,731	319,714	366,158	22,038	5,248	2,262	311
Romblon	161,133	74,694	77,481	7,565	873	430	90
V. Bicol	2,735,276	1,282,819	1,321,074	109,747	13,001	7,777	858
Albay	640,363	308,552	300,437	26,964	3,072	1,041	297
Camarines Norte	274,537	126,029	135,384	10,310	1,632	1,073	109
Camarines Sur	907,711	430,789	432,832	36,080	3,855	4,006	149
Catanduanes	133,830	63,844	63,202	5,837	624	274	49
Masbate	411,409	180,323	213,995	14,888	1,782	345	76
Sorsogon	367,426	173,282	175,224	15,668	2,036	1,038	178
VI. Western Visayas	3,919,710	1,926,101	1,796,294	174,980	15,894	3,337	3,104
Aklan	277,749	133,443	128,058	14,669	1,258	199	122
Antique	292,199	138,633	135,538	16,199	1,189	473	167
Capiz	421,484	207,860	193,535	18,065	1,453	219	352
Iloilo	1,216,082	610,112	543,878	56,347	4,685	1,075	785
Guimaras [1]	84,205	41,781	38,528	3,341	286	165	50
Negros Occ.	1,627,991	794,272	757,503	66,359	7,023	1,206	1,628

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Table 5.10a Marital Status of the Population 10 Years Old and Over by Region and Province: May 1990 (continued)

Region/province	All persons 10 years old and over	Single	Married	Widowed	Divorced/ separated	Others	Not stated
VII. Central Visayas	3,345,988	1,570,413	1,609,141	137,596	18,798	5,638	4,402
Bohol	699,697	334,972	326,872	32,703	3,147	1,073	930
Cebu	1,924,939	905,401	926,826	74,007	12,275	3,911	2,519
Negros Oriental	665,815	306,066	327,873	27,278	3,039	630	929
Siquijor	55,537	23,974	27,570	3,608	337	24	24
VIII. Eastern Visayas	2,166,512	968,683	1,081,731	95,479	16,108	2,715	1,796
Eastern Samar	236,680	107,941	115,869	10,851	1,785	159	75
Leyte	968,520	435,824	479,437	43,605	7,487	1,067	1,100
Biliran [2]	84,136	37,514	42,309	3,480	714	55	64
Northern Samar	266,671	114,309	138,885	11,251	1,836	257	133
Samar	374,666	162,138	193,537	15,426	2,768	657	140
Southern Leyte	235,839	110,957	111,694	10,866	1,518	520	284
IX. Western Mindanao	2,253,718	1,032,265	1,120,320	80,187	15,762	1,199	3,985
Basilan	169,316	74,170	84,985	7,092	1,943	157	969
Sulu	350,084	172,519	158,824	14,047	4,139	113	442
Tawi-tawi	169,636	78,594	84,135	4,673	1,533	76	625
Zamboanga del Norte	481,143	217,695	242,897	17,262	2,536	284	469
Zamboanga del Sur	1,083,539	489,287	549,479	37,113	5,611	569	1,480
X. Northern Mindanao	2,482,047	1,153,436	1,225,772	85,002	13,689	1,978	2,170
Agusan del Norte	331,926	157,652	160,029	11,359	2,251	381	254
Agusan del Sur	285,632	131,356	144,496	8,306	1,236	47	191
Bukidnon	572,648	260,632	292,861	15,809	2,578	178	590
Camiguin	47,330	23,100	21,649	2,253	292	16	20
Misamis Occ.	314,256	145,570	152,185	14,210	1,845	307	139

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Table 5.10a Marital Status of the Population 10 Years Old and Over by Region and Province: May 1990 (concluded)

Region/province	All persons 10 years old and over	Single	Married	Widowed	Divorced/ separated	Others	Not stated
Misamis Or.	622,828	293,373	303,603	20,697	3,876	628	651
Surigao del Norte	307,427	141,753	150,949	12,368	1,611	421	325
XI. Southern Mindanao	3,158,731	1,488,027	1,553,444	96,580	15,406	2,647	2,627
Surigao del Sur	319,657	149,700	156,815	11,082	1,543	95	422
Davao	742,018	350,629	366,059	20,947	3,443	377	563
Davao Oriental	279,614	133,412	135,891	8,701	1,093	374	143
Davao del Sur	1,068,525	507,483	519,275	34,027	6,271	1,156	313
South Cotabato	748,917	346,803	375,404	21,823	3,056	645	1,186
XII. Central Mindanao	2,192,797	1,010,965	1,089,480	75,2661	14,954	514	1,618
Lanao del Norte	430,864	198,662	214,045	14,518	3,048	126	465
Lanao del Sur	410,518	194,103	194,718	15,875	5,364	97	361
Maguindanao	519,655	229,478	269,429	17,027	3,450	98	173
Cotabato	529,735	247,572	261,743	18,189	1,909	127	195
Sultan Kudarat	302,025	141,150	149,545	9,657	1,183	66	424

[1] Subprovince. Excluded in Iloilo.
[2] Subprovince. Excluded in Leyte.

Source: National Statistics Office. *Census Reports, 1970, 1975, 1980 and 1990.*

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Table 5.11 Major Mother Tongues of the Population: Censal Years 1960, 1970, 1975, 1980 and 1990

Major mother tongue	1960 Number	1960 Percent	1970 Number	1970 Percent	1975 Number	1975 Percent	1980[a] Number	1980[a] Percent	1990 Number	1990 Percent
Total	27,087,685	100.00	36,684,486	100.00	42,070,660	100.00	48,200,247	100.00	60,559,116	100.00
Tagalog	5,694,072	21.02	8,979,719	24.48	10,019,214	23.82	14,294,342	29.66	16,911,871	27.93
Cebuano	6,529,882	24.11	8,844,996	24.11	10,262,735	24.39	11,666,676	24.20	14,713,220	24.30
Ilocano	3,158,560	11.66	4,150,596	11.31	4,685,896	11.14	4,963,386	10.30	5,923,511	9.78
Hiligaynon (Ilongo)	2,817,314	10.40	3,745,333	10.21	4,204,825	9.99	4,415,482	9.16	5,656,103	9.34
Bicol	2,108,837	7.78	2,507,156	6.83	2,928,245	6.96	2,685,043	5.57	3,519,236	5.81
Leynete-Samarnon (Waray)	1,488,668	5.50	1,767,829	4.82	1,945,005	4.62	1,920,727	3.98	2,437,688	4.03
Pampanga	875,531	3.23	1,212,024	3.30	1,442,607	3.43	1,336,804	2.77	1,897,378	3.13
Pangasinan	666,003	2.46	838,104	2.28	948,820	2.26	888,530	1.84	1,164,586	1.92
Others	3,748,818	13.84	4,638,729	12.64	5,633,313	13.39	6,029,257	12.51	8,335,523	13.76

[a] Question on mother tongue was not included in the 1980 Population Census. Figures were based on sample estimates.

Source: National Statistics Office. *Census Reports, 1960, 1970, 1975, 1980 and 1990.*

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Table 5.11a Language or Dialect Generally Spoken in the Households by Region: 1990

Language/dialect	Total	NCR	CAR	Ilocos	Cagayan Valley	Central Luzon	Southern Tagalog	Bicol
Total	11,407,262	1,569,588	219,349	659,403	446,839	1,163,205	1,583,682	708,802
Aklanon	72,952	295	-	10	81	19	920	-
Bicol	565,183	15,633	150	208	317	2,214	8,136	537,051
Bolinao	6,798	9	-	6,378	333	18	-	-
Bontoc	5,412	-	5,327	-	19	11	9	-
Cebuano	2,788,545	29,110	380	955	926	6,832	21,886	43,047
Chavacano	52,100	194	9	21	10	58	847	10
Davaweño	25,219	20	10	9	8	-	30	-
Kinaray-a (Hantikon)	100,626	135	-	-	10	-	3,341	-
Hiligaynon (Ilongo)	992,921	9,656	31	87	271	1,119	15,668	6,517
Ibanag	51,283	1,711	282	198	47,620	378	155	220
Ifugao	31,484	-	24,630	10	6,711	67	37	-
Ilocano	1,093,527	20,372	85,409	451,280	311,190	158,674	18,998	319
Kankanai	40,524	-	35,159	4,195	1,057	59	45	-
Maguindanao	143,177	987	41	40	47	373	503	40
Manobo	26,295	-	-	-	-	11	9	-
Maranao	127,097	1,486	71	93	268	291	442	41
Masbateño	63,153	215	-	-	-	19	658	62,161
Pampango	309,187	6,009	374	527	563	299,716	583	88
Pangasinan	191,476	6,326	2,913	174,794	905	4,262	1,119	306
Romblon	23,455	32	-	-	-	-	23,283	22
Samal	45,391	42	-	-	-	-	994	-
Lineyte-Samarnon (Waray)	376,682	12,704	94	146	92	2,626	3,764	367
Subanon	24,519	-	-	-	-	-	-	-
Tausog	122,566	911	55	49	235	368	1,679	69
Tagalog	3,692,434	1,454,004	11,700	17,383	29,802	665,161	1,405,701	57,952
All other languages/dialects	435,256	9,737	52,714	3,020	46,378	20,929	74,875	592

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Table 5.11a Language or Dialect Generally Spoken in Private Households by Region: 1990 (concluded)

Language/dialect	Western Visayas	Central Visayas	Eastern Visayas	Western Mindanao	Northern Mindanao	Southern Mindanao	Central Mindanao
Total	985,274	873,843	584,964	577,837	639,108	823,316	572,052
Aklanon	70,789	-	-	-	20	798	20
Bicol	63	58	183	139	148	781	102
Bolinao	-	-	-	20	19	10	10
Bontoc	9	-	-	19	-	18	-
Cebuano	78,254	845,656	227,364	286,984	525,146	571,685	150,320
Chavacano	72	42	9	50,212	28	227	361
Davaweño	10	-	-	97	27	24,998	10
Kinaray-a (Hantikon)	95,721	-	-	-	227	361	831
Hiligaynon (Ilongo)	732,079	8,493	632	12,805	19,592	86,562	97,409
Ibanag	59	76	120	89	98	144	133
Ifugao	-	-	-	21	8	-	-
Ilocano	125	80	146	2,170	4,118	14,665	25,981
Kankanai	-	-	-	-	9	-	-
Maguindanao	20	18	-	5,862	83	8,155	127,008
Manobo	-	-	-	-	9,399	9,672	7,204
Maranao	60	184	69	1,204	1,436	2,069	119,383
Masbateño	62	9	29	-	-	-	-
Pampango	37	46	29	60	219	673	263
Pangasinan	63	55	18	98	69	354	194
Romblon	10	-	-	10	-	98	-
Samal	-	-	-	43,263	-	948	32
Lineyte-Samarnon (Waray)	108	233	352,033	522	1,950	1,598	444
Subanon	-	-	-	23,635	862	12	10
Tausog	59	158	-	113,858	521	3,858	746
Tagalog	2,569	3,239	2,236	7,852	3,516	17,027	14,292
All other languages/dialects	5,105	15,496	2,096	29,217	71,612	78,603	27,299

Source: National Statistics Office. *1990 Census of Population and Housing, Report No. 3.*

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Table 5.12 Distribution of Religious Groups in the Philippines: 1960, 1970 and 1990

Religion	1960 Number	1960 Percent	1970 Number	1970 Percent	1990[a] Number	1990[a] Percent
Total	27,087,685	100.00	36,684,486	100.00	60,559,116	100.00
Roman Catholic	22,686,096	83.753	1,169,488	84.97	50,217,801	82.92
Protestant	785,399	2.90	1,122,999	3.06	3,287,355	5.43
Aglipay	1,414,431	5.22	1,434,688	3.91	1,590,208	2.62
Iglesia ni Cristo	270,104	1.00	475,407	1.30	1,414,393	2.34
Islam	1,317,475	4.86	1,584,963	4.32	2,769,643	4.57
Buddhist	39,631	0.15	33,639	0.09	22,681	0.04
Born Again Christians	-	-	-	-	323,789	0.53
Others	574,549	2.12	616,076	1.68	736,239	1.22
Not stated	-	-	247,226	0.67	197,007	0.33

Note: Questions on religion were not included in the 1980 Population census.

[a] Household population.

Source: National Statistics Office. *Census Reports, 1960, 1970 and 1990.*

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Table 5.13 Summary of Principal Vital Statistics in the Philippines: 1903-1990

Year	Population[1] (000)	Live births Number	Live births Rate[2]	Deaths Number	Deaths Rate[2]	Natural increase Number	Natural increase Rate[2]	Infant mortality Number	Infant mortality Rate[3]	Marriages Number	Marriages Rate[2]
1903	7,635[a]	284,800	37.3	329,671	43.2	44,871	(5.9)	n.a.	n.a.	n.a.	n.a.
1908	7,964	278,369	35.0	190,495	23.9	87,874	11.0	n.a.	n.a.	n.a.	n.a.
1913	8,786	316,056	36.0	154,086	17.5	161,970	18.4	n.a.	n.a.	n.a.	n.a.
1918	10,314[a]	345,751	33.5	367,106	35.6	21,355	2.1	n.a.	n.a.	77,160	15.0
1923	11,152	385,418	34.6	202,981	18.2	182,437	16.4	n.a.	n.a.	73,599	13.2
1928	12,498	422,716	33.8	218,096	17.5	204,620	16.4	63,441	150.1	72,639	11.6
1933	14,051	459,682	32.7	227,594	16.2	232,088	16.5	67,002	145.8	77,691	11.1
1938	15,814	512,389	32.4	261,848	16.6	250,541	15.8	71,239	139.0	96,556	12.2
1948	19,234[a]	602,415	31.3	243,647	12.7	358,948	18.7	68,897	114.4	128,646	13.4
1953	22,191	468,489	21.1	239,988	10.8	228,501	10.3	69,720	148.8	127,791	11.5
1958	25,795	484,592	18.8	185,431	7.2	299,161	11.6	52,923	109.2	129,280	10.0
1963	29,939	786,698	26.3	214,412	7.2	572,286	19.1	57,308	72.8	155,081	10.4
1968	34,728	898,570	25.9	261,893	7.5	636,677	18.3	63,786	71.0	210,520	12.1
1969	35,774	946,763	26.5	241,678	6.8	705,085	19.7	63,719	67.3	231,201	12.9
1970	36,684[a]	966,762	26.4	234,038	6.4	732,724	20.0	57,970	60.0	255,813	14.0
1971	37,902	963,749	25.4	250,139	6.6	713,610	18.8	59,730	62.0	252,731	13.3
1972	38,991	968,385	24.8	285,761	7.3	682,624	17.5	65,719	67.9	248,261	12.7
1973	40,123	1,049,290	26.2	283,475	7.1	765,815	19.1	67,881	64.7	263,338	13.1
1974	41,297	1,081,073	26.2	283,975	6.9	797,098	19.3	63,491	58.7	287,984	13.9
1975	42,071[a]	1,223,837	29.1	271,136	6.4	952,701	22.6	65,263	53.3	299,514	14.2
1976	43,338	1,314,860	30.3	299,861	6.9	1,014,999	23.4	74,792	56.9	303,988	14.0
1977	44,417	1,344,836	30.3	308,904	7.0	1,035,932	23.3	76,330	56.8	324,466	14.6
1978	45,498	1,387,588	30.5	297,034	6.5	1,090,554	24.0	73,640	53.1	340,108	15.0

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Table 5.13 Summary of Principal Vital Statistics in the Philippines: 1903-1990 (concluded)

Year	Population[1] (000)	Live Births Number	Live Births Rate[2]	Deaths Number	Deaths Rate[2]	Natural increase Number	Natural increase Rate[2]	Infant Mortality Number	Infant Mortality Rate[3]	Marriages Number	Marriages Rate[2]
1979	46,592	1,429,814	30.7	306,427	6.6	1,123,387	24.1	71,772	50.2	360,888	15.5
1980	48,098[a]	1,456,860	30.3	298,006	6.2	1,158,854	24.1	65,700	45.1	354,300	14.7
1981	49,536	1,461,204	29.5	301,117	6.1	1,160,087	23.4	64,415	44.1	349,742	14.1
1982	50,783	1,474,491	29.1	308,758	6.1	1,165,733	23.0	61,665	41.8	351,818	13.9
1983	52,055	1,506,356	28.9	327,260	6.3	1,179,096	22.7	64,267	42.7	351,663	13.5
1984	53,351	1,478,205	27.7	313,359	5.9	1,164,846	21.8	56,897	38.5	380,171	14.3
1985	54,668	1,437,154	26.2	334,663	6.1	1,102,491	20.2	54,613	38.0	378,550	13.8
1986	56,004	1,493,995	26.7	326,749	5.8	1,167,246	20.8	52,263	35.0	389,482	13.9
1987	57,356	1,582,469	27.6	335,254	5.8	1,247,215	21.7	50,803	32.1	400,760	14.0
1988	58,721	1,565,372	26.7	325,098	5.5	1,240,274	21.1	47,187	30.1	393,514	13.4
1989	60,097	1,565,254	26.0	325,621	5.4	1,239,633	20.6	43,026	27.5	395,933	13.2
1990	60,703[a]	1,631,069	26.9	313,890	5.2	1,317,179	21.7	39,633	24.3	422,041	13.9

Note: Figures are results of actual registration without any adjustment for underregistration.

[1] Estimated population.
[2] Per thousand population.
[3] Per thousand live births.
[a] Actual census data.

Source: National Statistics Office, Civil Registry and Vital Statistics Section.

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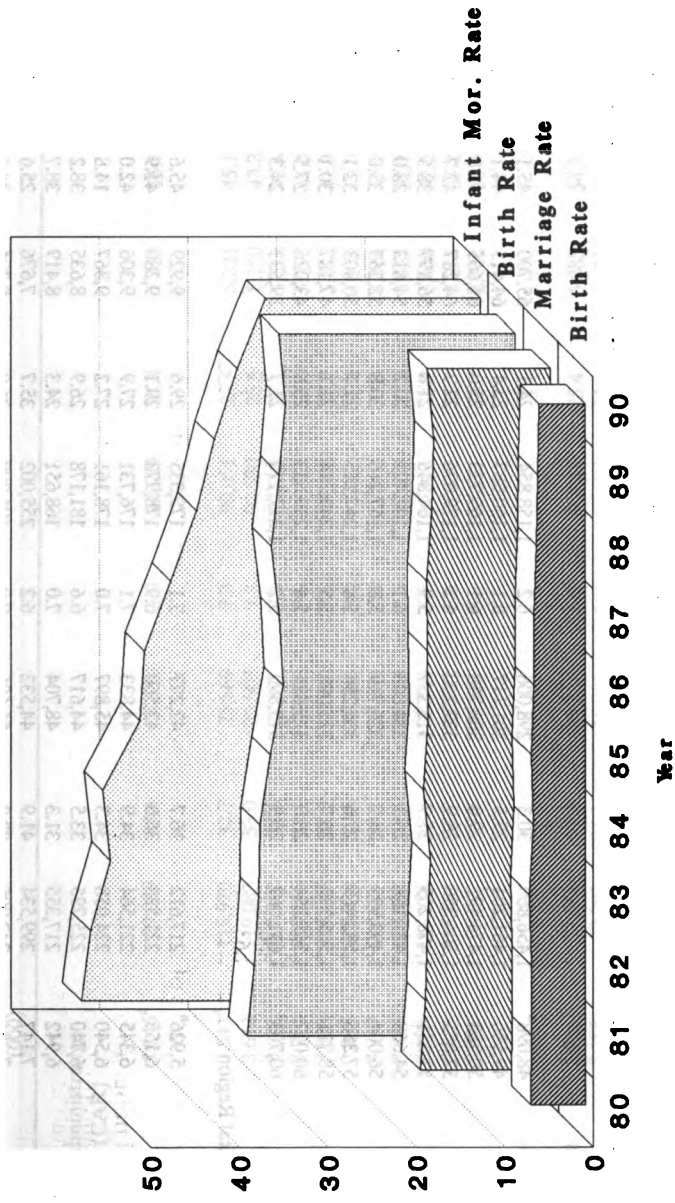
Figure 5.3 Vital Statistics Rates, Philippines: 1980-1990



Note: Infant mortality rate per thousand live births.

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Table 5.13a Summary of Vital Statistics in the Philippines by Region: 1980-1990

Region/Year	Population[1] (000)	Live births Number	Live births Rate[2]	Deaths Number	Deaths Rate[2]	Natural increase Number	Natural increase Rate[2]	Infant mortality Number	Infant mortality Rate[3]	Marriages Number	Marriages Rate[2]
Philippines											
1980	48,098[a]	1,456,860	30.3	298,006	6.2	1,158,854	24.1	65,700	45.1	354,300	14.7
1981	49,536	1,461,204	29.5	301,117	6.1	1,160,087	23.4	64,415	44.1	349,742	14.1
1982	50,783	1,474,491	29.0	308,758	6.1	1,165,733	23.0	61,665	41.8	351,818	13.9
1983	52,055	1,506,356	28.9	327,260	6.3	1,179,096	22.7	64,267	42.7	351,663	13.5
1984	53,351	1,478,205	27.7	313,359	5.9	1,164,846	21.8	56,897	38.5	380,171	14.3
1985	54,668	1,437,154	26.3	334,663	6.1	1,102,491	20.2	54,613	38.0	378,550	13.8
1986	56,004	1,493,995	26.7	326,749	5.8	1,167,246	20.8	52,263	35.0	389,482	13.9
1987	57,356	1,582,469	27.6	335,254	5.8	1,247,215	21.7	50,803	32.1	400,760	14.0
1988	58,721	1,565,372	26.7	325,098	5.5	1,240,274	21.1	47,187	30.1	393,514	13.4
1989	60,097	1,565,254	26.0	325,621	5.4	1,239,633	20.6	43,026	27.5	395,933	13.2
1990	60,703[a]	1,631,069	26.9	313,890	5.2	1,317,179	21.7	39,633	24.3	422,041	13.9
National Capital Region (NCR)											
1980	5,926[a]	217,612	36.7	42,277	7.1	175,335	29.6	9,929	45.6	59,708	20.2
1981	6,155	221,533	36.0	42,560	6.9	178,973	29.1	9,280	41.9	60,338	19.6
1982	6,345	221,564	34.9	44,833	7.1	176,731	27.9	9,306	42.0	62,585	19.7
1983	6,540	224,058	34.3	45,897	7.0	178,161	27.2	9,367	14.8	61,790	18.9
1984	6,740	225,795	33.5	44,617	6.6	181,178	26.9	8,635	38.2	64,570	19.2
1985	6,942	217,355	31.3	48,704	7.0	168,651	24.3	8,419	38.7	63,660	18.3
1986	7,147	299,534	41.9	44,532	6.2	255,002	35.7	7,676	25.6	63,187	17.7
1987	7,354	242,905	33.0	51,606	7.0	191,299	26.0	8,394	34.6	68,293	18.6
1988	7,561	250,861	33.2	49,470	6.5	201,391	26.6	8,106	32.3	71,805	19.0
1989	7,768	263,356	33.9	50,431	6.5	212,925	27.4	7,956	30.2	76,620	19.7
1990	7,948[a]	281,817	35.5	49,591	6.3	232,226	29.2	7,712	27.4	84,502	21.3

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Table 5.13a Summary of Vital Statistics in the Philippines by Region: 1980-1990 (continued)

Region/Year	Population[1] (000)	Live births Number	Live births Rate[2]	Deaths Number	Deaths Rate[2]	Natural increase Number	Natural increase Rate[2]	Infant mortality Number	Infant mortality Rate[3]	Marriages Number	Marriages Rate[2]
Cordillera Administrative Region (CAR)											
1990	1,146[a]	29,059	25.4	4,530	4.0	24,529	21.4	438	15.1	6,260	10.9
I. Ilocos											
1980	3,541[a]	115,920	32.7	25,869	7.3	90,051	25.4	5,231	45.1	26,663	15.1
1981	3,612	119,083	33.0	26,503	7.3	92,580	25.6	5,150	43.2	27,162	15.0
1982	3,682	119,972	32.6	27,378	7.4	92,594	25.1	5,228	43.6	27,256	14.8
1983	3,754	120,325	32.1	28,063	7.5	92,262	24.6	5,295	44.0	27,307	14.5
1984	3,828	119,653	31.3	28,750	7.5	90,903	23.7	5,125	42.9	27,321	14.3
1985	3,903	113,798	29.2	30,346	7.8	83,452	21.4	4,888	43.0	26,638	13.7
1986	3,979	116,808	29.4	29,206	7.3	87,602	22.0	4,404	37.7	27,197	13.7
1987	4,056	120,972	29.8	28,393	7.0	92,579	22.8	3,955	32.7	28,107	13.9
1988	4,134	118,154	28.6	28,340	6.9	89,814	21.7	3,800	32.2	27,587	13.3
1989	4,213	116,744	27.7	25,112	6.0	91,632	21.7	3,055	26.2	28,970	11.5
1990	3,551[a]	98,092	27.6	24,461	6.9	73,631	20.7	2,742	28.0	25,607	14.4
II. Cagayan Valley											
1980	2,216[a]	71,581	32.3	15,336	6.9	56,245	25.4	3,885	54.3	16,058	14.5
1981	2,283	70,903	31.1	15,321	6.7	55,582	24.3	3,613	51.0	16,121	14.1
1982	2,340	73,672	31.5	15,435	6.6	58,237	24.9	3,635	49.2	16,915	14.5
1983	2,399	73,429	30.6	15,888	6.6	57,541	24.0	3,626	49.4	15,198	12.7
1984	2,459	70,866	28.8	15,290	6.2	55,576	22.6	3,074	43.4	16,275	13.2
1985	2,521	71,079	28.2	15,084	6.0	55,995	22.2	3,023	42.5	17,467	13.9
1986	2,584	71,988	27.9	15,923	6.2	56,065	21.7	3,140	43.6	17,976	13.9

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Table 5.13a Summary of Vital Statistics in the Philippines by Region: 1980-1990 (continued)

Region/Year	Population[1] (000)	Live births Number	Live births Rate[2]	Deaths Number	Deaths Rate[2]	Natural increase Number	Natural increase Rate[2]	Infant mortality Number	Infant mortality Rate[3]	Marriages Number	Marriages Rate[2]
1987	2,648	72,957	27.6	15,274	5.8	57,683	21.8	2,739	37.5	17,362	13.1
1988	2,713	73,371	27.0	14,962	5.5	58,409	21.5	2,585	35.2	16,680	16.9
1989	2,778	72,794	26.2	13,154	4.5	59,640	21.5	2,132	29.3	16,879	11.0
1990	2,341[a]	66,163	28.3	12,462	4.8	53,701	22.9	1,771	26.8	15,460	13.2
III. Central Luzon											
1980	4,803[a]	157,470	32.8	27,901	5.8	129,569	27.0	5,979	38.0	43,231	18.0
1981	4,947	157,332	31.8	28,092	5.7	129,240	26.1	5,622	35.7	43,457	17.6
1982	5,070	157,160	31.0	28,948	5.7	128,212	25.3	5,596	35.6	44,820	17.7
1983	5,196	161,370	31.1	30,504	5.9	130,866	25.2	5,519	34.2	45,385	17.5
1984	5,325	159,838	30.0	29,595	5.6	130,243	24.5	5,289	33.1	45,878	17.2
1985	5,456	153,359	28.1	33,151	6.1	120,208	22.0	5,078	33.1	46,249	17.0
1986	5,590	159,498	28.5	31,686	5.7	127,812	22.9	4,718	29.6	46,783	16.7
1987	5,726	167,576	29.2	31,675	5.5	135,901	23.7	4,472	26.7	47,605	16.6
1988	5,863	167,644	28.6	32,210	5.5	135,434	23.1	4,179	24.9	46,996	16.1
1989	6,002	168,631	28.1	31,730	5.0	136,901	22.8	3,854	22.9	50,183	16.7
1990	6,199[a]	179,158	28.9	31,853	4.8	147,305	23.8	3,468	19.4	53,269	17.2
IV. Southern Tagalog											
1980	6,119[a]	192,888	31.5	37,805	6.2	155,083	25.3	8,895	46.1	47,862	15.6
1981	6,333	197,310	31.2	39,263	6.2	158,047	25.0	9,152	46.4	47,425	15.0
1982	6,516	199,143	30.6	40,927	6.3	158,216	24.3	8,572	43.0	47,140	14.5
1983	6,703	202,665	30.2	43,164	6.4	159,501	23.8	8,933	44.1	49,004	14.6
1984	6,895	205,125	29.7	41,445	6.0	163,680	23.7	8,278	40.4	52,976	15.4
1985	7,089	202,131	28.5	44,758	6.3	157,373	22.2	7,882	39.0	54,516	15.4

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Table 5.13a Summary of Vital Statistics in the Philippines by Region: 1980-1990 (continued)

Region/Year	Population[1] (000)	Live births Number	Live births Rate[2]	Deaths Number	Deaths Rate[2]	Natural increase Number	Natural increase Rate[2]	Infant mortality Number	Infant mortality Rate[3]	Marriages Number	Marriages Rate[2]
1986	7,287	208,917	28.7	45,917	6.3	163,000	22.4	7,794	37.3	55,057	15.1
1987	7,488	221,017	29.5	47,334	6.3	173,683	23.2	7,594	34.4	56,262	15.0
1988	7,692	213,778	27.8	48,631	6.3	165,147	21.5	7,290	34.1	51,804	13.5
1989	7,897	212,863	27.0	47,058	5.7	167,805	21.0	6,249	29.4	53,428	13.5
1990	8,263[a]	226,957	27.5	45,116	5.2	181,841	22.0	6,063	26.7	57,815	14.0
V. Bicol											
1980	3,477[a]	111,988	32.2	24,991	7.2	86,997	25.0	5,176	46.2	21,827	12.6
1981	3,572	109,429	30.6	26,016	7.3	83,413	23.4	5,272	48.2	20,504	11.5
1982	3,658	108,204	29.6	26,015	7.1	82,189	22.5	5,005	46.3	18,600	10.2
1983	3,744	108,497	29.0	27,225	7.3	81,272	21.7	5,129	47.3	19,062	10.2
1984	3,832	108,067	28.2	24,531	6.4	83,536	21.8	4,376	40.5	22,335	11.7
1985	3,922	109,936	28.0	25,929	6.6	84,007	21.4	4,229	38.5	25,981	13.3
1986	4,012	109,973	27.4	26,913	6.7	83,060	20.7	4,554	41.4	24,425	12.2
1987	4,105	117,683	28.7	29,820	7.3	87,863	21.4	4,718	40.1	24,597	12.0
1988	4,198	108,163	25.8	25,274	5.2	82,524	19.7	3,751	34.7	20,462	9.5
1989	4,293	106,306	24.8	25,639	5.8	80,667	18.8	3,330	31.3	20,139	9.4
1990	3,910[a]	109,151	27.9	22,131	5.2	87,020	22.3	2,749	25.2	22,907	11.7
VI. Western Visayas											
1980	4,526[a]	112,200	24.8	31,378	6.9	80,822	17.9	6,555	58.4	29,818	13.2
1981	4,646	114,966	24.7	30,697	6.6	84,269	18.1	6,426	55.9	29,977	12.9
1982	4,755	118,416	24.9	31,831	6.7	86,585	18.2	6,158	52.0	30,374	12.8
1983	4,866	117,466	24.1	33,779	6.9	83,687	17.2	6,447	54.9	28,939	11.9
1984	4,979	105,842	21.3	31,888	6.4	73,954	14.9	5,320	50.3	31,317	12.6

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Table 5.13a Summary of Vital Statistics in the Philippines by Region: 1980-1990 (continued)

Region/Year	Population[1] (000)	Live births Number	Live births Rate[2]	Deaths Number	Deaths Rate[2]	Natural increase Number	Natural increase Rate[2]	Infant mortality Number	Infant mortality Rate[3]	Marriages Number	Marriages Rate[2]
1985	5,092	98,289	19.3	35,117	6.9	63,172	12.4	5,221	53.1	28,680	11.3
1986	5,207	105,232	20.2	32,301	6.2	72,931	14.0	4,581	43.6	32,823	12.6
1987	5,323	114,823	20.9	32,959	6.2	81,864	15.4	4,496	39.2	33,404	12.6
1988	5,439	111,169	21.6	31,330	5.4	79,839	14.7	3,936	35.4	32,717	11.8
1989	5,556	108,686	19.6	32,866	7.3	75,820	13.6	3,716	34.2	32,703	11.8
1990	5,393[a]	106,298	19.7	31,161	5.8	75,137	13.9	3,306	61.3	32,651	12.1
VII. Central Visayas											
1980	3,787[a]	114,054	30.1	26,872	7.1	87,182	23.0	5,224	45.8	27,670	14.6
1981	3,873	114,804	29.6	26,890	6.9	87,914	22.7	5,314	46.3	26,469	13.7
1982	3,952	117,621	29.8	26,373	6.7	91,248	23.1	4,762	40.5	26,841	13.6
1983	4,032	119,703	29.7	30,682	7.6	89,021	22.1	5,488	45.8	24,667	12.2
1984	4,113	113,726	27.7	27,433	6.7	86,293	21.0	4,228	37.2	28,405	13.8
1985	4,195	112,124	26.7	28,612	6.8	83,512	19.9	4,081	36.4	26,886	12.8
1986	4,278	118,954	27.8	28,837	6.7	90,117	21.1	4,183	35.2	30,311	14.2
1987	4,362	127,899	29.3	28,538	6.5	99,361	22.8	4,034	31.5	31,388	14.4
1988	4,446	129,566	29.1	27,604	6.2	101,962	22.9	3,860	29.8	31,614	14.1
1989	4,531	133,910	29.6	27,380	6.0	107,197	23.5	3,566	26.6	31,076	13.7
1990	4,594[a]	140,231	30.5	28,177	6.1	112,054	24.4	3,764	26.8	32,499	14.2
VIII. Eastern Visayas											
1980	2,800[a]	57,887	20.7	19,073	6.8	38,814	13.9	3,507	60.6	14,400	10.3
1981	2,857	56,929	19.9	18,730	6.6	38,199	13.4	3,515	61.7	13,309	9.3
1982	2,910	57,804	19.9	19,187	6.6	38,617	13.3	3,126	54.1	12,798	8.8
1983	2,963	60,278	20.3	18,958	6.4	41,320	13.9	3,032	50.3	13,622	9.2

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Table 5.13a Summary of Vital Statistics in the Philippines by Region: 1980-1990 (continued)

Region/Year	Population[1] (000)	Live births Number	Live births Rate[2]	Deaths Number	Deaths Rate[2]	Natural increase Number	Natural increase Rate[2]	Infant mortality Number	Infant mortality Rate[3]	Marriages Number	Marriages Rate[2]
1984	3,018	58,211	19.3	18,394	6.1	39,817	13.2	2,784	47.8	16,312	10.8
1985	3,073	54,143	17.6	19,532	6.4	34,611	11.3	2,588	47.8	15,237	9.9
1986	3,129	57,651	18.4	18,018	5.8	39,633	12.7	2,369	41.1	16,665	10.7
1987	3,185	60,236	18.9	18,460	5.8	41,776	13.1	2,380	39.5	16,623	10.4
1988	3,243	59,906	18.5	17,280	5.3	42,626	13.1	2,062	34.4	15,701	7.8
1989	3,301	55,563	16.8	17,747	5.0	37,816	11.5	1,938	34.9	13,327	8.1
1990	3,054[a]	57,857	17.3	15,407	5.0	42,450	13.9	1,567	27.1	15,521	10.2
IX. Western Mindanao											
1980	2,529[a]	55,283	21.9	9,554	3.8	45,729	18.1	2,325	42.1	12,132	9.6
1981	2,608	52,254	20.0	7,984	3.1	44,270	17.0	1,853	35.5	12,248	9.4
1982	2,671	50,243	18.8	7,856	2.9	42,837	16.0	1,673	33.3	10,897	8.2
1983	2,734	56,912	20.8	9,932	3.6	46,980	17.2	2,208	38.8	12,021	8.8
1984	2,798	57,127	20.4	9,614	3.4	47,513	17.0	1,919	33.6	13,949	10.0
1985	2,863	53,693	18.8	10,811	3.8	42,882	15.0	1,987	37.0	13,271	9.3
1986	2,928	55,824	19.1	10,425	3.6	45,379	15.5	1,809	32.4	14,084	9.6
1987	2,994	58,687	19.6	9,786	3.3	48,901	16.3	1,647	28.1	13,986	9.3
1988	3,061	60,959	19.9	9,546	3.1	51,413	16.8	1,526	25.0	14,657	8.7
1989	3,128	60,823	19.4	9,998	3.2	50,825	16.2	1,493	24.5	13,378	8.6
1990	3,158[a]	60,661	19.2	10,165	3.2	50,496	16.0	1,487	24.5	14,090	8.9
X. Northern Mindanao											
1980	2,759[a]	91,125	33.0	14,913	5.4	76,212	27.6	3,758	41.2	19,632	14.2
1981	2,851	87,583	30.7	15,514	5.4	72,069	25.3	3,819	43.6	18,076	12.7
1982	2,931	88,754	30.3	16,176	5.5	72,578	24.8	3,472	39.1	18,806	12.8

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Table 5.13a Summary of Vital Statistics in the Philippines by Region: 1980-1990 (continued)

Region/Year	Population[1] (000)	Live births Number	Live births Rate[2]	Deaths Number	Deaths Rate[2]	Natural increase Number	Natural increase Rate[2]	Infant mortality Number	Infant mortality Rate[3]	Marriages Number	Marriages Rate[2]
1983	3,012	92,689	30.8	17,233	5.7	75,456	25.1	3,866	41.7	19,386	12.9
1984	3,094	89,715	29.0	16,545	5.3	73,170	23.6	3,196	35.6	21,815	14.1
1985	3,178	90,159	28.4	17,330	5.5	72,829	22.9	3,176	35.2	21,298	13.4
1986	3,264	92,657	28.4	17,503	5.4	75,154	23.0	3,079	33.2	22,538	13.8
1987	3,350	101,569	30.3	16,287	4.9	85,282	25.5	2,665	26.2	23,709	14.2
1988	3,438	102,355	26.0	15,708	4.3	86,647	25.2	2,663	26.0	24,368	14.0
1989	3,526	98,324	27.9	15,620	4.4	82,704	23.5	2,227	22.6	21,197	12.0
1990	3,510[a]	99,920	28.5	15,456	3.6	84,464	24.1	1,891	18.9	23,558	13.4
XI. Southern Mindanao											
1980	3,347[a]	114,093	34.1	15,736	4.7	98,357	29.4	3,750	32.9	25,601	15.3
1981	3,459	113,821	32.9	16,588	4.8	97,233	28.1	3,720	32.7	25,013	14.5
1982	3,551	115,822	32.6	16,666	4.7	99,156	27.9	3,618	31.2	25,148	14.2
1983	3,645	120,565	33.1	18,180	5.0	102,385	28.1	3,678	30.5	25,685	14.1
1984	3,740	115,618	30.9	17,545	4.7	98,073	26.2	3,193	27.6	27,948	14.9
1985	3,836	113,574	29.6	17,214	4.5	96,360	25.1	2,713	23.9	27,740	14.5
1986	3,934	118,243	30.1	17,864	4.5	100,379	25.5	2,725	23.0	27,511	14.0
1987	4,032	127,160	31.5	17,754	4.4	109,406	27.1	2,533	19.9	28,784	14.3
1988	4,132	123,128	29.8	17,658	4.3	105,470	25.5	2,354	19.1	29,365	14.2
1989	4,232	119,633	28.3	17,613	4.1	102,020	24.1	2,098	17.5	28,205	13.3
1990	4,459[a]	119,997	26.9	17,371	3.9	102,626	23.0	2,035	17.0	29,456	13.2
XII. Central Mindanao											
1980	2,271[a]	44,759	19.7	6,301	2.8	38,458	16.9	1,486	33.2	9,698	8.5
1981	2,340	45,257	19.3	6,959	3.0	38,298	16.4	1,679	37.1	9,643	8.2

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Table 5.13a Summary of Vital Statistics in the Philippines by Region: 1980-1990 (concluded)

Region/Year	Population[1] (000)	Live births Number	Live births Rate[2]	Deaths Number	Deaths Rate[2]	Natural increase Number	Natural increase Rate[2]	Infant mortality Number	Infant mortality Rate[3]	Marriages Number	Marriages Rate[2]
1982	2,403	46,116	19.2	7,133	3.0	38,983	16.2	1,514	32.8	9,638	8.0
1983	2,467	48,399	19.6	7,755	3.1	40,644	16.5	1,679	34.7	9,597	7.8
1984	2,532	48,622	19.2	7,712	3.0	40,910	16.2	1,480	30.4	11,070	8.7
1985	2,598	47,514	18.3	8,075	3.1	39,439	15.2	1,328	27.9	10,927	8.4
1986	2,665	48,716	18.3	7,624	2.9	41,092	15.4	1,231	25.3	10,925	8.2
1987	2,733	48,985	17.9	7,368	2.7	41,617	15.2	1,176	24.0	10,640	7.8
1988	2,802	46,222	16.5	7,085	2.5	39,137	14.0	1,075	23.3	9,758	6.5
1989	2,872	47,621	16.6	7,010	2.2	91,249	14.1	922	19.4	9,828	6.8
1990	3,172[a]	46,091	14.5	6,009	1.2	40,082	12.6	640	13.9	8,446	5.3

Note: Figures are results of actual registration without any adjustment for underregistration.

[1] Estimated population projection based on 1980 Census of Population.
[2] Per thousand population.
[3] Per thousand live births.
[a] Actual census.

Source: National Statistics Office, Civil Registry and Vital Statistics Section.

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Table 5.14 Registered Number of Live Births by Month of Occurrence and Sex: 1980, 1984-1990

Month	Both sexes	1980 Male	Female	Both sexes	1984 Male	Female	Both sexes	1985 Male	Female
Philippines	1,456,860	758,123	698,737	1,478,205	772,007	706,198	1,437,154	752,173	684,981
January	123,696	64,424	59,272	129,305	67,042	62,263	123,830	64,489	59,341
February	110,326	57,311	53,015	112,544	58,358	54,186	105,854	55,547	50,307
March	117,340	61,174	56,166	117,368	61,312	56,056	117,285	61,031	56,254
April	113,196	59,008	54,188	114,933	60,118	54,815	115,686	60,689	54,997
May	118,353	61,919	56,434	122,802	64,130	58,672	118,300	62,011	56,289
June	111,162	57,868	53,294	114,852	60,003	54,849	111,389	58,333	53,056
July	118,887	62,029	56,858	120,688	63,160	57,528	114,441	60,051	54,390
August	121,228	62,943	58,285	123,671	65,166	58,505	117,010	61,265	55,745
September	131,795	68,620	63,175	134,651	70,321	64,330	126,393	66,198	60,195
October	133,596	69,368	64,228	133,827	70,228	63,599	133,256	69,947	63,309
November	127,194	66,037	61,157	127,705	66,655	61,050	127,054	66,505	60,549
December	130,087	67,422	62,665	125,859	65,514	60,345	126,656	66,107	60,549

Month	Both sexes	1986 Male	Female	Both sexes	1987 Male	Female	Both sexes	1988 Male	Female
Philippines	1,493,995	779,644	714,351	1,582,469	825,528	756,941	1,565,372	816,124	749,248
January	124,777	65,417	59,360	132,758	69,653	63,105	135,824	70,745	65,079
February	106,162	55,451	50,711	111,560	57,918	53,642	118,329	61,373	56,956
March	117,862	61,657	56,205	124,843	65,041	59,802	126,327	66,091	60,236
April	120,608	63,226	57,382	127,406	66,791	60,615	122,845	64,091	58,754
May	123,463	64,161	59,302	133,753	69,749	64,004	127,431	66,364	61,067
June	115,965	60,337	55,628	126,266	65,975	60,291	122,809	64,368	58,441

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Table 5.14 Registered Number of Live Births by Month of Occurrence and Sex: 1980, 1984-1990 (concluded)

Month	1986 Both sexes	1986 Male	1986 Female	1987 Both sexes	1987 Male	1987 Female	1988 Both sexes	1988 Male	1988 Female
July	119,402	62,005	57,397	127,924	66,570	61,354	126,102	66,164	59,938
August	123,868	65,088	58,780	126,284	66,109	60,175	129,081	67,367	61,714
September	132,246	69,181	63,065	139,324	72,887	66,437	139,293	72,358	66,935
October	137,332	71,224	66,108	144,846	75,272	69,574	139,669	73,069	66,600
November	134,271	70,392	63,879	143,544	74,638	68,906	136,119	70,615	65,504
December	138,039	71,505	66,534	143,961	74,925	69,036	141,543	73,519	68,024

Month	1989 Both sexes	1989 Male	1989 Female	1990 Both sexes	1990 Male	1990 Female
Philippines	1,565,254	813,925	751,329	1,631,069	848,275	782,794
January	132,259	68,835	63,424	137,329	71,556	65,773
February	111,866	57,908	53,958	116,473	60,451	56,022
March	126,413	66,178	60,235	129,193	67,406	61,787
April	123,391	64,365	59,026	127,604	66,432	61,172
May	126,787	65,946	60,841	134,620	69,553	65,067
June	119,841	62,424	57,417	127,040	66,306	60,734
July	125,375	65,208	60,167	129,890	67,612	62,278
August	131,699	68,546	63,153	136,863	71,392	65,471
September	145,698	75,741	69,957	150,893	78,539	72,354
October	143,444	74,421	69,023	151,095	78,717	72,378
November	137,561	71,761	65,800	143,309	74,307	69,002
December	140,920	72,592	68,328	146,760	76,004	70,756

Source: National Statistics Office, Civil Registry and Vital Statistics Section.

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Table 5.14a Registered Number of Live Births By Age of Mother: 1985-1990

Ages in years	1985 Number	1985 Percent	1986 Number	1986 Percent	1987 Number	1987 Percent	1988 Number	1988 Percent	1989 Number	1989 Percent	1990 Number	1990 Percent
All ages	1,437,154	100.0	1,493,995	100.0	1,582,469	100.0	1,565,372	100.0	1,565,254	100.0	1,631,069	100.0
Under 15	415	a	432	a	524	a	430	a	307	a	287	a
15 - 19	123,795	8.6	127,715	8.5	134,899	9.0	128,357	8.2	119,437	7.6	111,900	6.9
20 - 24	419,283	29.2	441,066	29.5	461,652	31.2	452,037	28.9	449,473	28.7	471,039	2.9
25 - 29	419,376	29.2	432,710	29.0	456,675	24.1	455,680	29.1	460,591	29.4	473,534	29.0
30 - 34	257,199	17.9	272,088	18.2	293,091	19.8	293,063	18.7	296,298	18.9	318,000	19.5
35 - 39	142,628	9.9	147,430	9.9	161,241	10.9	162,900	10.4	166,389	10.6	174,890	10.7
40 - 44	47,512	3.3	47,382	3.2	50,769	3.4	52,423	3.3	53,396	3.4	59,539	3.7
45 - 49	8,329	0.6	8,223	0.6	8,741	0.6	8,358	0.5	8,457	0.5	8,694	0.5
50 and above	2,110	0.1	1,977	0.1	1,747	0.1	1,238	a	1,130	0.1	1,180	0.1
Not stated	16,507	1.1	14,972	1.0	13,130	0.9	10,886	0.7	10,083	0.6	12,006	0.7

[a] Less than 0.1 percent.

Source: National Statistics Office, Civil Registry and Vital Statistics Section.

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Table 5.14b Registered Number of Live Births by Sex and by Region: 1980, 1984-1990

Region	1980 Both sexes	1980 Male	1980 Female	1984 Both sexes	1984 Male	1984 Female	1985 Both sexes	1985 Male	1985 Female
Philippines	1,456,860	758,123	698,737	1,478,205	772,007	706,198	1,437,154	752,173	684,981
National Capital Region (NCR)	217,612	113,775	103,837	225,795	118,193	107,602	217,355	114,980	102,375
I. Ilocos	115,920	59,994	55,926	119,653	62,515	57,138	113,798	59,578	54,220
II. Cagayan Valley	71,581	37,332	34,249	70,866	37,244	33,622	71,079	37,500	33,579
III. Central Luzon	157,470	81,723	75,747	159,838	83,593	76,245	153,359	80,350	73,009
IV. Southern Tagalog	192,888	100,392	92,496	205,125	106,945	98,180	202,131	105,524	96,607
V. Bicol	111,988	58,401	53,587	108,067	56,365	51,702	109,936	57,563	52,373
VI. Western Visayas	112,200	58,231	53,969	105,842	55,266	50,576	98,289	50,656	47,633
VII. Central Visayas	114,054	59,495	54,559	113,726	59,414	54,312	112,124	58,142	53,982
VIII. Eastern Visayas	57,887	30,116	27,771	58,211	30,343	27,868	54,143	28,091	26,052
IX. Western Mindanao	55,283	29,043	26,240	57,127	29,851	27,276	53,693	27,974	25,719
X. Northern Mindanao	91,125	47,201	43,924	89,715	46,603	43,112	90,159	47,206	42,953
XI. Southern Mindanao	114,093	58,998	55,095	115,618	60,149	55,469	113,574	59,573	54,001
XII. Central Mindanao	44,759	23,422	21,337	48,622	25,526	23,096	47,514	25,036	22,478

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Table 5.14b Registered Number of Live Births by Sex and by Region: 1980, 1984-1990 (continued)

Region	1986 Both sexes	1986 Male	1986 Female	1987 Both sexes	1987 Male	1987 Female	1988 Both sexes	1988 Male	1988 Female
Philippines	1,493,995	779,644	714,351	1,582,469	825,528	756,941	1,565,372	816,124	749,248
National Capital Region (NCR)	229,534	119,856	109,678	242,905	127,529	115,376	250,861	131,334	119,527
I. Ilocos	116,808	60,928	55,880	120,972	63,283	57,689	118,154	61,786	56,368
II. Cagayan Valley	71,988	37,585	34,403	72,957	38,493	34,464	73,371	38,587	34,784
III. Central Luzon	159,498	83,619	75,879	167,576	87,539	80,037	167,644	87,251	80,393
IV. Southern Tagalog	208,917	109,504	99,413	221,017	115,347	105,670	213,778	111,469	102,309
V. Bicol	109,973	57,401	52,572	117,683	61,283	56,400	108,163	56,298	51,865
VI. Western Visayas	105,232	54,650	50,582	114,823	59,859	54,964	111,265	57,709	53,556
VII. Central Visayas	118,954	61,908	57,046	127,899	66,437	61,462	129,566	67,541	62,025
VIII. Eastern Visayas	57,651	30,146	27,505	60,236	31,363	28,873	59,906	30,892	29,014
IX. Western Mindanao	55,824	28,794	27,030	58,687	30,091	28,596	60,959	31,702	29,257
X. Northern Mindanao	92,657	47,954	44,703	101,569	52,766	48,803	102,355	53,729	48,626
XI. Southern Mindanao	118,243	61,578	56,665	127,160	66,066	61,094	123,128	63,767	59,361
XII. Central Mindanao	48,716	25,721	22,995	48,985	25,472	23,513	46,222	24,059	22,163

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Table 5.14b Registered Number of Live Births by Sex and by Region: 1980, 1984-1990 (concluded)

Region	1989 Both sexes	1989 Male	1989 Female	1990 Both sexes	1990 Male	1990 Female
Philippines	1,565,254	813,925	751,329	1,631,069	848,275	782,794
National Capital Region (NCR)	263,356	137919	125,437	281,817	146,550	135,267
Cordillera Administrative Region (CAR)	29,119	15,019	14,100	29,059	15,031	14,028
I. Ilocos	95,002	49,741	45,261	98,092	51,480	46,612
II. Cagayan Valley	65,417	34,480	30,937	66,163	34,886	31,277
III. Central Luzon	168,631	87,891	80,740	179,158	93,344	85,814
IV. Southern Tagalog	212,863	110,276	102,587	226,957	117,875	109,082
V. Bicol	106,306	54,681	51,625	109,151	56,671	52,480
VI. Western Visayas	108,686	56,546	52,140	115,915	59,778	56,127
VII. Central Visayas	133,910	69,533	64,377	140,231	73,053	67,178
VIII. Eastern Visayas	55,563	28,712	26,851	57,857	30,043	27,814
IX. Western Mindanao	60,823	31,344	29,479	60,661	31,389	29,272
X. Northern Mindanao	98,324	51,175	47,149	99,920	51,787	48,133
XI. Southern Mindanao	119,633	61,993	57,640	119,997	62,495	57,502
XII. Central Mindanao	47,621	24,615	23,006	46,091	23,883	22,208

Source: National Statistics Office, Civil Registry and Vital Statistics Section.

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Table 5.15 Registered Number of Deaths by Month of Occurrence and Sex: 1985-1990

Month	1985 Total	1985 Male	1985 Female	1986 Total	1986 Male	1986 Female	1987 Total	1987 Male	1987 Female
Total	334,663	196,726	137,937	326,749	193,118	133,631	335,254	197,275	137,979
January	30,539	17,989	12,550	29,078	17,135	11,943	29,858	17,482	12,376
February	25,980	15,307	10,673	24,802	14,653	10,149	27,511	16,027	11,484
March	27,273	16,062	11,211	27,565	16,328	11,237	29,519	17,213	12,306
April	26,023	15,133	10,890	25,946	15,360	10,586	27,539	16,065	11,474
May	28,177	16,676	11,501	26,796	15,870	10,926	28,973	16,938	12,035
June	30,448	17,710	12,738	26,706	15,812	10,894	26,910	16,007	10,903
July	29,463	17,220	12,243	28,132	16,564	11,568	28,170	16,568	11,602
August	28,917	16,886	12,031	28,520	16,951	11,569	29,750	17,354	12,396
September	26,496	15,582	10,914	27,647	16,327	11,320	27,133	16,233	10,900
October	27,814	16,409	11,405	27,383	16,135	11,248	27,117	16,149	10,968
November	26,242	15,431	10,811	27,502	16,239	11,263	26,315	15,543	10,772
December	27,291	16,321	10,970	26,672	15,744	10,928	26,459	15,696	10,763

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Table 5.15 Registered Number of Deaths by Month of Occurrence and Sex: 1985-1990 (concluded)

Month	1988 Total	1988 Male	1988 Female	1989 Total	1989 Male	1989 Female	1990 Total	1990 Male	1990 Female
Total	325,098	192,044	133,054	325,621	192,077	133,544	313,890	185,788	128,102
January	27,830	16,387	11,443	28,247	16,791	11,456	27,504	16,363	11,141
February	25,970	15,352	10,618	26,128	15,437	10,691	23,323	13,849	9,474
March	26,891	15,969	10,922	26,470	15,636	10,834	24,733	14,902	9,831
April	26,267	15,562	10,705	26,389	15,528	10,861	25,107	14,932	10,175
May	28,163	16,654	11,509	27,159	15,914	11,245	26,640	15,766	10,874
June	25,545	15,187	10,358	27,152	16,116	11,036	26,384	15,592	10,792
July	27,214	15,925	11,289	29,120	16,990	12,130	29,286	17,021	12,265
August	28,672	16,827	11,845	27,955	16,468	11,487	27,438	16,122	11,316
September	26,206	15,407	10,799	26,228	15,509	10,719	25,935	15,370	10,565
October	26,214	15,553	10,661	27,309	15,967	11,342	25,973	15,186	10,787
November	26,625	15,689	10,936	25,840	15,137	10,703	25,847	15,284	10,563
December	29,501	17,532	11,969	27,624	16,584	11,040	25,720	15,401	10,319

Source: National Statistics Office, Civil Registry and Vital Statistics Section.

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Table 5.15a Registered Number of Deaths by Sex and Age Group: 1984-1990

Age group	1984 Total	1984 Male	1984 Female	1985 Total	1985 Male	1985 Female	1986 Total	1986 Male	1986 Female
Total	313,359	186,148	127,211	334,663	196,726	137,937	326,749	193,118	133,631
Under 1	56,897	33,391	23,506	54,613	31,599	23,014	52,263	30,633	21,630
1 - 4	39,334	21,404	17,930	42,514	22,705	19,809	36,532	19,635	16,897
5 - 9	10,006	5,671	4,335	10,905	6,036	4,869	10,217	5,688	4,529
10 - 14	5,617	3,128	2,489	5,637	3,168	2,469	5,576	3,144	2,432
15 - 19	7,199	4,650	2,549	8,153	5,189	2,964	7,756	4,980	2,776
20 - 24	9,982	6,988	2,994	10,793	7,562	3,231	10,717	7,506	3,211
25 - 29	10,212	7,208	3,004	11,796	8,237	3,559	11,668	8,188	3,480
30 - 34	10,201	7,047	3,154	10,910	7,441	3,469	11,354	7,748	3,606
35 - 39	9,720	6,501	3,219	11,054	7,354	3,700	11,426	7,768	3,658
40 - 44	10,712	7,188	3,524	11,159	7,537	3,622	10,819	7,269	3,550
45 - 49	11,771	8,030	3,741	12,795	8,602	4,193	12,839	8,599	4,240
50 - 54	13,039	8,589	4,450	13,942	9,079	4,863	14,453	9,344	5,109
55 - 59	13,559	8,848	4,711	14,927	9,742	5,185	15,285	10,010	5,275
60 - 64	15,983	10,012	5,971	16,798	10,362	6,436	17,143	10,708	6,435
65 - 69	15,914	9,465	6,449	17,996	10,761	7,235	18,325	10,981	7,344
70 - 74	20,750	11,737	9,013	21,886	12,372	9,514	21,833	12,154	9,679
75 - 79	16,039	8,645	7,394	18,561	10,040	8,521	19,289	10,510	8,779
80 - 84	18,317	9,403	8,914	18,725	9,119	9,606	17,090	8,130	8,960
85 and over	18,023	8,198	9,825	21,522	9,802	11,720	22,141	10,108	12,033
Not stated	84	45	39	37	19	18	23	15	8

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Table 5.15a Registered Number of Deaths by Sex and Age Group: 1984-1990 (concluded)

Age group	1987 Total	1987 Male	1987 Female	1988 Total	1988 Male	1988 Female	1989 Total	1989 Male	1989 Female	1990 Total	1990 Male	1990 Female
Total	335,254	197,275	137,979	325,098	192,044	133,054	325,621	192,077	133,544	313,890	185,788	128,102
Under 1	50,803	29,367	21,436	47,187	27,335	19,852	43,026	24,952	18,074	39,633	23,021	16,612
1 - 4	42,469	22,485	19,984	32,456	17,488	14,968	30,073	16,071	14,002	23,932	12,931	11,001
5 - 9	12,059	6,751	5,308	10,975	6,111	4,864	9,980	5,562	4,418	8,650	4,852	3,798
10 - 14	5,657	3,144	2,513	5,710	3,155	2,555	5,496	3,114	2,382	5,462	3,132	2,330
15 - 19	7,659	4,987	2,672	7,793	5,047	2,746	7,343	4,752	2,591	6,991	4,454	2,537
20 - 24	10,538	7,418	3,120	10,400	7,329	3,071	10,317	7,257	3,060	10,013	6,979	3,034
25 - 29	11,359	7,983	3,376	11,527	8,158	3,369	11,261	7,961	3,300	10,858	7,602	3,256
30 - 34	11,284	7,773	3,511	11,199	7,737	3,462	10,899	7,509	3,390	11,258	7,830	3,428
35 - 39	11,762	8,059	3,703	11,811	8,059	3,752	11,837	8,073	3,764	11,457	7,712	3,745
40 - 44	10,953	7,279	3,674	11,232	7,665	3,567	11,291	7,737	3,554	11,694	7,997	3,697
45 - 49	12,826	8,658	4,168	12,945	8,767	4,178	12,957	8,728	4,229	12,943	8,875	4,068
50 - 54	14,849	9,723	5,126	14,871	9,670	5,201	15,558	10,191	5,367	15,375	10,091	5,284
55 - 59	15,514	10,194	5,320	15,455	10,108	5,347	16,209	10,654	5,555	16,394	10,716	5,678
60 - 64	17,525	10,932	6,593	17,901	11,292	6,609	18,844	11,882	6,962	19,088	12,103	6,985
65 - 69	18,720	11,100	7,620	19,168	11,391	7,777	20,446	12,165	8,281	19,481	11,668	7,813
70 - 74	20,552	11,501	9,051	20,795	11,723	9,072	21,611	12,181	9,430	22,024	12,491	9,533
75 - 79	21,057	11,282	9,775	22,381	11,920	10,461	24,860	13,327	11,533	24,148	12,754	11,394
80 - 84	17,175	8,438	8,737	17,832	8,570	9,262	18,822	8,973	9,849	19,311	9,255	10,056
85 and over	22,480	10,193	12,287	23,452	10,516	12,936	24,771	10,972	13,799	25,177	11,324	13,853
Not stated	13	8	5	8	3	5	20	16	4	1	1	-

Source: National Statistics Office, Civil Registry and Vital Statistics Section.

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Table 5.15b Registered Ten Leading Causes of Death: 1985-1990

Causes of death	1985 Number	1985 Percent	1986 Number	1986 Percent	1987 Number	1987 Percent	1988 Number	1988 Percent	1989 Number	1989 Percent	1990 Number	1990 Percent
Total (all causes)	334,663	100.00	326,749	100.00	335,254	100.00	325,098	100.0	325,621	100.00	313,890	100.00
Diseases of the heart	36,242	10.83	39,163	11.99	38,840	11.58	40,560	12.48	23,268	7.15	46,272	14.74
Pneumonia	52,888	15.80	50,621	15.49	52,700	15.72	47,444	14.59	46,268	14.21	41,238	13.14
Diseases of the vascular system	27,189	8.12	a	-	29,905	8.92	28,257	8.69	17,593	5.40	30,771	9.80
Tuberculosis, all forms	31,650	9.46	30,604	9.37	28,697	8.56	27,020	8.31	26,300	8.08	24,307	7.74
Malignant neoplasm	18,016	5.38	18,204	5.57	20,367	6.08	21,056	6.48	20,211	6.21	22,094	7.04
Certain causes of mortality in early infancy	18,254	5.45	17,890	5.47	a	-	a	-	15,391	4.73	15,578	4.96
Accidents	a	-	a	-	11,630	3.47	7,201	2.21	7,540	2.31	12,008	3.83
Senility without mention of psychosis	a	-	13,113	4.01	a	-	a	-	12,507	3.84	11,207	3.57
Chronic obstructive pulmonary diseases and allied conditions	a	-	6,988	2.14	a	-	7,267	2.23	7,690	2.36	7,693	2.45
Intestinal infectious diseases	a	-	a	-	10,589	3.16	10,511	3.23	a	-	7,493	2.39
Measles	8,043	2.40	a	-	12,431	3.71	7,775	2.39	6,734	2.07	a	-
Avitaminosis and other nutritional deficiency	7,114	2.13	a	-	5,229	1.56	a	-	a	-	a	-

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Table 5.15b Registered Ten Leading Causes of Death: 1985-1990 (concluded)

Causes of death	1985		1986		1987		1988		1989		1990	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Nephritis and other nephrotic syndrome	5,470	1.63	a	-	a	-	a	-	a	-	a	-
Peptic ulcer	a	-	a	-	5,526	1.65	a	-	a	-	a	-
Certain conditions originating in the perinatal period	a	-	a	-	a	-	16,894	5.20	a	-	a	-
Gastro-entiritis and colitis	a	-	8,433	2.58	a	-	a	-	a	-	a	-
Diarrhea	10,235	3.06	a	-	a	-	a	-	a	-	a	-
Cerebrovascular diseases	a	-	15,441	4.73	a	-	a	-	a	-	a	-
Hypertension without heart involvement	a	-	10,715	3.28	a	-	a	-	a	-	a	-
All other causes	119,562	35.73	115,577	35.37	119,340	35.59	111,113	34.19	142,119	43.65	95,229	30.34

[a] Not included among the ten leading causes of death during the year.

Source: National Statistics Office, Civil Registry and Vital Statistics Section.

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Table 5.15c Selected Causes of Infant Deaths: 1984-1990

Causes of death	1984	1985	1986	1987	1988	1989	1990
Total	56,897	54,613	52,263	50,803	47,187	43,026	39,633
Pneumonia	14,053	14,963	14,497	13,380	12,597	11,173	9,383
Other causes of perinatal morbidity and mortality	10,633	9,836	9,903	9,099	8,773	8,984	8,389
Respiratory conditions of fetus and newborn	7,658	6,870	6,497	7,256	6,374	6,278	5,985
Congenital anomalies	2,458	2,359	2,166	2,250	2,288	2,100	2,063
Enteritis and other diarrheal diseases	4,056	3,566	2,960	2,884	2,791	1,939	1,838
Septicemia	1,020	1,176	1,156	1,023	1,182	1,193	1,532
Symptoms, signs and ill-defined conditions	2,465	2,500	2,020	1,640	1,450	1,208	1,288
Nutritional deficiencies	2,244	2,412	2,298	2,721	1,359	1,307	1,143
Birth injury and difficult labor	1,576	1,311	1,268	1,393	1,564	1,222	1,093
Measles	1,851	1,651	1,280	2,355	1,547	1,256	729
Other diseases of respiratory system	390	385	624	672	589	513	539
Meningitis	716	662	632	603	649	566	517
Acute bronchitis and bronchiolitis	781	988	903	765	656	449	414
Chronic obstructive pulmonary disease and allied conditions	1,103	978	1,008	749	600	457	349
Other diseases of digestive system	536	377	469	406	335	358	331
Tetanus	128	181	168	150	215	181	172

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Table 5.15c Selected Causes of Infant Deaths: 1984-1990 (concluded)

Causes of death	1984	1985	1986	1987	1988	1989	1990
Shigellosis and amoebiasis (dysentery, all forms)	312	299	269	251	258	175	152
Anemia	183	154	148	158	130	125	129
Hemolytic diseases of fetus and newborn	93	125	94	108	101	91	64
Nephritis, nephrotic syndrome and nephrosis	127	119	102	77	80	60	62
Influenza	122	148	104	107	42	81	54
Dengue-hemorrhagic fever	37	44	46	57	51	27	47
Diseases of the skin and subcuteneous tissues	68	62	62	55	59	58	33
Tuberculosis (all kinds)	28	40	45	53	37	43	29
Diphtheria	76	53	56	47	40	23	16
Acute respiratory infections	36	34	40	30	33	15	9
Chickenpox	2	-	3	2	2	3	7
Whooping cough	20	24	10	14	8	9	6
Acute poliomyelitis	4	5	2	1	2	2	1
Syphilis	11	1	-	-	-	-	-
All others	4,110	3,290	3,433	2,497	3,375	3,130	3,259

Source: National Statistics Office, Civil Registry and Vital Statistics Section.

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Table 5.16 Registered Number of Marriages by Month of Occurrence: 1982-1990

Month	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total	351,818	351,663	380,171	378,550	389,482	400,760	393,514	395,933	422,041
January	46,025	48,208	48,734	51,074	51,561	55,436	50,115	49,727	55,650
February	17,704	18,316	20,080	18,914	17,481	19,757	22,541	19,455	23,540
March	31,194	28,388	34,109	32,063	29,472	36,860	32,291	28,388	37,887
April	30,605	35,929	31,808	34,682	40,657	34,522	40,075	39,089	37,560
May	40,636	40,303	42,499	41,644	44,360	45,720	45,751	44,431	48,291
June	36,884	36,150	40,650	37,884	40,801	43,634	40,846	40,747	42,586
July	24,482	23,597	27,767	25,362	26,401	27,913	28,861	28,380	27,691
August	17,578	16,930	19,358	20,151	19,730	19,241	19,643	20,787	20,222
September	26,349	24,245	29,605	29,880	30,097	28,119	28,471	29,800	30,025
October	26,737	25,869	29,552	28,964	29,503	30,133	27,438	31,502	32,775
November	22,491	22,902	23,395	24,968	25,164	26,154	21,562	24,766	24,998
December	31,133	30,826	32,614	32,964	34,255	33,271	35,920	38,861	40,816

Source: National Statistics Office, Civil Registry and Vital Statistics Section.

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Table 5.16a Registered Number of Marriages by Previous Marital Status and Age of Groom: 1989 and 1990

Age of groom	1990 Total	1990 Single	1990 Widower	1990 Divorced or separated	1990 Not stated	1989 Total	1989 Single	1989 Widower	1989 Divorced or separated	1989 Not stated
Philippines	422,041	413,787	4,448	3,797	9	395,933	388,058	4,243	3,583	49
Below 20	25,067	25,062	3	2	-	25,516	25,513	1	2	-
20 - 24	154,784	154,670	48	64	2	147,456	147,349	37	59	11
25 - 29	135,525	135,080	164	278	3	128,148	127,704	148	284	12
30 - 34	57,714	56,897	316	501	-	51,410	50,618	320	467	5
35 - 39	22,207	21,092	428	687	-	19,796	18,778	405	607	6
40 - 44	10,468	9,219	500	749	-	9,079	7,837	506	731	5
45 - 49	5,514	4,431	526	556	1	4,991	3,944	499	547	1
50 - 54	3,621	2,682	531	407	1	3,383	2,433	568	379	3
55 - 59	2,483	1,745	488	250	-	2,206	1,518	446	241	1
60 - 64	1,975	1,327	493	154	1	1,799	1,158	491	148	2
65 - 69	1,178	703	382	92	1	932	525	331	75	1
70 - 74	742	432	279	31	-	579	327	231	20	1
75 and over	762	446	290	26	-	638	354	260	23	1
Not stated	1	1	-	-	-	-	-	-	-	-

Source: National Statistics Office, Civil Registry and Vital Statistics Section.

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Table 5.16b Registered Number of Marriages by Previous Marital Status and Age of Bride: 1989 and 1990

Age of bride	1990 Total	1990 Single	1990 Widower	1990 Divorced or separated	1990 Not stated	1989 Total	1989 Single	1989 Widower	1989 Divorced or separated	1989 Not stated
Philippines	422,041	418,566	3,220	247	8	395,933	392,758	2,879	248	48
Below 19	85,692	85,684	6	2	-	86,715	86,695	15	1	4
20 - 24	170,433	170,289	123	17	4	159,700	159,555	114	17	14
25 - 29	101,691	101,334	307	48	2	93,244	92,855	331	49	9
30 - 34	35,909	35,299	559	51	-	31,820	31,330	423	56	11
35 - 39	14,195	13,591	564	40	-	12,328	11,772	509	46	1
40 - 44	6,304	5,697	570	37	-	5,281	4,791	450	36	4
45 - 49	3,081	2,675	382	24	-	2,880	2,485	371	21	3
50 - 54	2,046	1,750	278	17	1	1,693	1,414	264	15	-
55 - 59	1,187	980	199	7	1	1,019	844	170	5	-
60 - 64	681	573	105	3	-	586	475	109	1	1
65 - 69	390	328	62	-	-	316	241	75	-	-
70 - 74	146	107	39	-	-	137	109	27	1	-
75 and over	280	253	26	1	-	202	180	21	-	1
Not stated	6	6	-	-	-	12	12	-	-	-

Source: National Statistics Office, Civil Registry and Vital Statistics Section.

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Table 5.16c Registered Number of Marriages by Type of Ceremony and Age Group of Bride and Groom: 1986-1990

Age group	Total 1986	1987	1988	1989	1990	Roman Catholic 1986	1987	1988	1989	1990
Groom	389,482	400,760	393,514	395,933	422,041	179,412	181,907	183,105	189,907	202,161
Under 20	37,700	37,433	32,708	25,516	25,067	16,610	15,807	13,971	12,181	12,172
20 - 24	155,888	157,248	149,876	147,456	154,784	77,258	77,030	74,673	76,254	79,145
25 - 29	121,234	124,677	124,482	128,148	135,525	53,855	55,478	57,920	61,392	64,965
30 - 34	40,795	44,808	46,855	51,410	57,714	18,634	20,086	21,489	23,750	26,918
35 - 39	15,146	16,400	17,994	19,796	22,207	6,321	6,668	7,376	8,237	9,429
40 - 44	6,453	7,257	7,809	9,079	10,468	2,615	2,693	2,918	3,260	3,972
45 - 49	4,071	4,370	4,790	4,991	5,514	1,483	1,490	1,660	1,749	2,065
50 - 54	2,545	2,768	2,967	3,383	3,621	903	907	990	1,144	1,247
55 - 59	1,946	1,999	2,107	2,206	2,483	629	591	628	662	833
60- 64	1,556	1,593	1,674	1,799	1,975	408	407	459	518	522
65 - 69	918	974	977	932	1,178	257	276	582	287	354
70 - 74	560	563	569	579	742	190	192	184	214	249
75 and over	670	668	706	638	762	249	281	255	259	290
Not stated	-	2	-	-	1	-	-	-	-	-

Age group	Civil ceremony 1986	1987	1988	1989	1990	Other religious rites[a] 1986	1987	1988	1989	1990	Not specified 1986	1987	1988	1989	1990
Groom	141,227	140,723	126,491	114,764	122,365	68,825	78,114	84,212	91,247	97,500	18	16	6	15	15
Under 20	14,084	13,925	11,064	6,781	6,633	7,005	7,701	7,672	6,554	6,261	1	-	1	-	-
20 - 24	51,232	50,192	43,193	37,041	38,954	27,392	30,021	32,009	34,158	36,681	6	5	1	3	1
25 - 29	46,536	45,393	41,221	38,822	41,028	20,838	23,796	25,339	27,927	29,528	5	10	2	7	4
30 - 34	15,130	16,136	15,649	16,211	18,048	7,030	8,585	9,717	11,445	12,744	1	1	-	4	4
35 - 39	6,036	6,195	6,478	6,712	7,492	2,789	3,537	4,140	4,847	5,286	-	-	-	-	4

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Table 5.16c Registered Number of Marriages by Type of Ceremony and Age Group of Bride and Groom: 1986-1990 (continued)

Age group	Civil ceremony 1986	1987	1988	1989	1990	Other religious rites[a] 1986	1987	1988	1989	1990	Not specified 1986	1987	1988	1989	1990
40 - 44	2,500	2,966	2,921	3,395	3,765	1,338	1,598	1,969	2,424	2,731	-	-	1	-	-
45 - 49	1,767	1,890	1,918	1,892	2,039	820	990	1,212	1,349	1,410	1	-	-	1	-
50 - 54	1,149	1,219	1,256	1,329	1,402	493	642	721	910	971	-	-	-	-	-
55 - 59	926	964	975	941	987	391	444	504	603	663	-	-	-	-	1
60 - 64	835	841	808	810	936	313	345	407	471	517	-	-	-	-	-
65 - 69	481	501	468	398	520	180	197	227	247	303	-	-	-	-	-
70 - 74	264	233	248	229	291	106	138	136	136	202	-	-	1	-	1
75 and over	287	267	292	203	270	130	120	159	176	202	4	-	-	-	-
Not stated	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-

Age group	Total 1986	1987	1988	1989	1990	Roman Catholic 1986	1987	1988	1989	1990
Bride	389,482	400,760	392,406	395,933	422,041	179,412	181,907	182,805	189,907	202,161
Under 20	113,864	113,457	102,286	86,715	85,692	53,979	52,326	47,939	43,643	43,127
20 - 24	156,119	158,646	155,057	159,700	170,433	72,895	73,910	74,337	79,639	84,820
25 - 29	75,678	80,855	85,048	93,244	101,691	33,951	36,174	39,269	43,053	46,858
30 - 34	24,322	26,874	28,793	31,820	35,909	10,653	11,350	12,542	13,802	15,930
35 - 39	9,590	10,389	11,087	12,328	14,195	3,960	4,123	4,428	4,999	5,793
40 - 44	3,913	4,367	4,663	5,281	6,304	1,588	1,683	1,807	2,093	2,513
45 - 49	2,459	2,532	2,617	2,880	3,081	981	931	989	1,140	1,252
50 - 54	1,343	1,416	1,651	1,693	2,046	514	522	606	612	777
55 - 59	920	930	1,062	1,019	1,187	319	311	332	359	446
60 - 64	553	595	590	586	681	211	221	217	207	259

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Table 5.16c Registered Number of Marriages by Type of Ceremony and Age Group of Bride and Groom: 1986-1990 (concluded)

Age group	Total 1986	1987	1988	1989	1990	Roman Catholic 1986	1987	1988	1989	1990
65 - 69	309	294	312	316	390	135	124	139	150	157
70 - 74	139	134	140	137	146	73	65	75	81	61
75 and over	233	238	192	202	280	130	145	116	122	165
Not stated	41	33	16	12	6	23	22	9	7	3

Age group	Civil ceremony 1986	1987	1988	1989	1990	Other religious rites[a] 1986	1987	1988	1989	1990	Not specified 1986	1987	1988	1989	1990
Bride	141,227	140,723	126,491	114,764	122,365	68,825	78,114	84,212	91,247	97,500	18	16	6	15	15
Under 20	39,676	38,856	31,536	21,555	21,192	20,204	22,270	22,809	21,516	21,373	5	5	2	1	-
20 - 24	55,624	53,995	47,838	43,296	46,070	27,595	30,737	32,880	36,757	39,538	5	4	2	8	-
25 - 29	28,338	28,857	28,113	30,040	32,638	13,386	15,820	17,665	20,148	22,187	3	4	1	3	5
30 - 34	9,422	10,236	10,165	10,821	12,073	4,247	5,286	6,085	7,195	7,906	-	2	1	2	8
35 - 39	3,934	4,253	4,306	4,486	5,194	1,695	2,013	2,353	2,843	3,207	1	-	-	-	-
40 - 44	1,650	1,855	1,848	1,990	2,352	675	829	1,008	1,198	1,439	-	-	-	-	1
45 - 49	1,075	1,130	1,047	1,068	1,127	403	471	581	671	702	-	-	-	1	-
50 - 54	601	633	711	673	769	228	261	334	408	499	-	-	-	-	-
55 - 59	422	426	486	432	464	179	193	244	228	277	-	-	-	-	1
60 - 64	251	258	246	247	261	91	116	127	132	161	-	-	-	-	-
65 - 69	126	112	117	99	133	48	58	56	67	100	-	-	-	-	-
70 - 74	41	49	41	25	48	24	20	24	31	37	-	-	-	-	-
75 and over	55	57	35	30	43	44	35	41	50	72	4	-	-	-	
Not stated	12	6	2	2	6	5	5		3	2	-	-	-	-	-

Source: National Statistics Office, Civil Registry and Vital Statistics Division.

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Table 5.16d Registered Intermarriages by Nationality: 1986-1990

Nationality	Number 1986	1987	1988	1989	1990	Percent distribution 1986	1987	1988	1989	1990
Groom	389,482	400,760	393,514	395,933	422,041	100.00	100.00	100.00	100.0	100.00
Filipino	381,686	391,419	382,114	383,541	409,772	98.00	97.67	97.10	96.87	97.09
Chinese	274	318	367	339	321	0.07	0.08	0.09	0.09	0.08
American	3,837	4,121	4,449	4,509	4,601	0.99	1.03	1.13	1.14	1.09
Spanish	46	28	44	52	44	0.01	0.02	0.01	0.01	0.01
Japanese	938	2,056	3,580	4,476	4,300	0.24	0.63	0.91	1.13	1.02
Australian	885	773	705	567	616	0.23	0.19	0.18	0.14	0.15
Iranian	11	16	13	22	13	a	a	a	a	a
German	195	239	235	280	258	0.05	0.06	0.06	0.07	0.06
Others	1,490	1,731	1,893	2,034	2,091	0.38	0.16	0.48	0.51	0.50
Not stated	120	59	114	113	25	0.03	0.65	0.03	0.03	a
Bride	389,482	400,760	393,514	395,933	422,041	100.00	100.00	100.00	100.00	100.00
Filipino	388,376	399,650	392,293	394,566	420,782	99.84	99.73	99.69	99.65	99.70
Chinese	131	129	135	133	97	0.03	0.05	0.03	0.03	0.02
American	605	668	718	721	725	0.16	0.13	0.18	0.18	0.17
Spanish	35	23	19	35	20	0.01	0.01	a	a	a
Japanese	48	40	66	93	75	0.01	0.01	0.02	0.02	0.02
Australian	30	15	20	29	35	0.01	a	a	a	a
Iranian	9	15	13	21	10	a	a	a	a	a
German	6	5	6	9	8	a	a	a	a	a
Others	150	204	230	308	287	0.04	0.01	0.06	0.08	0.07
Not stated	92	11	14	18	2	0.02	0.06	a	a	a

[a] Less than 0.01 percent.

Source: National Statistics Office, Civil Registry and Vital Statistics Section.

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Table 5.17 Distribution of Registered Filipino Emigrants by Country of Destination: 1975-1991

Year	Total	Percent increase/ (decrease)	U.S.A.	Australia	Canada	Others
1975	14,492	-	12,001	601	1,750	140
1976	37,690	160.07	31,098	1,035	4,968	589
1977	39,451	4.67	31,885	1,961	5,183	422
1978	38,345	(2.80)	27,573	2,703	7,229	840
1979	40,450	5.49	30,458	2,925	6,102	965
1980	45,500	12.48	36,455	1,632	4,713	2,700
1981	48,867	7.40	40,307	2,752	5,226	582
1982	53,953	10.41	44,438	2,931	4,898	1,686
1983	42,481	(21.26)	34,794	2,608	3,946	1,133
1984	41,551	(2.19)	34,682	2,915	2,463	1,491
1985	45,269	8.95	38,653	3,458	2,097	1,061
1986	49,338	8.99	40,650	4,374	3,206	1,108
1987	56,350	14.21	40,813	8,983	5,757	797
1988	58,066	3.05	41,397	9,341	6,608	720
1989	55,703	(4.07)	39,503	5,922	8,032	2,246
1990	63,208	13.47	43,816	5,855	8,409	5,128
1991	62,671	(0.85)	43,981	5,728	7,233	5,729

Source: Commission on Filipinos Overseas.

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Table 5.17a Profile of Registered Filipino Emigrants by Age Group: 1981-1991

Age group	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total	48,867	53,953	42,481	41,551	45,269	49,338	56,350	58,066	55,703	63,208	62,671
14 and below	9,588	9,100	8,433	8,199	9,154	10,524	12,407	12,579	11,696	11,515	11,234
15 - 19	4,712	4,650	4,498	4,359	4,822	5,520	5,941	5,838	5,312	5,587	6,036
20 - 24	5,846	5,956	5,164	5,035	5,196	5,512	5,733	5,699	5,767	7,429	7,758
25 - 29	5,919	6,643	5,323	5,348	5,489	5,809	6,946	6,429	6,750	8,707	8,531
30 - 34	4,048	5,357	3,659	3,956	4,264	4,836	6,359	6,830	7,029	7,877	7,145
35 - 39	2,445	3,488	2,409	2,695	2,845	3,179	4,069	4,737	4,548	4,868	4,479
40 - 44	1,799	2,760	1,678	1,703	1,665	1,855	2,334	3,115	2,976	3,262	3,009
45 - 49	1,543	2,145	1,437	1,586	1,613	1,590	1,742	2,019	1,937	2,004	2,171
50 - 54	2,142	2,402	1,679	1,601	1,800	1,840	1,943	1,961	1,970	2,255	2,232
55 - 59	2,955	2,985	2,364	2,007	2,344	2,339	2,436	2,240	2,033	2,500	2,554
60 - 64	3,068	3,223	2,461	2,109	2,458	2,576	2,554	2,465	2,067	2,657	2,857
65 - 69	2,653	2,630	1,737	1,497	1,809	1,867	1,990	1,937	1,657	2,115	2,329
70 and over	2,149	2,614	1,639	1,456	1,810	1,891	1,896	2,165	1,949	2,424	2,336
Not stated	-	-	-	-	-	-	-	52	12	8	-

Source: Commission on Filipinos Overseas.

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Table 5.17b Distribution of Registered Filipino Emigrants by Major Occupational Status Prior to Migration: 1981-1991

Occupational grouping	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total	48,867	53,953	42,481	41,551	45,269	49,338	56,350	58,066	55,703	63,208	62,671
Professional, technical and related workers	4,821	5,509	3,928	3,791	3,869	4,147	4,899	7,529	6,700	7,693	7,534
Managerial, executive and administrative workers	451	360	324	320	366	369	420	578	444	410	449
Clerical workers	2,475	3,992	2,796	3,131	2,972	3,394	4,605	2,452	1,913	2,030	2,264
Sales workers	1,628	1,865	1,414	1,326	1,819	2,109	2,825	2,903	2,931	3,575	3,396
Service workers	2,381	2,213	1,614	1,075	1,037	1,038	874	936	997	1,299	1,933
Agri./animal husbandry/ forestry worker/fishermen	2,238	1,894	1,787	1,475	1,483	1,389	1,105	1,207	1,049	1,457	1,401
Production process workers, transport equipment operators and laborers	1,780	2,758	1,951	1,992	1,848	1,822	1,754	2,242	2,206	2,309	3,102
Members of the armed forces	858	504	96	57	36	32	73	337	360	281	296
Employed/not determined	-	-	-	-	-	-	-	-	83	2	4
Others											
Housewives	11,202	12,469	9,025	8,730	9,247	8,695	9,315	9,550	9,748	11,277	12,070
Retirees	1,718	2,056	1,327	1,022	1,103	1,399	1,691	1,390	1,677	1,828	2,081
Students	10,486	10,374	9,773	8,872	9,575	11,439	13,409	14,568	13,223	13,439	13,556
Minors (below 7 years old)	3,625	4,419	3,826	3,919	4,348	4,750	5,382	5,581	5,008	4,971	4,775
Unemployed	5,204	5,540	4,620	5,841	7,566	8,755	9,998	8,793	9,364	12,637	9,810

Source: Commission on Filipinos Overseas.

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Table 5.18 Registered Top Twenty Nationals: 1986-1990

Nationality	Total	1986	1987	1988	1989	1990[a]
Total	3,768,329	760,805	666,429	788,200	921,786	631,109
Americans	978,478	277,777	167,042	180,146	205,552	147,961
Japanese	700,553	117,759	111,447	145,425	187,889	138,033
Chinese	406,020	56,906	67,107	89,871	121,837	70,299
British	397,346	58,201	76,762	102,431	104,764	55,188
Australian	206,876	39,674	41,100	43,461	49,131	33,510
West German	123,693	22,659	22,631	26,994	30,820	20,589
Canadian	101,072	18,098	20,440	20,811	22,842	18,881
South Korean	84,380	9,345	10,581	12,647	26,440	25,367
Singaporean	65,991	10,310	11,750	14,788	17,547	11,596
Saudi Arabian	64,764	15,966	16,670	13,283	10,516	8,329
Malaysian	63,264	11,980	11,520	14,085	16,682	8,997
Swiss	45,614	9,045	8,956	9,794	9,749	8,070
Indian	44,806	10,142	9,357	8,872	9,321	7,114
French	43,776	8,617	7,740	7,972	10,413	9,034
Pakistani	36,259	7,760	7,472	10,507	5,885	4,635
Thailander	35,702	7,428	7,392	7,803	8,007	5,072
Italian	31,772	4,940	5,379	7,643	7,778	6,032
Dutch	28,010	4,772	5,279	6,245	6,837	4,877
Swedish	27,838	4,444	5,240	6,806	6,883	4,465
Indonesian	24,857	4,525	4,512	5,426	6,436	3,958
Others	257,258	60,457	48,052	53,190	56,457	39,102

[a] As of September 1990.

Source: Commission on Immigration and Deportation. *Statistical Report.*

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Table 5.19 Number of Inter-Regional Migrants by Sex and Region of Origin and Destination: 1975-1980

Sex/ region of destination	All regions of origin	NCR	Region of origin I	II	III	IV	V
Both sexes							
All regions of destination	1,148,297	204,778	87,578	36,208	92,257	114,683	99,285
National Capital Region (NCR)	378,878	-	42,682	16,002	51,246	75,386	51,573
I. Ilocos	35,588	12,447	-	6,567	6,761	3,597	1,156
II. Cagayan Valley	33,259	4,881	13,004	-	8,418	2,093	1,317
III. Central Luzon	101,844	42,388	12,937	3,908	-	13,664	8,708
IV. Southern Tagalog	183,095	90,817	9,400	3,596	16,001	-	27,772
V. Bicol	36,939	15,957	1,195	568	3,284	9,648	-
VI. Western Visayas	33,523	11,128	779	465	1,436	3,154	1,544
VII. Central Visayas	51,757	6,181	975	1,079	721	1,765	2,261
VIII. Eastern Visayas	27,605	9,560	477	255	839	1,547	1,403
IX. Western Mindanao	28,143	1,213	588	726	501	432	313
X. Northern Mindanao	92,323	3,990	1,333	1,049	929	1,171	1,639
XI. Southern Mindanao	89,017	4,383	2,002	1,287	1,051	1,477	1,121
XII. Central Mindanao	56,326	1,833	2,206	706	1,070	749	478

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Table 5.19 Number of Inter-Regional Migrants by Sex and Region of Origin and Destination: 1975-1980 (continued)

Sex/ region of destination	Region of origin VI	VII	VIII	IX	X	XI	XII
Both sexes							
All regions of destination	105,536	114,987	98,489	37,205	56,639	62,080	38,572
National Capital Region (NCR)	44,158	22,990	48,999	4,933	6,944	8,612	5,353
I. Ilocos	867	871	936	538	581	748	519
II. Cagayan Valley	826	548	673	317	484	481	217
III. Central Luzon	4,509	3,506	8,162	813	1,423	1,191	635
IV. Southern Tagalog	11,370	5,706	10,790	1,914	2,134	2,404	1,191
V. Bicol	1,009	1,773	1,846	326	472	604	257
VI. Western Visayas	-	7,391	857	979	1,339	2,943	1,508
VII. Central Visayas	7,730	-	7,215	4,148	8,639	8,721	2,322
VIII. Eastern Visayas	785	6,005	-	564	2,499	2,999	672
IX. Western Mindanao	3,139	8,943	869	-	6,658	2,278	2,483
X. Northern Mindanao	8,485	24,978	8,439	10,951	-	18,191	11,168
XI. Southern Mindanao	12,248	23,791	8,565	5,718	15,127	-	12,247
XII. Central Mindanao	10,410	8,485	1,138	6,004	10,339	12,908	-

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Table 5.19 Number of Inter-Regional Migrants by Sex and Region of Origin and Destination: 1975-1980 (continued)

Sex/ region of destination	All regions of origin	NCR	Region of origin I	II	III	IV	V
Male							
All regions of destination	532,398	100,271	40,222	15,306	43,904	51,002	43,172
National Capital Region (NCR)	151,291	-	17,246	5,707	22,846	31,429	20,457
I. Ilocos	16,439	5,916	-	2,998	3,136	1,759	404
II. Cagayan Valley	17,653	2,425	6,978	-	4,629	1,135	640
III. Central Luzon	46,611	20,530	5,865	1,753	-	6,240	3,710
IV. Southern Tagalog	90,151	45,283	5,012	1,659	8,155	-	13,619
V. Bicol	18,384	7,621	531	288	1,801	4,984	-
VI. Western Visayas	16,347	5,183	422	217	754	1,583	731
VII. Central Visayas	24,946	2,974	558	540	318	1,027	1,060
VIII. Eastern Visayas	13,624	4,501	260	107	372	806	682
IX. Western Mindanao	14,692	635	297	392	264	204	190
X. Northern Mindanao	47,675	1,991	739	540	519	668	841
XI. Southern Mindanao	45,952	2,282	1,069	728	526	721	604
XII. Central Mindanao	28,615	930	1,245	377	584	446	234

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Table 5.19 Number of Inter-Regional Migrants by Sex and Region of Origin and Destination: 1975-1980 (continued)

Sex/ region of destination	Region of origin VI	VII	VIII	IX	X	XI	XII
Male							
All regions of destination	46,088	54,165	42,272	18,530	27,055	30,735	19,676
National Capital Region (NCR)	15,205	8,299	18,805	2,247	2,632	3,698	2,720
I. Ilocos	400	348	308	282	273	332	283
II. Cagayan Valley	431	252	363	167	259	255	119
III. Central Luzon	1,827	1,470	3,327	399	665	549	276
IV. Southern Tagalog	5,296	2,663	4,907	914	942	1,111	590
V. Bicol	519	870	906	151	264	275	174
VI. Western Visayas	-	3,615	490	486	682	1,439	745
VII. Central Visayas	3,752	-	3,045	1,936	4,116	4,480	1,158
VIII. Eastern Visayas	387	2,996	-	296	1,228	1,564	425
IX. Western Mindanao	1,690	4,553	401	-	3,518	1,251	1,297
X. Northern Mindanao	4,634	12,690	4,529	5,586	-	9,330	5,608
XI. Southern Mindanao	6,455	12,250	4,630	2,916	7,490	-	6,281
XII. Central Mindanao	5,492	4,159	561	3,150	4,986	6,451	-

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Table 5.19 Number of Inter-Regional Migrants by Sex and Region of Origin and Destination: 1975-1980 (continued)

Sex/ region of destination	All regions of origin	NCR	Region of origin I	II	III	IV	V
Female							
All regions of destination	615,899	104,507	47,356	20,902	48,353	63,681	56,113
National Capital Region (NCR)	227,587	-	25,436	10,295	28,400	43,957	31,116
I. Ilocos	19,149	6,531	-	3,569	3,625	1,838	752
II. Cagayan Valley	15,606	2,456	6,026	-	3,789	958	677
III. Central Luzon	55,233	21,858	7,072	2,155	-	7,424	4,998
IV. Southern Tagalog	92,944	45,534	4,388	1,937	7,846	-	14,153
V. Bicol	18,555	8,336	664	280	1,483	4,664	-
VI. Western Visayas	17,176	5,945	357	248	682	1,571	813
VII. Central Visayas	26,793	3,207	417	539	403	738	1,201
VIII. Eastern Visayas	13,981	5,059	217	148	467	741	721
IX. Western Mindanao	13,451	578	291	334	237	228	123
X. Northern Mindanao	44,648	1,999	594	509	410	503	798
XI. Southern Mindanao	43,065	2,101	933	559	525	756	517
XII. Central Mindanao	27,711	903	961	329	486	303	244

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Table 5.19 Number of Inter-Regional Migrants by Sex and Region of Origin and Destination: 1975-1980 (concluded)

Sex/ region of destination	Region of origin VI	VII	VIII	IX	X	XI	XII
Female							
All regions of destination	59,448	60,822	56,217	18,675	29,584	31,345	18,896
National Capital Region (NCR)	28,953	14,691	30,194	2,686	4,312	4,914	2,633
I. Ilocos	467	523	628	256	308	416	236
II. Cagayan Valley	395	296	310	150	225	226	98
III. Central Luzon	2,682	2,036	4,835	414	758	642	359
IV. Southern Tagalog	6,074	3,043	5,883	1,000	1,192	1,293	601
V. Bicol	490	903	940	175	208	329	83
VI. Western Visayas	-	3,776	367	493	657	1,504	763
VII. Central Visayas	3,978	-	4,170	2,212	4,523	4,241	1,164
VIII. Eastern Visayas	398	3,009	-	268	1,271	1,435	247
IX. Western Mindanao	1,449	4,390	468	-	3,140	1,027	1,186
X. Northern Mindanao	3,851	12,288	3,910	5,365	-	8,861	5,560
XI. Southern Mindanao	5,793	11,541	3,935	2,802	7,637	-	5,966
XII. Central Mindanao	4,918	4,326	577	2,854	5,353	6,457	-

Note: Number of **interregional** migrants refer to individuals who were 5 years old and over in 1980 whose regions of residence in 1980 was different from his region of residence in 1975.
Values were computed from Table on Number of Migrants by Area of Destination and Area of Origin, by Sex: 1975-1980.

Source: National Statistics Office, Population Studies Section.

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Table 5.20 Net Migration Rate by Region: 1975-1980

Region	Net migration rate[1]
National Capital Region (NCR)	3.70
I. Ilocos	-1.79
II. Cagayan Valley	-0.17
III. Central Luzon	0.25
IV. Southern Tagalog	1.43
V. Bicol	-2.25
VI. Western Visayas	-1.97
VII. Central Visayas	-2.08
VIII. Eastern Visayas	-3.13
IX. Western Mindanao	-0.47
X. Northern Mindanao	1.69
XI. Southern Mindanao	1.07
XII. Central Mindanao	0.99

[1] $$100 \times \left[\frac{\text{1975 - 1980 Net-Migrant 5 years old and over}}{\text{1/2(Population 5 years old and over(1975) + Population 5 years old and over(1980)}}\right]$$

Source: National Statistics Office, Population Studies Section. (unpublished tabulation derived from 1980 census).

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Chapter 6
Education and Culture

6.1 The Philippine Educational System

The Education Act of 1982 (B.P. 232) serves as the framework for the establishment of an integrated system of education in the country. As mandated by the Act, the goals of the Philippine Educational System are the following: provide each individual with a broad general education that will assist him in the peculiar ecology of his own society; train the nation's manpower in the middle-level skills required for national development; develop the professions and apply new knowledge for improving the quality of human life; and respond effectively to changing needs and conditions of the nation through a system of educational planning and evaluation.

6.1.1 Formal Education

Formal education refers to the hierarchically structured and chronologically graded learnings organized and provided by the formal school system and for which certification is required for the learner to progress through the grades or move to higher levels.

Formal education consists of an optional one or two years of preschool education, six years of elementary education, four years of secondary education, and a four to five years of tertiary or college education and postgraduate education leading to masters and doctorate. One to three years of postsecondary nondegree technical or vocational education is also considered a formal education.

Preschool Education. Preschool education complements elementary education. This level aims to guide children in the development of their potentials, proper attitude and behaviour through chronologically sequenced learning experiences. Preschool education is mostly offered by the private sector.

Elementary Education. Public elementary education is entirely supported by the national government as mandated by the constitution. The elementary education program is designed to give six years of basic literacy, numeracy, thinking and work skills to enhance learning capabilities and values. The normal age bracket for schoolchildren in this level is from 7 to 12 years old.

Secondary Education. Graduates of the elementary course are admitted to secondary course. This level is the continuation of general education given in the elementary level and serves as preparation for vocational or college education.

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Tertiary Education. Students who have completed the secondary education --and as some schools require-- those who passed the National College Entrance Examination (NCEE) can be admitted to the collegiate or university level. The scope of tertiary education covers all postsecondary courses ranging from one- or two-year vocational technical courses to four-year degree and professional programs, including graduate education at the masteral and doctoral levels.

Tertiary education is the chief source of professionals as well as skilled and semiskilled manpower needed by the country. Consistent with the aims of education, tertiary education is geared to enable each Filipino to develop his full potential for self-actualization and productivity.

Technical or Vocational Education is an integral part of the educational program of the country. Students also have to undergo the formally organized and structured school system. Its primary objective is the development of a strong, appropriately trained, middle-level skilled manpower which possesses the capabilities that are supportive of national development. All post-secondary or nondegree technical courses range from six months to three years.

6.1.2 Nonformal Education and Training

Nonformal education is available to those who are unable to avail of the facilities of formal education. It is an organized systematic educational activity which provides selected types of learning to particular groups of population. These groups are also supplied with instructional materials relevant to their training.

Nonformal education is designed to help solve the unemployment and underemployment problems of the country by equipping the adults and youths who are unable to undergo formal schooling, with employable skills in short-term nondegree courses. Basic literacy skills, reading, writing and numeracy are likewise strengthened.

6.2 Educational Institutions

The country has several educational institutions varying from government and private preelementary schools, to elementary schools, secondary schools, colleges and universities, technical and vocational schools and special schools.

Free government elementary and secondary schools have been established in almost every barangay in the country. Some of the secondary and postsecondary schools are private stock (nonsectarian) or nonstock corporations (sectarian schools, foundations and corporation schools).

Public colleges and universities are classified into three categories: chartered state colleges and universities, nonchartered colleges, and community colleges.

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Chartered state universities and colleges enjoy autonomy under a self-governing board of regents, chaired by the Secretary of the Department of Education, Culture and Sports (DECS) or his designated representative.

Nonchartered state colleges are higher educational institutions offering higher education courses. Many of them evolved from technical schools such as schools of arts and trades, agriculture and others. Community colleges are mostly outgrowths of barangay high schools located in rural areas and offer degree programs including graduate courses. The establishment of private colleges and universities are governed by the corporation law. Such institutions have their respective board of directors or trustees, and are either stock or nonstock corporations.

Institutions with religious affiliations (Roman Catholic, Protestant, Aglipayan, Seventh Day Adventists, and others) are classified as sectarian schools, and are nonstock organizations.

Vocational or technical postsecondary education is offered in public vocational or technical institutions that are generally called Schools of Arts and Trades (SATs), and in private technical institutions. Private technical schools are organized under the Philippine Association of Private Technical Institutions.

In order to help improve the resource base and to encourage self-help efforts of secondary and tertiary vocational and technical schools, the President approved a mechanism whereby income of such institutions can be retained to support the improvement of its physical facilities and general quality of instruction.

Nonformal and special education are provided by a number of government agencies, including the Departments of Labor and Employment (DOLE) through its apprenticeship scheme, Social Welfare and Development (DSWD), Trade and Industry (DTI), Agriculture (DA) and the National Manpower and Youth Council (NMYC). The nonformal education programs of these agencies cover office training, handicraft, agriculture and other livelihood short-term courses, while the Bureau of Nonformal Education under the DECS is tasked to promote functional literacy programs.

The special schools of the government are the Philippine National School for the Blind, National School for the Deaf, National Orthopedic School for crippled children, Boys Town for orphans and underprivileged children, and Correctional School for Juvenile Delinquents. Under the Jose Fabella Memorial Schools are the Elsie Gaches Village Special School, National Training School for Boys, Jose Fabella Center in Mandaluyong, and Reception and Study Center for Children.

Some of the private special schools in Metro Manila are the Special Child Study Center, St. Joseph of Cupertino for Retarded Children, Southeast Asian Institute for the Deaf, Montessori Children's House, Ehepheta Nursery Kindergarten School for the Blind, and the Deaf Evangelistic Alliance Foundation, Inc.

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The government has also established special types of secondary schools like the Philippine Science High School for the gifted and the scientifically inclined students. A special science curriculum has been drawn up for the Manila Science High School where electives of science and mathematics are required, and where humanities subjects are optional. The revised special science curriculum for Quezon City Science High School is likewise mathematics-oriented and with electives in arts like journalism, speech and drama, economics and Spanish.

6.3 Education Statistics

6.3.1 Number of Schools

Delivery of education services is accomplished through schools or institutions of varying educational levels in the different parts of the country. A total of 44,641 schools were in operation in SY 1990-91. Of this total, 38,905 or 87.15 percent were government schools and the remaining 5,736 or 12.85 percent were private schools. By level of education offered, there were 4,201 preschools, 33,081 elementary schools, 5,550 secondary schools and 809 tertiary schools. By region, Southern Tagalog posted the highest number of schools in preschool, elementary and secondary with 1,001, 4,194 and 808, respectively. On the other hand, the highest number of tertiary schools were located in Metro Manila with 135 schools. (See Table 6.1)

6.3.2 Enrolment and Student Statistics

For SY 1990-91, total enrolment was registered at 16.17 million, an increase of 2.58 percent from the previous school year's level of 15.76 million. Enrolment in elementary level reached 10.4 million, 93.29 percent of which were enrolled in government schools and 6.71 percent in private schools. Secondary level enrolment accounted for about 4.0 million, 63.57 percent of which were enrolled in government schools and 36.43 percent in private schools. Enrolment in tertiary schools totalled 1.7 million. (See Table 6.2)

Among all regions, Metro Manila reported the biggest number of enrolment with more than 2.2 million students for SY 1990-91. It recorded the highest number of enrolment in elementary, tertiary and vocational schools. However, enrolment in secondary schools was highest in Southern Tagalog with about 587 thousand enrolees (Table 6.3). There were more students enrolled in government elementary and secondary schools than in private schools of the same education levels. The increase in enrolment especially in government secondary schools could be attributed to the implementation of the free high school education in accordance with Republic Act 6655.

Enrolment in government and private tertiary institutions by major field of study is presented in Table 6.4. In SY 1990-91, there were about 1.35 million enrolees in tertiary education, a 3.1 percent increase from the 1.31 million

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enrolees reported in the previous year (Table 6.4). The rise in tertiary enrolment may be attributed to the passage of R.A. 6728 which provides government assistance to students and teachers in private education and the increased availability of government scholarships, study grants and loans. Table 6.4 further shows that Commerce and Business Management posted the biggest although decreasing number of enrolees with 392,958 students, followed by Engineering and Technology with 273,408 enrolees.

Table 6.5 shows that total enrolment in nonformal education in 1990 totalled 387,485. Out of this number, 276,451 or 71.34 percent graduated. Functional literacy program recorded 122,296 enrolees while livelihood skills development program had 265,189 enrolees. (See Table 6.5.)

The number of foreign students who were issued permits to study in the Philippines for SY 1990-91 reached 6,471, a decrease of 5.64 percent from the previous year's level. (See Table 6.6.)

The National Education Testing Center through the National College Entrance Examination (NCEE) posted a total number of 832,295 examinees in SY 1992-93. Of the total, 438,429 or 52.7 percent passed at 50 percent cut off score (passing score). (See Table 6.7 for details.)

6.3.3 Scholarships

State scholarships and grants awarded for SY 1991-92 reached 10,956, posting a decrease of 673 from the previous school year's scholars which numbered 11,629. The National Integration Study Grant Program (NISGP) reported the biggest number of awardees at 2,944, accounting for 26.87 percent of the total. The National Reconciliation and Development Program (NRDP) awarded the second highest number at 2,615 scholars, followed by the Study-Now-Pay- Later Plan (SNPLP) with 2,500 awardees. Among the lending institutions for the Study-Now-Pay-Later Plan, Social Security System (SSS) granted loans to the highest number of Study-Now- Pay-Later Plan (SNPLP) scholars, followed by Government Security Insurance System (GSIS) and Development Bank of the Philippines (DBP). (See Tables 6.8 and 6.9.)

6.3.4 Education Indicators

The capability of the educational system in the equitable, efficient and effective delivery of education to its clientele for a particular school year is revealed by the various education indicators for the year, such as participation, completion, survival, transition, dropout and retention rates. Tables 6.10 and 6.11 show such indicators in the government and private elementary and secondary levels.

For the elementary level, participation rate was recorded at 95.26 percent for government and 3.84 percent for private schools. Transition rate reached 93.47 percent and 95.84 percent for government and private schools, respectively. The dropout rate in both government and private schools improved from 1.74 in SY 1989-90 to 1.69 in SY 1990-91 and from 1.29 in SY 1989-90 to 1.09 in

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SY 1990-91, respectively. The teacher-student ratio was recorded at 1:33 for government schools and 1:35 for private schools. (Refer to Table 6.10.)

In the secondary level, participation rate for government schools was 33.82 percent and 20.89 percent for private schools in SY 1990-91. The cohort-survival rate was recorded at 74.97 percent for government schools and 78.79 percent for private schools. The teacher-student ratio was 1:31 and 1:36 for government and private schools, respectively (Table 6.11).

6.3.5 Teaching Staff

The number of teachers in government elementary schools in SY 1990-91 reached 311,013 which indicates a 4.70 percent increase from the previous year's level. Likewise, secondary school teachers in government sector increased from 79,083 in SY 1989-90 to 122,688 in SY 1990-91. (See Table 6.12 for more details.)

6.3.6 Literacy

Literacy is defined as the ability of a person to read and write a simple message in any language or dialect. *Literacy rate* is the proportion of literates to the total population in a given group. The literacy rate of private household population 10 years old and over increased from 82.7 percent in 1980 to 93.5 percent in May 1990. National Capital Region (NCR) posted the highest literacy rate of 99.1 percent, whereas in Western Mindanao, literacy rate was only 81.3 percent. (See Table 6.13a.)

6.3.7 Government Board Examinations

The Professional Regulation Commission is the government agency which administers and conducts the licensure examinations of various boards according to the rules and regulations promulgated by it. It also regulates and licenses various professions in the Philippines, except the law and the teaching professions.

Graduates in different fields of study who pass the state-given examinations and are therefore holders of valid licenses or certifications to practice acquire the status of registered professionals. In 1992, there were 55,686 board examinees who passed the board examinations in 26 different professions. By profession, nurses accounted for the biggest percentage (44.27 percent) among the successful examinees. Midwives followed with 12.02 percent and engine officer with 7.97 percent.

There were 3,194 bar examinees in 1991, an increase of 3.03 percent from the previous year's level of 3,100 examinees. Of the total, 569 or 17.8 percent passed the examination. (Refer to Tables 6.14 and 6.15.)

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6.4 Education Programs and Projects

6.4.1 Elementary Education Programs

The year 1990 was doubly significant for elementary education for two reasons: first, the upgrading of the standard of quality and quantity of education and second, the advent of the global movement, Education for All (EFA).

To improve sector performance, the Bureau of Elementary Education (BEE) initiated and implemented programs and projects aimed at improving the different performance indicators in elementary education.

Effective SY 1991-92, Character Education/Good Manners and Right Conduct was restored as a learning area in the elementary school curriculum.

Curriculum and Instructional Materials Development for Teachers and Pupils. Since the New Elementary School Curriculum (NESC) is still being used, efforts were directed towards the development of support and instructional materials to sustain it, rather than curriculum development per se.

Staff Development and Technical Assistance. The staff development of the Bureau for CY 1990 focused on maintaining the gains from the Program for Decentralized Educational Development (PRODED) and reinforcing those that have been found needing further support and attention.

Facilities Development. The BEE continued its efforts towards the improvement of school facilities by implementing projects designed to enhance the competence of school administrators on facilities management.

Research and Evaluation. To provide the Bureau empirical bases for programs and projects, research activities are continuously undertaken such as the Dropout Intervention Program (DIP), a three-year project which aims to reduce the incidence of dropout in the elementary level specifically among pupils from the low-income municipalities, increase participation rate and improve achievement levels.

Another research undertaken by the Bureau was the Accelerated Learning Program for Elementary Schools (ALPES), which aims to accelerate high-achieving Grades IV and V pupils to the next higher grade. In 1989, 24 Grade IV and 23 Grade V pupils passed ALPES test.

6.4.2 Secondary Education Development Programs

The Secondary Education Development Program (SEDP) aims at improving the quality and internal efficiency of the secondary school system. Programs were pursued along these thrusts: implementation of a training program for school administrators, subject area supervisors and teachers; provision of instructional materials and education facilities in support of the New Secondary Education Curriculum and monitoring of student achievement in the new curriculum.

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The SEDP continued the implementation with the provision of textbooks and instructional materials, mass training of teachers and provision of school facilities and instruction equipment. In the summer of 1991, a total of 28,528 third year teachers and 414 trainors for fourth year teachers underwent training.

Added as a dimension of values education at the secondary level was Good Manners and Right Conduct in SY 1991-92. This is intended to reinforce character building and formation deemed essential for promoting discipline and good behavior.

The Project Management Unit was created to supervise projects under SEDP. Project implementations were undertaken by appropriate offices of the DECS. The Bureau of Secondary Education handled curriculum development and development of instructional materials. The Instructional Materials Corporation (IMC) managed the printing and distribution of textbooks. The Fund Assistance to Private Education managed parallel programs of the private sector such as the mass training of private school teachers and the implementation of tuition fee subsidiaries. As mandated by R.A. 6655, all enrolees in the public schools are exempted from payment of tuition and other school fees. This free education policy extends to the private sector through the Educational Service Contracting (ESC) and the tuition fee subsidiary under the Government Assistance to Students and Teachers in Private Education (GASTPE). Students in private schools are subsidized by the government through these programs. Under the SEDP, public school students are provided free textbooks.

A total of 169,878 secondary students benefited from the Educational Service Contracting (ESC) scheme in SY 1991-92.

Beneficiaries of tuition fee supplements totalled 592,528 students enrolled in private high schools and 25,640 students enrolled in private colleges and universities.

6.4.3 Higher Education Programs or Projects

Higher education programs are geared towards the provision of better quality education, development of middle and higher level manpower, and intensification of research and extension services.

Higher Education Resource Information Project is a continuing project designed to generate an effective data base system for policy formulation in higher education. A project to formulate standards for the conversion of private colleges into universities has also been undertaken to provide quality measure for tertiary level schools applying for university status.

A complementary project on university and graduate school reassessment has also been undertaken as well as the reclassification of higher education programs.

Curriculum Development Program Consists of projects carried out under this program include finalization of the proposed curriculum on BSSE (Bachelor of Science in Secondary Education) and BSED (Bachelor of Science in Elemen-

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tary Education); research project in the state-of-the-art research in teacher education; and examination and analysis of higher education programs to upgrade existing policies and standards.

Rebel Returnees Study Grant Program (RRSGP) is a comprehensive and integrated rehabilitation program for rebel returnees and members of MNLF and other allied groups to participate in the country's socioeconomic and political development program. In 1990, there were 3,744 awardees for this program.

Government Assistance to Students and Teachers in Private Education (GASTPE) or Republic Act 6728 was enacted to operationalize the policy of assistance to private education. It provides financial assistance such as tuition fee supplements for deserving private high school and college students, high school textbooks assistance, scholarship grants, expansion of the educational service contracting scheme, educational loans and college faculty development fund.

6.4.4 Other Programs

Education for All (EFA) is an international movement which aims to meet the basic learning needs of children and adults. In line with this, Proclamation No. 480 was issued in 1989 to ensure the success of the country's involvement in the EFA. Also in the same year, a national committee was organized to form policy directions for the promotion of EFA in the country by the year 2000. The Philippine Plan of Action for EFA for the period 1991-2000 was officially approved on June 5, 1991. It spells out the directions on four major program areas, namely, early childhood care and development, universalization of quality primary education, eradication of illiteracy and continuing education.

Technical or Vocational Education Project. This project is intended to upgrade the practical skills of students attending formal/technical/vocational education courses at the postsecondary but below college degree level. Improvement in technical/vocational education were pursued through consultations with industries for occupational or job analysis as the major approach to curriculum design and implementation. DACUM (Development Curriculum) charts of duties and tasks for each job title in eleven (11) technologies were developed. These are now being used as the main basis for course design and delivery. The adoption and intensification of training-cum production of trainers, tools, machineries, spare parts and accessories were the major efforts to support the institutionalization of technician education institutes. These institutes trained the faculty of technical and vocational institutions within the region where they are located.

The Technical and Education Manpower Development Plan for Technicians, Craftsmen and Operators was updated to project the industry demand

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for specific occupations in each region and province. It was intended to guide institutions in their admission and resource allocation decisions.

Study-Now-Pay-Later Plan. This project is designed to democratize access to higher education among deserving high school students and provide them opportunities to pursue their educational aspirations and goals.

Sports Development Program. The principle "Sports for All" is the basis of the national sports education policy. Attention is specially given to the promotion of sportsmanship and physical fitness through mass participation in sports and related activities. Sports activities such as Palakasan ng Lahi and local sports competitions are being held regularly in schools.

6.5 Cultural Education

Education plays an important role in the preservation and development of the Filipino cultural heritage, customs and traditions. It is through the educational system that values indigenous to the Filipinos are instilled in the people. With this in view, one of the basic thrusts adopted by the educational system in 1987 was values development to be effected through the infusion of sense of nationhood, humanism and Filipinism in the curricula of all three levels of education. To enhance national identity and culture, cultural institutions such as libraries, museums, archives, and cultural centers at local, provincial and regional levels were strengthened and expanded.

Degree courses in fine arts (painting, sculpture, commercial and decorative arts, graphics and interior design, and others) and architecture are offered in major colleges and universities. Likewise, degree courses in music, the most widespread of the performing arts, are offered at a number of Philippine colleges and universities. A prime institution which offers opportunities for cultural education is the Cultural Center of the Philippines (CCP). The CCP has been assigned a leading role in the promotion and development of Philippine culture.

Other cultural venues and organizations currently active in the national art scene include the National Music Competition for Young Artists (NAMCYA), Metropolitan Theatre, Teatro Pilipino, Bulwagang Gantimpala, Repertory Philippines, Concert at the Park, Paco Park Presents, and Puerta Real Evenings.

6.5.1 The Cultural Center of the Philippines

The Cultural Center of the Philippines seeks to preserve, promote and enhance the Filipino people's artistic heritage and to help evolve and develop a Filipino national culture that will uphold the cultural identity of the various ethnic groups while emphasizing the many similarities that collectively serve as basis of national identity. The Visual, Literary and Media Arts Department (VLMA) was created in 1986 to operationalize CCP's five basic thrusts of Filipinization, democratization, decentralization, regimentation, and interna-

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tional relations. VLMA seeks to highlight the role of artists in the nonperforming arts, namely, visual arts, literary, film and broadcast. It also envisions the enrichment of Filipino culture and arts with the development and training of potential artists and giving recognition and support to established artists in the four fields of art.

The Coordinating Center for Broadcast Arts aims to develop broadcast media (radio and television) as effective vehicles for Filipino culture and arts. It is committed to train the unschooled majority in the provinces to provide them the knowledge and skills in radio and video productions with a view to develop a new breed of local artists and broadcast practitioners.

The CCP serves both as a national venue for the performing arts and coordinating center for artistic and cultural programs and activities throughout the country, mainly through the local arts council and foundations which it helps to organize. Art councils and foundations have been established in Cebu, Bacolod, Silay, Iloilo, Iligan, Bukidnon, Bulacan, Butuan, Laoag, Laguna, Tacloban, Tuguegarao and Baguio City.

As a venue for artistic and cultural programs and activities, the CCP makes reasonably available to local groups its facilities and its resources through different types of grants.

In the CCP complex are three buildings (the CCP Main, the Tanghalang Balagtas or the Folk Arts Theater, and the Manila Film Center) which house several performances and film screening venues, art galleries, a museum, and the library, among others.

Resident companies of the CCP include the following: Philippine Philharmonic Orchestra, Philippine Madrigal Singers, Philippine Bayanihan, Philippine Dance Company, Philippine Ballet Theater, Ramon Obusan Folkloric Dance Group and Tanghalang Pilipino.

6.5.1.1 CCP Education and Training Programs

The Philippine High School for the Arts based at the National Arts Center in Mt. Makiling, Los Banos, Laguna, provides educational and developmental facilities for talented and highly gifted students. It features integrated areas of special studies to prepare high school students for higher education while developing attitudes to pursue a career in the arts. It offers courses in the allied arts major in music, theater arts, visual arts, dance and regular subject requirements for secondary education. Summer arts workshops for children are also offered during summer.

Training programs in the performing arts conducted by the Coordinating Center for Dance comprise three levels: 1) Folk Dance Workshop, 2) CCP Summer Dance Workshop, and 3) Master Classes, Symposia and Lectures.

Folk Dance Workshop is designed for elementary and high school teachers of Philippine folk dances. Summer Dance Workshop is given to classical and modern dance students, teachers, choreographers and professional artists.

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Master classes, symposia and lectures are conducted by local and visiting foreign masters.

Theater Operations Apprentice Program is a periodic training and apprenticeship program for lighting design, stage management and technical direction undertaken with Outreach and Exchange Program which provides "hands-on" training of apprentices from the regions in the various areas of theater operations.

Training Programs for Young Artists are being undertaken through affiliate organizations. These include the following: Pasaknungan Philippines which trains and encourages musically inclined children to develop their potentials through free training in the techniques of violin, violoncello, contrabass and various other stringed instruments; Pangkat Pambata which is a free training course in dance, drama and music for young boys and girls with ages 4 to 12 years; and Philippine Youth Orchestra which trains young solo and orchestra instrumentalists and conductors.

6.5.2 Cultural Agencies

Philippine cultural agencies serve as the government's arm in instilling national pride through the preservation of the country's historical and cultural heritage. There are four major cultural agencies, namely, National Museum, Institute of National Language, National Library, and National Historical Institute.

Through Executive Order 118, the government created the Presidential Commission for Culture and Arts (PCCA) to serve as the national coordinating body to orchestrate the activities of the diverse cultural and artistic groups, including the Cultural Center of the Philippines.

6.5.2.1 The National Library

The National Library is the repository of recorded cultural heritage of the country and other intellectual, literary and information sources. It provides services and access to its resources for the people's intellectual growth, citizenship building, lifelong learning and enlightenment.

The National Library continued its efforts towards the development and preservation of its collections, facilities and resources to meet the information needs of scholars, researchers, students and the general reading public.

In 1991, public libraries totalled 561, an increase of 2.94 percent from the 1990 level of 545. These public libraries included 1 regional, 41 provincial, 32 city, 345 municipal, 82 barrio, 37 deposit stations, 7 district and 8 automobile units.

The total number of researchers or readers in 1990 reached 189,798, 16.27 percent of which were professionals and 83.73 percent were students.

Book collections reached 888,664. Public documents accounted for 57.23 percent of the total book collections while Filipiniana books and reference books comprised 28.26 percent and 14.51 percent, respectively.

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6.5.2.2 The National Historical Institute

The National Historical Institute which was created in 1972 has been at the helm of the government's efforts in instilling national pride in the history and cultural heritage of the Philippines. It has the following primary functions: promotion and preservation of the nation's history and the works of national heroes through historical studies; acquisition, maintenance, restoration and conservation of historic sites, structures and memorabilia; heraldic activities; and commemoration of significant events.

6.5.2.3 The Institute of Philippine Languages

The Institute of Philippine Languages is responsible for the propagation, enrichment, and development of the Filipino national language. Among its various activities are the following: gathering, translating and revising technical vocabularies; editing and expanding the Filipino language; and conducting surveys for orthographic reforms.

In 1990, the Institute completed the revision of Ang Alpabeto and the linguistic analysis of noun affixes of major Filipino dialects; prepared and updated monolingual, bilingual and multilingual dictionaries, scientific and specialized vocabularies, glossaries, thesauruses and other similar language tools; and translated into Filipino and other Philippine dialects laws, code of laws, major legislations, executive issuances, informative materials, outstanding literary works including folklore, epics, and floating literary works of ethnic origin and selected world classics. The Institute also designed and implemented programs and projects for propagation and preservation of the Filipino language in all domains throughout the country; conducted an effective information drive on Filipino and other major Philippine dialects through the school system, government offices and mass media; and implemented Executive Order 335 which enjoins all departments, bureaus, agencies and instrumentalities of the government to take such steps as are necessary for the purpose of using Filipino language in official transactions, communications and correspondences.

6.5.2.4 The National Museum

The National Museum is the repository of the country's historical and cultural artifacts. Among its activities are collecting, identifying and preserving anthropological, archeological, botanical, geological and zoological specimens; conducting basic researches on the social sciences and natural history of the Philippines; conserving and restoring cultural landmarks; and maintaining and improving branch museums scattered across the country. It also conducts guided tours to existing permanent exhibitions and extends technical assistance to other museums and educational institutions.

Collections in the Philippine museums range from small, locally gathered historical artifacts and objects to large collections of government and private

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institutions. Such collections may be found useful in the study and teaching of natural history, science and technology, and cultural history.

Some of the more important museums in the country are listed below:

Museum	*Location*
Archdiocesan Museum	Arzobispado St., Intramuros, Manila
Aga Khan Museum	Mindanao State University, Marawi City
Ateneo Art Gallery	Ateneo de Manila University Loyola Heights, Quezon City
Ayala Museum	Makati, Metro Manila
Baguio-Mt. Province Museum	Baguio City
Bayanihan Folk Arts Museum	Phil. Women's University Taft Avenue, Manila
Bohol Museum	Tagbilaran City, Bohol
Bontoc Museum	Bontoc, Ifugao Province
Cagayan Museum and Historical Research Center	Tuguegarao, Cagayan
Central Bank Money Museum	Central Bank Complex Roxas Boulevard, Manila
Central Luzon State University Museum	Muñoz, Nueva Ecija
Centro Escolar University Museum and Archives	Mendiola St., Manila
Museo ng Kalinangang Pilipino	Cultural Center of the Philippines Roxas Blvd. Manila
Divine Word University Museum	Tacloban City, Leyte
Villa Escudero Museum	Tiaong, Quezon Province
Hiyas ng Bulakan	Malolos, Bulacan
Casa Manila Museum	Intramuros Administration Real cor. Gen. Luna Sts., Manila
UP-Jorge B. Vargas Museum	UP College of Fine Arts Diliman, Quezon City
Lopez Memorial Museum	Chronicle Building Pasig, Metro Manila
Malacanang Heritage Foundation	Malacanang Palace, Manila
Metropolitan Manila Police Museum	Western Police Headquarters United Nations Ave., Manila
Metropolitan Museum of Manila	Central Bank Complex Foundation Roxas Blvd., Manila

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Museo ng Malacañang	Malacañang Palace, Manila
Museo de Oro Foundation, Inc.	Xavier University Cagayan de Oro City
Museo Iloilo	Iloilo City
Museo It Aklan	Kalibo, Aklan
Museo ng Buhay Pilipino	Central Bank Security Printing Plant, East Avenue, Quezon City
National Museum	Old Congress Building Padre Burgos St., Manila
National Museum (Abra)	Tayum, Abra
National Museum (Albay)	Daraga (Cagsawa), Albay
National Museum (Butuan City)	Doongan, Butuan City
National Museum (Cotabato)	Cotabato City
National Museum (Cagayan)	Tuguegarao, Cagayan
National Museum (Benguet)	Kabayan, Benguet
National Museum (Kiangan)	Kiangan, Ifugao
National Museum (Ilocos Sur)	Masingal, Ilocos Sur
National Museum (La Union)	San Fernando, La Union
National Museum (Pangasinan)	Bolinao, Pangasinan
National Museum (Palawan)	Quezon, Palawan
National Museum (Vigan)	Padre Burgos House Vigan, Ilocos Sur
National Museum (Zamboanga)	Zamboanga City
Philippine Army Museum and Library	Fort Bonifacio Makati, Metro Manila
Philippine Museum of Ethnology	Nayong Pilipino, Pasay City
Philippine Science Centrum	Ermita, Manila
Philippine Air Force Museum	Villamor Air Base, Pasay City
Piddig Museum	Piddig, Ilocos Norte
Pila Museum	Pila, Laguna
Ramon Magsaysay Memorabilia	Ramon Magsaysay Center Roxas Boulevard, Manila
Resurreccion Memorial Museum	Luna, La Union
Jose Rizal Shrine	Fort Santiago, Intramuros, Manila
Jose Rizal Shrine	Calamba, Laguna
San Agustin Museum	San Agustin Monastery Intramuros, Manila
Silliman University Anthropology Museum	Dumaguete City
St. Louis University Museum	Baguio City

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St.Therese Museum	St.Therese St. Cebu City
Sulu Ethnological Museum	Notre Dame Jolo College Jolo, Sulu
Sulu Museum and Library	Sangguniang Panlalawigan Jolo, Sulu
University Museum of Anthropology	University of the Philippines Diliman, Quezon City
University of Nueva Caceres Museum	Naga City
University of Santo Tomas Arts and Sciences Museum	España St., Manila
University of San Carlos Museum	Cebu City
Tetra Minizoo and Aquarium Museum	Quad II, Ayala Center, Makati, Metro Manila
UPLB Museum of Natural History	Los Banos, Laguna

6.6 The Motion Picture Industry

The motion picture industry comprising the movies, television programs and videograms is definitely one of the most popular communication vehicles and entertainment forms today. It contributes significantly to the enhancement of human values and makes a great impact on the social and cultural life of the people. To ensure that the motion pictures project positive influence on the masses, the government has taken steps to regulate and develop the motion picture industry by creating regulatory boards such as the Movie and Television Review and Classification Board and Videogram Regulatory Board.

As of 1990, there were 779 cinema houses in the country, registered with MTRCB. Out of this total, 239 or 30.68 percent were located in Metro Manila and the remaining 540 or 69.32 percent were in provincial areas.

6.6.1 The Movie and Television Review and Classification Board

Created under P.D. 1986, the Movie and Television Review and Classification Board (MTRCB) is the government entity which regulates the production and dissemination of movies and television programs with the end view of determining the different levels of audience stability and appreciation.

Specifically, the objectives or functions of the MTRCB directly related to movies and television are the following: maintain the standard for film review to protect the viewing public, specifically minors, from unsuitable contents; ensure that all films for public exhibition are consistent and relevant with current Filipino morals, culture and tradition as standards; monitor all importation and exportation of film, theatrical exhibition, television, commercial and film advertising materials, religious materials or materials for professional growth; and screen all advertising materials related to film or motion picture

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like posters, photo stills, including still frames, newspaper layouts and billboards.

In 1991, MTRCB reviewed a total of 356 films, a decrease of 6.07 percent from the level of 379 films in 1990. Out of this total, 63 percent were foreign films, and 37 percent were local films.

6.6.2 The Videogram Regulatory Board (VRB)

The surge in the number of families owning video cassette recorders brought about the increased demand for video softwares in the mid-1970's and 1980's. To meet this demand, many video outlets emerged. These outlets were mostly supplied by reproducers who pirated films including those currently shown in theaters. By 1985, the video industry in the Philippines was 95 percent pirated. Aside from the adverse effects on the movie industry and government revenues, this development also brought negative cultural elements to the Filipino homes, that of pornography and violence, which comprised about 30 percent of the films.

Thus, on October 5, 1985, Presidential Decree 1987 was promulgated, creating the Videogram Regulatory Board. Its functions are to oversee the regulation and development of the video industry in the country and ensure the maintenance of the videogram as a wholesome medium of entertainment for the people. Specifically, the VRB has the power to supervise, regulate, grant, deny or cancel permits for the importation, exportation, production, copying, sale, lease, exhibition of videograms including, among others, video tapes, discs, cassettes, or any technical improvement or variation thereof. It has also the authority to disapprove, delete objectionable portions from and prohibit the exhibition or showing of videograms which in the judgment of the VRB are objectionable for being immoral, indecent, libelous, contrary to law or good customs, or injurious to the prestige of the Republic of the Philippines or its people.

In 1990, videograms reviewed and classified numbered 1,083. New video establishments reached 776 while licenses issued during the year reached 2,836.

6.7 The National Artists

As the highest tribute to Filipinos who have distinct contributions to Arts and Letters, the National Artist Award was created under Proclamation No. 1001 on April 27, 1972.

1972 Awardee. First to be declared National Artist was painter Fernando Amorsolo, who was posthumously awarded during the state funeral services for him at the Cultural Center of the Philippines.

1973 Awardees. Succeeding awardees were the following: Francisca Reyes-Aquino for Dance, Carlos V. Francisco for Painting, Amado V. Hernandez for Literature, Amado J. Molina for Music, Juan F. Nakpil for Architecture,

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Guillermo Tolentino for Sculpture, and Jose Garcia Villa for Literature. The awards were conferred on June 12, 1973.

1976 Awardees. Napoleon Abueva for Sculpture, Pablo S. Antonio for Architecture, Lamberto Avellana for Drama and Film, Victorio Edades for Painting, Jovita Fuentes for Music, Leonor Orosa-Goquingco for Dance, and Nick Joaquin for Literature.

1981 Awardee. Vicente S. Manansala was posthumously awarded on August 26, 1981 for Painting.

1982 Awardees. Carlos P. Romulo for Literature and Gerardo de Leon for Film.

1987 Awardee. Honorata "Atang" de la Rama for Theater and Music.

1988 Awardees. Antonino Buenaventura for Music and Lucresia Reyes-Urtula for Dance.

1989 Awardee. Lucresia Kasilag for Music.

1991 Awardees. Hernando R. Ocampo for Visual Arts and Lucio San Pedro for Music.

The International Artist Award, created in 1973, is conferred to noted foreign artists who have contributed to the advancement of art and culture in the Philippines. American pianist Van Cliburn and Prima Donna Margot Fonteyn of England have been the recipients of this award.

Sources:

6.1;6.2.1; 6.2.4;6.2.5; 6.3	Department of Education, Culture and Sports.
6.2.6	National Statistics Office.
6.2.7	Professional Regulation Commission.
6.4; 6.7	Cultural Center of the Philippines.
6.5	National Library; National Historical Institute; Institute of Philippine Languages; National Museum.
6.6	Movie and Television Review and Classification Board; Videogram Regulatory Board.

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Table 6.1 Distribution of Schools by Sector, Level of Education Offered and Region: SY 1990-1991

Region	Government and Private				
	Total	Preschool	Elementary	Secondary	Tertiary
Philippines	44,641	4,201	33,081	5,550	809
National Capital Region (NCR)	1,962	676	805	346	135
Cordillera Administrative Region (CAR)	1,341	41	1,107	176	17
I. Ilocos	3,197	370	2,269	515	43
II. Cagayan Valley	2,172	106	1,823	218	25
III. Central Luzon	3,612	446	2,635	468	63
IV. Southern Tagalog	6,100	1,001	4,194	808	97
V. Bicol	3,699	268	2,898	461	72
VI. Western Visayas	4,231	507	3,132	521	71
VII. Central Visayas	3,293	228	2,635	373	57
VIII. Eastern Visayas	3,542	89	3,061	358	34
IX. Western Mindanao	2,758	41	2,423	261	33
X. Northern Mindanao	3,019	84	2,359	400	52
XI. Southern Mindanao	2,935	151	2,257	365	60
XII. Central Mindanao	2,780	193	2,240	280	50

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Table 6.1 Distribution of Schools by Sector, Level of Education Offered and Region: SY 1990-1991 (concluded)

Region	Government					Private				
	Total	Preschool	Elementary	Secondary	Tertiary	Total	Preschool	Elementary	Secondary	Tertiary
Philippines	38,905	2,888	32,449	3,394	174	5,736	1,313	1,632	2,156	635
National Capital Region (NCR)	920	341	466	101	12	1,042	335	339	245	123
Cordillera Administrative Region (CAR)	1,182	13	1,066	97	6	159	28	41	79	11
I. Ilocos	2,885	325	2,197	354	9	312	45	72	161	34
II. Cagayan Valley	1,973	73	1,765	127	8	199	33	58	91	17
III. Central Luzon	2,998	258	2,453	273	14	614	188	182	195	49
IV. Southern Tagalog	5,059	671	3,893	473	22	1,041	330	301	335	75
V. Bicol	3,373	224	2,822	313	14	326	44	76	148	58
VI. Western Visayas	3,836	432	3,008	374	22	395	75	124	147	49
VII. Central Visayas	2,898	135	2,549	205	9	395	93	86	168	48
VIII. Eastern Visayas	3,410	71	3,034	284	21	132	18	27	74	13
IX. Western Mindanao	2,595	18	2,379	190	8	163	23	44	71	25
X. Northern Mindanao	2,672	35	2,390	236	11	347	49	93	164	41
XI. Southern Mindanao	2,524	110	2,211	195	8	411	41	148	170	52
XII. Central Mindanao	2,580	182	2,216	172	10	200	11	41	108	40

Source: Department of Education, Culture and Sports (DECS).

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Table 6.2 Enrolment in Government and Private Schools by Level of Education: SY 1971-72 to SY 1990-91

School year	Grand total	Elementary			Secondary			Tertiary
		Total	Government	Private	Total	Government	Private	government and private
1971-72	8,802,654	7,001,970	6,659,544	342,426	1,800,684	812,260	988,424	n.a.
1972-73	8,897,721	7,022,709	6,667,644	355,065	1,875,012	863,326	1,011,686	n.a.
1973-74	9,167,087	7,209,039	6,845,138	363,901	1,958,048	913,342	1,044,706	n.a.
1974-75	9,541,425	7,429,249	7,043,522	385,727	2,112,176	975,356	1,136,820	n.a.
1975-76	9,888,986	7,597,279	7,197,878	399,401	2,291,707	1,061,731	1,229,976	n.a.
1976-77	11,204,077	7,808,158	7,387,178	420,980	2,508,519	1,205,434	1,303,085	887,400
1977-78	11,538,471	7,861,641	7,424,254	437,387	2,696,460	1,319,898	1,376,562	980,370
1978-79	12,005,538	8,056,013	7,601,115	454,898	2,820,469	1,370,127	1,450,342	1,129,056
1979-80	12,176,332	8,227,355	7,817,450	409,905	2,766,874	1,489,959	1,276,915	1,182,103
1980-81	12,585,032	8,290,448	7,931,168	359,280	3,018,568	1,614,554	1,404,014	1,276,016
1981-82	12,789,904	8,518,283	8,073,290	444,993	2,935,732	1,591,510	1,344,222	1,335,889
1982-83	13,077,001	8,591,267	8,164,061	427,206	3,074,219	1,721,159	1,353,060	1,411,515
1983-84	13,498,520	8,717,469	8,228,554	488,915	3,204,551	1,844,174	1,360,377	1,576,500
1984-85	13,244,804	8,793,773	8,269,825	523,948	3,323,063	1,957,444	1,365,619	1,127,968
1985-86	12,166,354	8,896,920	8,392,103	504,817	3,269,434	1,949,542	1,319,892	n.a.
1986-87	13,702,441	9,229,595	8,639,399	590,196	3,357,014	1,996,377	1,360,637	1,115,832
1987-88	14,556,327	9,601,322	8,964,804	636,518	3,494,460	2,090,073	1,404,387	1,460,545
1988-89	15,017,675	9,972,571	9,323,637	648,934	3,737,104	2,354,620	1,382,484	1,308,000
1989-90	15,762,815	10,284,861	9,604,422	680,439	3,961,639	2,516,729	1,444,910	1,516,315[a]
1990-91	16,170,160	10,427,077	9,727,575	699,502	4,033,597	2,564,045	1,469,552	1,709,486[a]

[a] Includes 361,736 vocational/technical enrolment.

Source: Department of Education, Culture and Sports.Source: Department of Education, Culture and Sports (DECS).

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Figure 6.1 Percentage Distribution of Enrolment in Public and Private Schools by Level of Education: SY 1988-89 to SY 1990-91

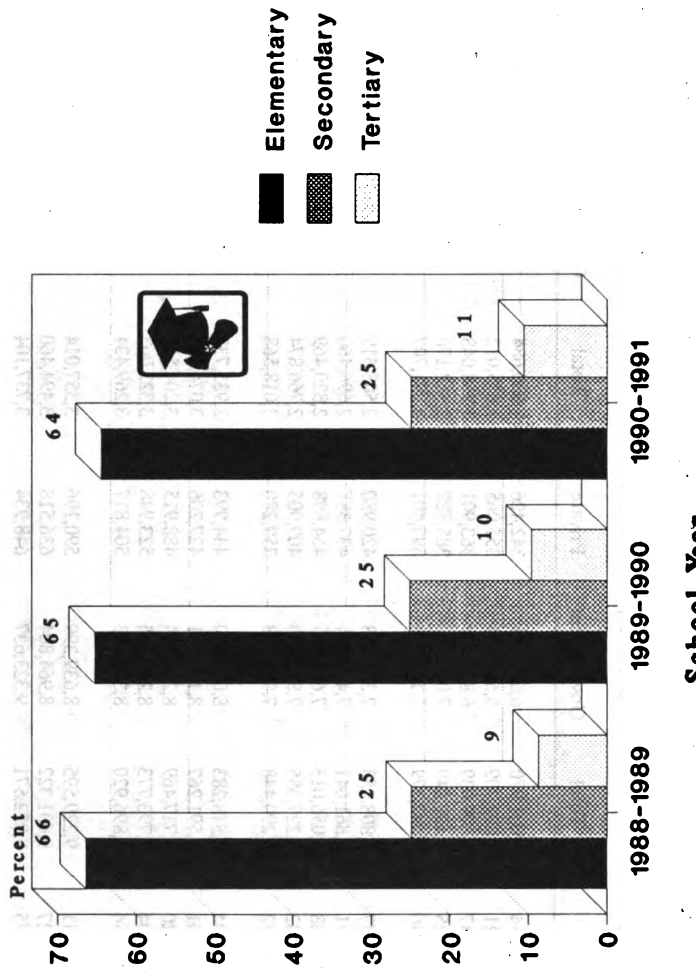

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Table 6.3 Enrolment in Government and Private Schools by Level of Education and by Region: SY 1990-91 and SY 1989-90

Region	Grand total	SY 1990-1991 Elementary			Secondary			Vocational/ technical	Tertiary government and private
		Total	Government	Private	Total	Government	Private		
Philippines	16,170,160	10,427,077	9,727,575	699,502	4,033,597	2,564,045	1,469,552	361,736	1,347,750
National Capital Region (NCR)	2,243,114	1,132,632	869,179	263,453	561,309	327,129	234,180	153,544	395,629
Cordillera Administrative Region (CAR)	336,328	200,506	179,951	20,555	80,352	45,881	34,471	11,618	43,852
I. Ilocos	982,480	603,245	581,398	21,847	280,274	198,003	82,271	22,901	76,060
II. Cagayan Valley	601,676	398,265	385,658	12,607	151,820	93,148	58,672	7,399	44,192
III. Central Luzon	1,588,907	1,056,636	969,534	87,102	426,390	234,024	192,366	14,910	90,971
IV. Southern Tagalog	2,156,180	1,419,509	1,319,418	100,091	586,952	332,482	254,470	23,047	126,672
V. Bicol	1,137,674	765,355	744,639	20,716	267,100	183,046	84,054	22,902	82,317
VI. Western Visayas	1,490,767	941,949	907,815	34,134	408,148	322,603	85,545	37,307	103,363
VII. Central Visayas	1,124,143	738,527	705,003	33,524	269,556	140,912	128,644	18,810	97,250
VIII. Eastern Visayas	799,428	544,161	535,346	8,815	181,937	140,281	41,656	16,089	57,241
IX. Western Mindanao	760,301	568,127	554,665	13,462	155,060	113,381	41,679	5,102	32,012
X. Northern Mindanao	950,624	627,369	604,233	23,136	221,759	139,193	82,566	8,581	92,915
XI. Southern Mindanao	1,129,900	788,140	741,511	46,629	274,707	180,915	93,792	14,918	52,135
XII. Central Mindanao	868,638	642,656	629,225	13,431	168,233	113,045	55,186	4,608	53,141

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Table 6.3 Enrolment in Government and Private Schools by Level of Education and by Region: SY 1990-91 and SY 1989-90 (concluded)

Region	Grand total	SY 1989-1990 Elementary			Secondary			Vocational/ technical	Tertiary government and private
		Total	Government	Private	Total	Government	Private		
Philippines	16,170,160	10,284,861	9,604,422	680,439	3,961,639	2,516,729	1,444,910	291,000	1,225,315
National Capital Region (NCR)	2,243,114	1,128,420	855,180	273,240	567,187	323,251	243,936	137,733	359,663
Cordillera Administrative Region (CAR)	336,328	197,037	181,211	15,826	77,020	43,624	33,396	10,493	39,865
I. Ilocos	982,480	583,100	559,374	23,726	273,962	191,286	82,676	11,186	69,146
II. Cagayan Valley	601,676	392,543	380,673	11,870	147,434	90,404	57,030	6,745	40,175
III. Central Luzon	1,588,907	1,023,143	942,440	80,703	416,661	224,671	191,990	13,607	82,791
IV. Southern Tagalog	2,156,180	1,403,840	1,313,786	90,054	559,495	315,860	243,635	21,080	115,155
V. Bicol	1,137,674	752,686	734,599	18,087	268,744	189,239	79,505	21,000	74,833
VI. Western Visayas	1,490,767	939,272	906,063	33,209	409,223	323,267	85,956	6,271	93,966
VII. Central Visayas	1,124,143	725,033	692,067	32,966	253,343	128,968	124,375	17,400	88,409
VIII. Eastern Visayas	799,428	542,343	534,622	7,721	176,778	137,464	39,314	15,000	52,037
IX. Western Mindanao	760,301	571,963	559,470	12,493	153,749	113,705	40,044	4,749	29,101
X. Northern Mindanao	950,624	636,669	614,227	22,442	215,752	136,754	78,998	7,868	84,468
XI. Southern Mindanao	1,129,900	784,927	740,532	44,395	262,498	173,321	89,177	13,558	47,395
XII. Central Mindanao	868,638	603,885	590,178	13,707	179,793	124,915	54,878	4,310	48,311

Source: Department of Education, Culture and Sports.

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Table 6.4 Highest Education Enrolment and Graduate by Major Field of Study: SY 1989-90 and SY 1990-91

Program/ Major Field of Study	SY 1990-91	SY 1989-90
Total	1,347,750	1,307,722
Arts and Sciences	196,711	191,772
Teacher Training and Education Science	242,828	185,649
Engineering and Technology	273,406	281,513
Medicine and Health	176,252	160,391
Commerce, Business Management	392,958	421,385
Agriculture, Foresty, Fisheries, and Veterinary Medicine	43,458	39,866
Law	20,405	25,838
Religion/Theology	1,730	1,308

Note : No breakdown for the year 1990-91.

Source: Department of Education, Culture and Sports.

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Table 6.5 Enrolment and Graduates of Nonformal Education by Course and by Region: CY 1990 and 1991

Region	Total		Functional literacy		Livelihood skills development	
	Enrolment	Graduates	Enrolment	Graduates	Enrolment	Graduates
Philippines	387,485	276,451	122,296	54,154	265,189	222,297
National Capital Region (NCR)	25,695	18,166	1,069	513	24,626	17,653
Cordillera Administrative Region (CAR)	10,246	4,605	5,317	1,619	4,929	2,986
I. Ilocos	14,081	38,217	1,716	420	12,365	6,095
II. Cagayan Valley	14,604	7,516	2,960	2,500	11,644	11,618
III. Central Luzon	11,244	26,334	2,254	1,158	8,990	5,837
IV. Southern Tagalog	35,031	18,006	12,043	12,043	22,988	21,230
V. Bicol	43,773	29,320	16,785	1,768	26,988	23,614
VI. Western Visayas	48,668	33,310	16,398	12,794	32,270	26,865
VII. Central Visayas	96,627	82,384	24,168	9,096	72,459	65,843
VIII. Eastern Visayas	9,844	8,518	2,122	1,462	7,722	7,351
IX. Western Mindanao	12,680	8,977	4,698	1,989	7,982	4,798
X. Northern Mindanao	28,452	20,252	11,220	2,161	17,232	15,743
XI. Southern Mindanao	26,797	27,708	16,169	1,254	10,628	8,298
XII. Central Mindanao	9,743	14,177	5,377	5,377	4,366	4,366

Source: Department of Education, Culture and Sports.

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Table 6.6 Number of Foreign Students (Nonimmigrants) Issued Study Permits: SY 1983-84 to SY 1990-91

Nationality	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
Total	8,151	4,640	5,021	5,480	4,608	5,306	6,858	6,471
American	2,250	501	511	377	303	338	336	241
British	964	454	465	148	126	150	125	138
Chinese	555	260	245	161	169	229	348	386
Indonesian	277	347	348	375	532	282	527	456
Iranian	480	309	294	132	119	228	185	180
Japanese	96	60	55	69	62	-	62	57
Jordanian	-	265	1,015	1,450	1,400	1,169	2,197	1,680
Korean	186	337	287	336	347	295	555	890
Malaysian	77	83	58	53	84	-	63	45
Nigerian	255	227	182	150	195	119	84	64
Thai	1,957	832	776	1,088	893	1,028	726	490
Australian	-	-	-	-	-	-	-	5
Bangladeshi	-	-	-	-	-	77	48	60
Canadian	-	-	-	-	-	-	-	-
Indian	-	-	-	-	-	71	75	63
Pakistani	-	134	114	159	177	424	648	885
Singaporean	-	5	5	2	7	-	-	4
Other nationalities	1,054	826	666	980	194	896	879	827

Source: Bureau of Youth Affairs, Foreign Students and Foreign Schools.

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Table 6.7 Number of Successful NCEE Examinees: SY 1975-76 to SY 1992-93

School year	Total number of examinees	Passed		Cut-off score (Percentile rank)
		Number	Percent	
Total	12,283,529	6,676,947	55.0	-
1975-76	390,814	273,570	70.0	30
1976-77	414,686	290,280	70.0	30
1977-78	450,070	315,049	70.0	30
1978-79	497,354	348,148	70.0	30
1979-80[a]	551,770	-	-	35
1980-81	569,799	370,369	65.0	35
1981-82	663,718	431,417	65.0	35
1982-83	700,436	420,262	60.0	40
1983-84	745,970	410,284	55.0	45
1984-85	743,832	409,108	55.0	45
1985-86[b]	732,131	402,832	55.0	45
1986-87	717,397	393,758	54.9	45
1987-88	802,342	405,095	50.5	50
1988-89	824,382	414,570	50.3	50
1989-90	882,536	445,416	50.5	50
1990-91	883,575	434,996	49.2	50
1991-92	880,482	473,364	53.8	50
1992-93	832,295	438,429	52.7	50

[a] Results were cancelled as per MEC Order No. 27, s. 1979 dated May 28, 1979.
[b] Excludes 4,839 NCEE results due to rampant irregularities in the school concerned.

Source: National Education Testing Center.

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Table 6.8 Number of Scholarship Awardees by Program: SY 1969-1970 to 1991-1992

School year	Total	SSP	NISGP	SEGEAP	WSGPSP	TLSP	DCPSP	SNPLP	APCCSP	Fellowship program at RYUKYUS U.	NRDP
1969-1970	174	174	-	-	-	-	-	-	-	-	-
1970-1971	80	80	-	-	-	-	-	-	-	-	-
1971-1972	139	139	-	-	-	-	-	-	-	-	-
1972-1973	250	250	-	-	-	-	-	-	-	-	-
1973-1974	4,215	215	4,000	-	-	-	-	-	-	-	-
1974-1975	1,193	243	950	-	-	-	-	-	-	-	-
1975-1976	1,570	257	1,308	-	-	5	-	-	-	-	-
1976-1977	3,967	157	1,180	-	775	1	-	1,854	-	-	-
1977-1978	4,460	185	1,170	475	662	4	-	1,964	-	-	-
1978-1979	3,572	204	761	151	308	3	-	2,145	-	-	-
1979-1980	5,726	1,094	1,194	242	655	3	-	2,538	-	-	-
1980-1981	4,205	300	915	175	356	5	-	2,454	-	-	-
1981-1982	3,908	325	151	115	356	3	-	2,958	-	-	-
1982-1983	4,690	188	879	78	34	2	6	3,503	-	-	-
1983-1984	4,875	377	781	211	-	3	1	3,502	-	-	-

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Table 6.8 Number of Scholarship Awardees by Program: SY 1969-1970 to 1991-1992 (concluded)

School year	Total	SSP	NISGP	SEGEAP	WSGPSP	TLSP	DCPSP	SNPLP	APCCSP	Fellowship program at RYUKYUS U.	NRDP
1984-1985	5,219	488	483	96	1,065	-	6	3,081	-	-	-
1985-1986	3,934	451	1,104	137	416	-	10	1,816	-	-	-
1986-1987	3,047	188	1,174	86	437	-	7	1,149	4	2	-
1987-1988	3,150	407	1,212	154	31	-	-	1,224	-	-	122
1988-1989	3,522	384	971	209	262	3	-	1,417	-	1	171
1989-1990	8,474	1,245	4,151	1,068	-	-	-	2,583	-	-	1,960
1990-1991	11,629	1,432	4,243	1,449	-	-	-	2,129	-	-	2,376
1991-1992	10,956	1,302	2,944	1,595	-	-	-	2,500	-	-	2,615

Notes:

SSP - State Scholarship Program
NISGP - National Integration Study Grant Program
SEGEAP - Selected Ethnic Group Educational Assistance Program
WSGPSP - Work Study Grant Program Southern Philippines
TLSP - Teijin Limited Scholarship Program
DCPSP - Design Center Philippines Scholarship Program
SNPLP - Study-Now-Pay-Later Plan
APCCSP - American-Philippines Chamber of Commerce Study Program
NRDP - National Reconciliation and Development Program

Source: National Scholarship and Student Loan Center.

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Table 6.9 Distribution of Study-Now-Pay-Later Plan Grantees per Lending Institution: SY 1984-85 to SY 1991-92

Lending institutions	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Total	3,317	1,714	1,149	1,224	1,417	[a]2,583	6,915	9,415
GSIS	741	531	596	625	588	358	1,638	2,138
SSS	616	627	422	520	300	700	1,811	2,311
PNB	613	-	-	-	242	448	1,123	1,623
DBP	606	-	-	-	95	385	1,262	1,762
LBP	741	556	131	79	192	437	1,081	1,581

Notes:

GSIS - Government Service Insurance System
SSS - Social Security System
PNB - Philippine National Bank
DBP - Development Bank of the Philippines
LBP - Land Bank of the Philippines

[a] Includes 255 unutilized slots.

Source: National Scholarship and Student Loan Center.

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Table 6.10 Education Indicators in Government and Private Elementary Schools: SY 1989-90 and SY 1990-91

Indicator	SY 1990-91 Government	SY 1990-91 Private	SY 1989-90 Government	SY 1989-90 Private
Retention rate	91.25	96.30	92.06	97.96
Participation rate	95.26	3.84	105.35	7.46
Transition rate	93.47	95.84	94.32	98.29
Cohort survival rate	68.15	98.42	67.50	88.59
Completion rate	65.99	97.57	64.97	85.93
Teacher-student ratio	1:33	1:35	1:32	1:37
Dropout rate	1.69	1.09	1.74	1.29

Notes:

Retention rate = (Enrolment in Gr. II-VI t/enrolment in Gr. I-V) x 100
Participation rate = (Enrolment in Gr. I-VI/population 7-12) x 100
Transition rate = (Enrolment in Gr. V in SY t/enrolment in Grade IV in SY t-1) x 100
Cohort-survival rate = (Enrolment in Grade VI in SY t/enrolment in Grade I in SY t-5) x 100
Completion rate = (Enrolment in Gr. I/graduates in SY 1986-97) x 100
Teacher-student ratio = (No. of teachers in SY t/ enrolment in SY t)
Dropout rate = (No. of dropouts in SY t/enrolment in SY t) x 100

Source: Department of Education, Culture and Sports.

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Table 6.11 Education Indicators in Government and Private Secondary Schools: SY 1988-89, SY 1989-90 and SY 1990-91

Indicator	SY 1990-91		SY 1989-90		SY 1988-89	
	Government	Private	Government	Private	Government	Private
Enrolment ratio	45.90	26.31	46.21	26.53	10.76	6.32
Retention rate	86.61	92.46	90.12	95.61	93.58	90.51
Participation rate	33.82	20.89	34.98	20.74	33.54	23.37
Transition rate	67.42	452.84	n.a.	n.a.	72.35	n.a
Cohort survival rate	74.97	78.79	76.65	82.95	73.57	80.08
Teacher-student ratio	1:31	1:36	1:31	1:36	1:30	n.a.

Notes:

Enrolment ratio = (Enrolment in Yr. I-IV/population ages 13-16) x 100
Retention rate = (Enrolment in Yr. II-IV in SY t/enrolment in Yrs. I-III in SY t-1) x 100
Participation rate = (Enrolment in Secondary level/population of 13-16) x 100
Transition rate = (Enrolment in Yr. I in SY t/graduates in elementary in SY t-1) x 100
Cohort-survival rate = (Enrolment in Year IV in SY t/enrolment in Year I in SY t-3) x 100
Teacher-student ratio = (No. of teachers in Yr. I-IV/enrolment in yr. I-IV)

Source: Department of Education, Culture and Sports.

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Table 6.12 Number of Teachers in Government Schools by Level of Education and by Region: SY 1989-1990 and SY 1990-1991

Region	SY 1990-91		SY 1989-90	
	Elementary	Secondary	Elementary	Secondary
Philippines	311,013	122,688	297,043	79,083
National Capital Region (NCR)	33,899	20,039	25,911	12,547
Cordillera Administrative Region (CAR)	6,507	2,891	6,128	1,744
I. Ilocos	20,387	8,721	20,335	6,237
II. Cagayan Valley	11,788	4,876	11,905	3,042
III. Central Luzon	29,713	11,210	27,653	6,452
IV. Southern Tagalog	40,575	17,463	38,442	9,921
V. Bicol	23,609	7,988	23,525	5,155
VI. Western Visayas	30,496	12,100	30,470	9,824
VII. Central Visayas	22,338	7,179	21,830	3,537
VIII. Eastern Visayas	19,288	5,660	19,606	4,528
IX. Western Mindanao	16,476	4,415	16,592	3,201
X. Northern Mindanao	17,829	6,542	17,660	4,234
XI. Southern Mindanao	21,695	8,087	20,560	5,381
XII. Central Mindanao	16,413	5,517	16,426	3,280

Source: Department of Education, Culture and Sports.

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Table 6.13 Urban and Rural Literacy of Private Household Population 15 Years Old and Over by Age Group and Sex: 1980 and 1990

Age group	Both sexes Total	Both sexes Literate	Both sexes Illiterate	Male Total	Male Literate	Male Illiterate	Female Total	Female Literate	Female Illiterate
1990									
Philippines	36,565,403	34,215,672	2,349,731	18,175,854	17,080,157	1,095,697	18,389,549	17,135,515	1,254,034
15-19	6,640,651	6,399,740	240,911	3,320,861	3,185,990	134,871	3,319,790	3,213,750	106,040
20-24	5,768,325	5,584,611	183,714	2,866,207	2,770,717	95,490	2,902,118	2,813,894	88,224
25-29	4,945,251	4,755,904	189,347	2,459,263	2,366,484	92,779	2,485,988	2,389,420	96,568
30-34	4,201,026	4,039,140	161,886	2,110,791	2,030,543	80,248	2,090,235	2,008,597	81,638
35-39	3,501,621	3,329,687	171,934	1,768,532	1,686,711	81,821	1,733,089	1,642,976	90,113
40-44	2,753,843	2,595,654	158,189	1,389,855	1,314,777	75,078	1,363,988	1,280,877	83,111
45-49	1,221,488	2,037,188	184,300	1,113,345	1,026,493	86,852	1,108,143	1,010,695	97,448
50-54	1,905,828	1,726,810	179,018	944,837	862,310	82,527	960,991	864,500	96,491
55-59	1,439,403	1,256,634	182,769	705,646	626,163	79,483	733,757	630,471	103,286
60-64	1,127,881	944,906	182,975	547,008	468,644	78,364	580,873	476,262	104,611
65-69	807,620	642,877	164,743	376,777	309,597	67,180	430,843	333,280	97,563
70-74	565,339	423,231	142,108	264,981	205,521	75,460	300,358	217,710	82,648
75 and over	687,127	479,290	207,837	307,751	226,207	81,544	379,376	253,083	126,293
Urban	18,585,088	18,085,025	500,063	9,006,531	8,794,545	211,986	9,578,557	9,290,480	288,077
15-19	3,254,804	3,200,651	54,153	1,555,357	1,527,162	28,195	1,699,447	1,673,489	25,958
20-24	3,028,003	2,990,617	37,386	1,450,959	1,431,873	19,086	1,577,044	1,558,744	18,300
25-29	2,611,458	2,576,104	35,354	1,267,259	1,250,327	16,932	1,344,199	1,325,777	18,422
30-34	2,234,000	2,203,632	30,368	1,103,739	1,089,346	14,393	1,130,261	1,114,286	15,975
35-39	1,839,870	1,808,933	30,937	919,281	905,229	14,052	920,589	903,704	16,885
40-44	1,442,630	1,412,950	29,680	724,979	711,827	13,152	717,651	701,123	16,528
45-49	1,082,001	1,047,966	34,035	538,312	523,575	14,737	543,689	524,391	19,298
50-54	921,215	885,859	35,356	450,337	435,608	14,729	470,878	450,251	20,627

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Table 6.13 Urban and Rural Literacy of Private Household Population 15 Years Old and Over by Age Group and Sex: 1980 and 1990 (continued)

Age group	Both sexes Total	Both sexes Literate	Both sexes Illiterate	Male Total	Male Literate	Male Illiterate	Female Total	Female Literate	Female Illiterate
55-59	684,758	646,770	37,988	328,875	314,141	14,734	355,883	332,629	23,254
60-64	533,380	492,221	41,159	252,211	236,750	15,461	281,169	255,471	25,698
65-69	372,989	333,716	39,273	166,602	152,676	13,926	206,387	181,040	25,347
70-74	256,677	221,193	35,484	113,278	100,399	12,879	143,399	120,794	22,605
75 and over	323,303	264,413	58,890	135,342	115,632	19,710	187,961	148,781	39,180
Rural	17,980,315	16,130,647	1,849,668	9,169,323	8,285,612	883,711	8,810,992	7,845,035	965,957
15-19	3,385,847	3,199,089	186,758	1,765,504	1,658,828	106,676	1,620,343	1,540,261	80,082
20-24	2,740,322	2,593,994	146,328	1,415,248	1,338,844	76,404	1,325,074	1,255,150	69,924
25-29	2,333,793	2,179,800	153,993	1,192,004	1,116,157	75,847	1,141,789	1,063,643	78,146
30-34	1,967,026	1,835,508	131,518	1,007,052	941,197	65,855	959,974	894,311	65,663
35-39	1,661,751	1,520,754	140,997	849,251	781,482	67,769	812,500	739,272	73,228
40-44	1,311,213	1,182,704	128,509	664,876	602,950	61,926	646,337	579,754	66,583
45-49	1,139,487	989,222	150,265	575,033	502,918	72,115	564,454	486,304	78,150
50-54	984,613	840,951	143,662	494,500	426,702	67,798	490,113	414,249	75,864
55-59	754,645	609,864	144,781	376,771	312,022	64,749	377,874	297,842	80,032
60-64	594,501	452,685	141,816	294,797	231,894	62,903	299,704	220,791	78,913
65-69	434,631	309,161	125,470	210,175	156,921	53,254	224,456	152,240	72,216
70-74	308,662	202,038	106,624	151,703	105,122	46,581	156,959	96,916	60,043
75 and over	363,824	214,877	148,947	172,409	110,575	61,834	191,415	104,302	87,113

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Table 6.13 Urban and Rural Literacy of Private Household Population 15 Years Old and Over by Age Group and Sex: 1980 and 1990 (continued)

Age group	Both sexes Total	Both sexes Literate	Both sexes Illiterate	Male Total	Male Literate	Male Illiterate	Female Total	Female Literate	Female Illiterate
1980									
Philippines	27,734,739	23,107,817	4,626,922	13,658,525	11,458,040	2,200,485	14,076,214	11,649,777	2,426,437
15-19	5,231,468	4,819,901	411,567	2,551,220	2,328,808	222,412	2,680,248	2,491,093	189,155
20-24	4,543,903	4,152,813	391,090	2,177,803	1,977,597	200,206	2,366,100	2,175,216	190,884
25-29	3,824,256	3,424,685	399,571	1,894,425	1,691,259	203,166	1,929,831	1,733,426	196,405
30-34	2,983,656	2,633,931	349,725	1,509,013	1,330,215	178,798	1,474,643	1,303,716	170,927
35-39	2,410,285	2,024,075	386,210	1,220,953	1,027,551	193,402	1,189,332	996,524	192,808
40-44	2,071,104	1,703,776	367,328	1,041,396	863,120	178,276	1,029,708	840,656	189,052
45-49	1,656,004	1,265,178	390,826	821,750	642,101	179,649	834,254	623,077	211,177
50-54	1,383,561	1,002,095	381,466	680,792	509,625	171,167	702,769	492,470	210,299
55-59	1,092,620	720,936	371,684	527,195	366,360	160,835	565,425	354,576	210,849
60-64	904,223	532,336	371,887	440,261	276,804	163,457	463,962	255,532	208,430
65-69	717,261	399,766	317,495	348,668	209,205	139,463	368,593	190,561	178,032
70-74	439,672	228,109	211,563	215,741	123,811	91,930	223,931	104,298	119,633
75 and over	476,726	200,216	276,510	229,308	111,584	117,724	247,418	88,632	158,786
Urban	10,982,522	10,229,275	753,247	5,202,099	4,891,670	310,429	5,780,423	5,337,605	442,818
15-19	2,068,611	2,006,324	62,287	943,139	913,399	29,740	1,125,472	1,092,925	32,547
20-24	1,910,099	1,852,967	57,132	870,689	844,321	26,368	1,039,410	1,008,646	30,764
25-29	1,609,932	1,556,487	53,445	770,237	745,461	24,776	839,695	811,026	28,669
30-34	1,259,872	1,210,429	49,443	626,478	603,076	23,402	633,394	607,353	26,041
35-39	924,410	871,840	52,570	459,432	435,629	23,803	464,978	436,211	28,767
40-44	793,179	739,646	53,533	391,272	368,400	22,872	401,907	371,246	30,661
45-49	615,459	555,910	59,549	299,642	275,624	24,018	315,817	280,286	35,531
50-54	512,293	450,524	61,769	246,834	222,889	23,945	265,459	227,635	37,824

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Table 6.13 Urban and Rural Literacy of Private Household Population 15 Years Old and Over by Age Group and Sex: 1980 and 1990 (concluded)

Age group	Both sexes Total	Both sexes Literate	Both sexes Illiterate	Male Total	Male Literate	Male Illiterate	Female Total	Female Literate	Female Illiterate
50-54	512,293	450,524	61,769	246,834	222,889	23,945	265,459	227,635	37,824
55-59	387,588	325,826	61,762	181,242	158,428	22,814	206,346	167,398	38,948
60-64	312,771	246,151	66,620	144,379	119,564	24,815	168,392	126,587	41,805
65-69	253,801	191,584	62,217	115,833	92,767	23,066	137,968	98,817	39,151
70-74	160,490	115,252	45,238	74,701	58,074	16,627	85,789	57,178	28,611
75 and over	174,017	106,335	67,682	78,221	54,038	24,183	95,796	52,297	43,499
Rural	16,752,217	12,878,542	3,873,675	8,456,426	6,566,370	1,890,056	8,295,791	6,312,172	1,983,619
15-19	3,162,857	2,813,577	349,280	1,608,081	1,415,409	192,672	1,554,776	1,398,168	156,608
20-24	2,633,804	2,299,846	333,958	1,307,114	1,133,276	173,838	1,326,690	1,166,570	160,120
25-29	2,214,324	1,868,198	346,126	1,124,188	945,798	178,390	1,090,136	922,400	167,736
30-34	1,723,784	1,423,502	300,282	882,535	727,139	155,396	841,249	696,363	144,886
35-39	1,485,875	1,152,235	333,640	761,521	591,922	169,599	724,354	560,313	164,041
40-44	1,277,925	964,130	313,795	650,124	494,720	155,404	627,801	469,410	158,391
45-49	1,040,545	709,268	331,277	522,108	366,477	155,631	518,437	342,791	175,646
50-54	871,268	551,571	319,697	433,958	286,736	147,222	437,310	264,835	172,475
55-59	705,032	395,110	309,922	345,953	207,932	138,021	359,079	187,178	171,901
60-64	591,452	286,185	305,267	295,882	157,240	138,642	295,570	128,945	166,625
65-69	463,460	208,182	255,278	232,835	116,438	116,397	230,625	91,744	138,881
70-74	279,182	112,857	166,325	141,040	65,737	75,303	138,142	47,120	91,022
75 and over	302,709	93,881	208,828	151,087	57,546	93,541	151,622	36,335	115,287

Source: 1990 Census of Population and Housing, National Statistics Office.

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Table 6.13a Literacy Rate of the Household Population 10 Years Old and Over by Region: 1970, 1980, and 1990

Area	1970	1980	1990
Philippines	83.4	82.7	93.5
National Capital Region (NCR)	96.0	96.6	99.1
Cordillera Administrative Region (CAR)	72.1	76.2	89.0
I. Ilocos	84.4	86.0	95.8
II. Cagayan Valley	82.1	81.4	91.3
III. Central Luzon	90.4	88.5	97.8
IV. Southern Tagalog	90.8	85.8	96.8
V. Bicol	86.4	83.5	95.3
VI. Western Visayas	82.2	81.2	93.0
VII. Central Visayas	78.0	76.0	91.0
VIII. Eastern Visayas	77.6	76.5	89.8
IX. Western Mindanao	65.5	65.0	81.3
X. Northern Mindanao	83.7	83.4	92.9
XI. Southern Mindanao	79.1	80.1	91.9
XII. Central Mindanao	66.7	66.5	83.0

Source: Census of Population and Housing, National Statistics Office.

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Table 6.14 Number of Examinees Who Passed Board Examinations by Profession: 1982-1992

Profession	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Total	45,261	38,678	40,179	40,413	35,277	31,620	33,169	28,872	9,338	54,064	55,686
Agricultural Engineer	421	327	429	454	102	88	82	77	n.a.	95	65
Architect	481	161	501	623	684	364	371	369	317	406	314
Certified Public Accountant	5,300	4,762	5,625	4,875	4,243	3,850	3,373	2,538	n.a.	1,611	1,379
Chemical Engineer	670	1,251	1,061	1,218	981	996	598	432	n.a.	377	482
Chemist	-	212	263	241	120	44	114	86	n.a.	63	61
Civil Engineer	3,566	4,717	5,299	5,623	3,206	3,936	2,119	978	n.a.	3,337	2,563
Contractor	a	a	a	a	a	a	a	a	a	-	-
Customs Broker	179	-	-	239	-	192	144	n.a.	n.a.	90	52
Deck Officer	4,751	4,881	4,665	4,325	2,888	812	1,078	n.a.	n.a.	5,768	2,797
Dentist	1,053	1,176	1,425	1,530	1,634	948	2,183	1,125	653	1,986	1,113
Dietician Nutritionist	1,230	510	390	330	338	290	265	306	n.a.	265	183
Electrical Engineer	2,255	1,934	2,118	2,754	2,540	2,619	2,574	994	348	2,837	2,413
Electronic Communication Engineer	238	-	209	846	783	802	903	1,010	123	1,135	720
Engine Officer	3,831	3,989	4,085	4,064	3,037	1,220	78	130	n.a.	5,768	4,436
Forester	229	-	533	286	284	-	201	n.a.	n.a.	45	59
Geodetic Engineer	328	275	553	354	86	269	233	n.a.	n.a.	218	399
Geologist	156	-	113	74	53	-	39	n.a.	n.a.	10	16
Master Plumber	58	54	84	71	29	20	14	9	n.a.	23	26
Mechanical Engineer	2,456	3,132	2,965	2,457	2,024	2,693	2,540	981	n.a.	842	561

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Table 6.14 Number of Examinees Who Passed Board Examinations by Profession: 1982-1992 (concluded)

Profession	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Medical Technologist	691	824	889	1,016	1,024	1,502	1,566	2,336	421	1,745	1,325
Midwife	3,205	2,583	2,048	1,792	2,486	3,466	4,343	6,352	5,276	6,700	6,695
Mining Engineer	84	87	89	126	88	-	50	51	n.a.	43	48
Naval Architect	10	37	44	23	29	11	18	8	n.a.	2	6
Nurse	9,741	5,351	2,960	3,112	3,532	3,795	6,351	7,366	n.a.	16,334	24,654
Optometrist	454	-	265	324	491	251	227	315	n.a.	302	283
Pharmacist	530	637	635	740	608	506	864	813	402	860	1,543
Physical Therapist/ Occupational Therapist	88	34	91	326	189	147	141	235	n.a.	199	318
Physician	1,496	1,678	1,536	1,468	3,076	2,866	2,818	2,537	2,200	2,440	2,550
Sanitary Engineer	106	17	107	115	85	51	91	111	n.a.	111	84
Social Worker	1,305	-	906	425	307	246	n.a.	n.a.	n.a.	211	268
Sugar Technologist	-	17	9	-	-	-	-	n.a.	n.a.	n.a.	n.a.
Veterinarian	335	-	198	489	258	335	305	317	n.a.	168	175
Metallurgical Engineer [1]	14	21	17	17	11	23	17	12	n.a.	13	17
Interior Designer	-	11	41	32	45	39	34	n.a.	n.a.	48	42
Aeronautical Engineer	-	-	26	35	21	27	45	18	n.a.	12	39

a Transferred to the jurisdiction of the Department of Trade and Industry.
[1] Started in 1982.

Note: Year refers to year released.

Source: Professional Regulation Commission, Public Information and Statistics Division.

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Table 6.15 Number of Successful Bar Examinees: 1968-1991

Year	Total number of examinees	Passed	
		Number	Percent
1968	1,643	347	21.12
1969	1,731	495	28.60
1970	1,761	492	27.94
1971	1,835	621	33.84
1972	1,907	547	28.68
1973	1,631	610	37.40
1974	1,956	685	35.02
1975	1,950	686	35.18
1976	1,979	985	49.77
1977	1,714	1,038	60.56
1978	1,890	1,076	56.93
1979	1,824	903	49.51
1980	1,800	605	33.61
1981	1,924	841	43.71
1982	2,112	433	20.50
1983	2,455	523	21.30
1984	2,582	563	21.80
1985	2,719	701	25.78
1986	2,600	491	18.88
1987	2,832	480	17.90
1988	2,840	689	24.26
1989	3,012	639	21.22
1990	3,100	866	27.9
1991	3,194	569	17.8

Source: Supreme Court of the Philippines, Bar Examination Division.

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Chapter 7
Health and Welfare

This chapter gives an overview of the health status of the country's population and the various programs and services undertaken by the Department of Health, Department of Social Welfare and Development and the Philippine National Red Cross. It also presents data on medical and paramedical manpower as well as the number of hospitals and health facilities in the country. Benefits derived from the Government Service Insurance System and the Social Security System are likewise presented.

7.1 Health

7.1.1 Health of the Nation

Table 7.1 presents an overview of the health of the nation from 1989-1992, based on data gathered by the Department of Health.

The *Crude Birth Rate* (CBR), which indicates the state of population growth in the country, showed a fluctuating trend. It declined from 23.20 in 1989 to 22.40 in 1990 but registered a minimal increase of 0.31 and 0.16 per 1,000 population from 1990 to 1991 and 1991 to 1992, respectively. The average CBR from 1989 to 1992 was 22.80 per 1,000 population. In 1992, CBR stood at 22.87 per 1,000 population. Meanwhile, the status of mortality which is represented by Crude Death Rate (CDR) exhibited a decreasing trend from 4.40 in 1989 to 3.75 in 1992. The 1989 CDR represented a reduction of 1.10 persons who died per thousand population from the 1988 crude death rate.

The *Infant Mortality Rate* (IMR) specifically measures the risk of dying among infants less than one year of age. In 1992, IMR was 38.50 per 1,000 live births, up by 19.80 or 51 percent from the previous year's 18.70 per thousand live births. It is noticeable here that IMR, from 1989 to 1991, decreased significantly, while in 1992, it showed an increase such that IMR is even higher than that recorded in 1989. *Maternal Mortality Rate* measures maternity-related mortality among women during pregnancy, childbirth and postpartum, except those from accidental or incidental causes. In 1992, there were 1,195 maternal deaths registered with a rate of 0.82 per thousand live births. The lowest rate recorded during the four-year period was in 1989 with 0.70 per 1,000 live births.

Death rate from communicable diseases improved significantly from 212.60 in 1991 to 190.1 in 1992. However, death rates from diseases of the heart and malignant neoplasms were on the uptrend with the former registering 58.90 per thousand population in 1992 from 52.60 per thousand population in 1991;

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and the latter at 33.30 in 1992 from 30.80 per thousand population in 1991. Meanwhile, deaths occuring at 50 years of age or more, proportionate mortality, gradually increased by more than 1 per thousand population. Life expectancy at birth was estimated to be 65.2 years in 1992, about two years lower than that recorded in three years earlier.

During the year, the ten leading causes of morbidity were intestinal parasitism, diarrhea, bronchitis, avitaminosis, influenza, pneumonia, accidents, tuberculosis (all forms) and cardiovascular disease. Generally, there was a decrease of 4.71 percent in morbidity in 1992 as compared to the previous year's level of 6,370,514. (See Table 7.2 for details.)

On the other hand, Table 7.3 gives the ten leading causes of mortality. Collectively, they accounted for a total of 126,589 deaths in 1992. Cardiovascular diseases, considered as the number one killer disease, recorded 40,892 deaths. Pneumonia ranked next with 36,811 deaths, followed by tuberculosis (all forms) with 15,893 deaths. The other leading causes of mortality in descending order were the following: cancer; accidents/injuries; diarrhea; diseases of the vascular system; and avitaminosis and other nutritional deficiencies.

For the past several years, pneumonia caused the most number of infant deaths. In 1992, it caused a total of 9,620 deaths which showed an increase of 3.90 percent over the previous year's total of 9,259. The second leading cause was prematurity and was followed closely by congenital anomalies with 2,257 and 2,194 infant deaths, respectively. Deaths caused by diarrhea registered as the number four cause of death at 1,816. (See Table 7.3a for details.)

7.1.2 Health Programs and Services Under the Department of Health

Primary Health Care (PHC) Program. This is a community-based approach to health development which provides essential health care, that is, health care which is accessible and acceptable to individuals and families in the communities through their full participation; sustainable at a cost which the community and the government can afford; aimed at developing self-reliance for individual and community health; and part and parcel of the total socioeconomic development effort.

The PHC activities in the barangay level include the organization of the barangay for primary health care and a survey of basic health, social and economic needs. It also pursues health-related activities such as providing safe water supply, clearing and maintaining water canals, compost-making, construction and use of water-sealed toilets, backyard gardening, herbal gardening, establishment of income-generating projects, and maintenance of health facilities.

Maternal and Child Health Program. This program is concerned with the protection and care of children from conception to adolescence and of expectant and nursing mothers. This is an integral part of the total health program of

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the country and is implemented through the service facilities of the Department of Health such as the hospitals, rural health units (RHUs) and puericulture centers in cooperation with the private sector and the community through the primary health care approach.

National Tuberculosis Control Program. The long-term objective of this program is to eliminate tuberculosis as a major public health problem. Its medium-term objective is to keep annual infection rate at less than one percent, a prevalence rate of infectious tuberculosis of 1 per 1,000 population and a mortality rate of 10 per 100,000 population.

To accomplish these, the following services were integrated fully to all peripheral health services up to the barangay level, namely: BCG vaccination, case findings by direct sputum microscopy, and ambulatory treatment of cases. Consultative workshop on the Integrated National Tuberculosis Control Program in coordination with Health Education and Manpower Development Services of the Department of Health and the National Institute of Tuberculosis was conducted in Ilocos, Cagayan Valley, Western Mindanao and Central Mindanao. Field trial of a short-course chemotherapy for pulmonary tuberculosis was undertaken in the province of Pampanga. Health education was also incorporated in the program to encourage and increase people's participation in accepting and availing of the tuberculosis control services.

In 1988, the program has examined 1,090,882 symptomatics by sputum microscopy. Of the total, 64,155 were found positive which is equivalent to a positivity rate of 5.88 percent.

Schistosomiasis Control Program. Schistosomiasis is a parasitic long-drawn disease endemic in 23 provinces found in eight regions in the Philippines. The snail intermediate host, *Oncomelania quadrasi*, has been found in 28,231 hectares of spatially distributed water-logged areas in 183 municipalities. Table 7.4 shows the schistosomiasis control activities undertaken by the government in 1992.

The Schistosomiasis Control Council (SCC) was created on February 16, 1976 by Presidential Decree 893. The council's main functions and objectives are to formulate an integrated national program for the control of schistosomiasis in the Philippines and to coordinate and integrate the implementation of the schistosomiasis control program, projects and activities of all agencies and instrumentalities of the government as well as those of the private sector involved in controlling the disease.

Leprosy Control Program (LCP). The objectives of the program are to reduce the number of new cases among the young and the lepromatous rate of newly detected cases; to develop functional linkages with national government organizations for the socioeconomic rehabilitation of the cured and the disabled; to study relapse rate from the new regiment test; to study new drugs and vaccine for leprosy; and to conduct epidemiological studies especially on subclinical

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infection. The National Leprosy Control Program also provides a comprehensive program of health care for all the registered and newly discovered cases of leprosy, provides effective chemotherapy to all leprosy cases and identifies all correctible deformities and institutes appropriate intervention.

Sexually Transmitted Diseases (STD). The general objective of the program is to control and reduce STD through screening of probable reservoirs of infection like hospitality girls and masseuse for adequate and complete treatment including contact tracing, follow-up investment, health education and public information.

The Communicable Disease Control Services undertakes and supervises the Sexually Transmitted Disease Control Program. The program is implemented by more than 80 social hygiene clinics scattered all over the different health regions. These clinics are responsible for the detection and treatment of venereal and nonvenereal diseases which are sexually transmitted.

Cardiovascular Disease Program. Cardiovascular diseases consist mainly of hypertension, coronary heart disease and rheumatic fever and rheumatic heart disease.

The specific objectives of the program are to reduce the levels of known risk factors of ischemic heart disease and hypertension like cigarette smoking, hypercholesthrolemia, high salt intake and overweight, and to improve its detection, registration, treatment and rehabilitation.

Cancer Control. This program is under the Cancer Control Center which has continuously carried out its functions of rendering cancer detection, diagnosis, treatments as well as rehabilitation centers.

Environmental Sanitation Program. This program consists of three areas: Water Supply Sanitation, Excreta Disposal and Food Sanitation. The main objective of the Water Supply Sanitation Services is to provide safe and adequate water to 100 percent of the rural population annually through water quality improvement and efficient monitoring of the same from existing water supply sources.

Food Sanitation Program continues for the upliftment of the country's food sanitation through proper planning, programming, training, intensified health education component and supervision of personnel responsible for food sanitation at all levels.

The Nutritional Program. This program has the responsibility to carry out the development and institution of nutrition approaches as a major component of the Philippine Nutrition Program.

Dental Health Program. This program is implemented by the Bureau of Dental Health Services which is concerned with the dental health and improvement of dental health services. This is made available to the public by a network of dental health units, dental clinics in government hospitals, rural health units and

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the barangays nationwide. Services offered are oral examination, oral prophylaxis, fluoride therapy, filling, extraction, periodontal treatment and gum treatment including pits and fissure sealant.

Family Planning Program. This program is an integrated noncoercive, community-oriented service network geared towards individual and family welfare.

Its main objectives are: to integrate family planning into the total health care delivery system of DOH; to provide family planning information, education, communication (IEC) and motivation; to improve maternal and child health care through proper child spacing or limitation, concomittantly reducing maternal or child morbidity and mortality; and to contribute to the nation's birth and population growth rates in order to achieve a balance between resources and population.

To support the Family Planning (FP) Program, the following activities were accomplished in 1992: 1) Conducted study on the profile of 1989-1991 sterilization clients in eight selected DOH hospitals nationwide; 2) Validated FP program performance from 1989-1992 in three regions, jointly with the UPPI; 3) Undertook Marvelon Inventory in four regions; 4) Conducted project review of PO7 in four regions and P23 in its project sites; 5) Disseminated results of six researchers; 6) Undertook Management Training for Midlevel Managers in collaboration with MSH; and 7) Monitored or assessed FP program implementation in the different regions.

The different FP clinics in the country provided services to 833,170 new acceptors and 2,098,552 current users during the year. An increasing trend of both clients is noticeable, from the past five-year (1987-1991) average of 599,505 new acceptors to 833,170 in 1992. Current users likewise showed a similar pattern.

These clinics provide services involving nonpermanent and permanent methods of contraception; relevant laboratory examination (e.g., pap smear, wet smear, gram staining, pregnancy test, urinalysis, etc.); management of complications or side effects arising from contraceptive use; infertility assistance to childless couples desiring children; and other related services essential to safe and effective practice of family planning. Table 7.5 shows the number of family planning acceptors from 1982 to 1992.

7.1.3. Medical and Paramedical Manpower

In the advent of increasing population of the country which triggers more demand for health services, efforts to absorb more medical and paramedical practitioners in various health facilities were continued. This is shown in Table 7.6 wherein the number of nurses, dentists, sanitary inspectors and dieticians or nutritionists increased in 1992 when compared to the 1991 figures. On the other hand, the number of physicians decreased further by 7.91 percent from 1991 to 1992 compared with the 1.39 percent decline from 1990 to 1991.

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7.1.4 Hospitals and Health Facilities

Table 7.7 shows the number of health centers and barangay health stations in the country in 1991 and 1992.

Among the health facilities, barangay health stations topped in number. In 1992, 740 barangay health stations were established, accounting for the increase of 0.44 percent over its 1991 level. Also in 1992, there were 2,385 health centers nationwide which help that segment of the population below the poverty threshold. Table 7.8 also shows that there were 1,742 hospitals nationwide with a total bed capacity of 84,069 and bed population ratio of 756 patients per bed in 1992. This figure went down by 0.63 percent over the 1,753 hospitals and by 5.12 percent over the 88,604 bed capacity in 1991. As expected, private hospitals outnumbered government hospitals but the latter outnumbered the former in terms of bed capacity. Private hospitals numbering 1,103 had 36,799 bed capacity while the 639 government hospitals had a bed capacity of 53,023. While the bed capacity of private hospitals decreased by 5.15 percent, those in the government hospitals increased by 6.07 percent in 1992.

The biggest number of hospitals, 253, is located in Southern Tagalog (Region IV) which is one of the most populated regions of the country. The Autonomous Region of Muslim Mindanao (ARMM) had the least number with only 26 hospitals. On the other hand, the Cordillera Administrative Region (CAR) reported the biggest population per bed, with one bed to 1,897 population. The Metropolitan Manila Area (NCR) posted a bed population ratio of 1:192. (See Table 7.8 for more details.)

7.1.5 Health Research and Development

The government is continuously undertaking researches on health. The Philippine Council for Health Research and Development (PCHRD) is the primary agency involved in health researches. However, other institutions such as hospitals, colleges and universities, and other government departments also conduct health researches.

The PCHRD is an agency under the Department of Science and Technology (DOST) created through Executive Order 784 dated March 17, 1982 with the main purpose of enhancing the systematic coordination of research and development efforts in health and the allied sciences. The Council seeks to optimize the use of human material resources to answer defined needs and problems in order to enhance national development. It is tasked to formulate a comprehensive plan for research and development (R and D) in the health sector, rationalize resource allocation and investment in health science and technology, provide leadership and direction in health research and development, and evolve systems needed to support and enhance national policies and priorities.

The PCHRD has three major program thrusts, namely, Biotechnical R and D, Pharmaceutical or Pharmacological R and D, and Policy and Operational R and D.

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Biotechnical R and D aims at generating or adopting appropriate health technology focused on specific health problems. Researches in this area emphasize the development of diagnostic techniques, parameters, and tools as well as biological (vaccine, serum, antigen, etc.), laboratory and diagnostic instruments and reagents.

Pharmaceutical or Pharmacological R and D is designed to provide medicinal preparations required in the treatment and control of diseases at all levels of health care including regulation of fertility. This involves the development of processes for the production of drug formulation from indigenous sources including the assessment of the efficacy and safety of drugs and provisions of adequate raw materials.

Policy and Operational R and D involves the organization, administration, utilization and other aspects of health services delivery systems as they relate to the social, political, cultural and economic conditions of the country. Specifically, this includes delivery systems; health services; sociological or behavioral studies; information, education and communication approaches; and policy researches.

7.1.6 The National Drug Policy (NDP)

The NDP is a program of the national government that seeks to ensure that safe and effective drugs are made available to the public at any time and place and at reasonable and affordable prices. It was formulated through the initiatives of the Department of Health and was enunciated by President Aquino on April 30, 1987. The objectives of the policy are quality assurance of drugs, rational use of drugs by health professionals and consumers, national self-sufficiency in pharmaceutical and rationalization of the DOH's Procurement Program. The Bureau of Food and Drugs ensures that high quality drug and medicines will be made available to the public by upgrading their standards on quality control. It also undertakes product registration and licensing of sales establishments to eliminate the use of illegal drugs.

To ensure the rational use of drugs by consumers and health professionals, generic labeling, prescribing and dispensing of medicines is implemented; the National Drug Formulary was created; and the advertising and promotion of pharmaceutical products are regulated. The DOH is held responsible to issue guidelines on labeling, dispensing and prescribing of drug products.

To achieve self-sufficiency in basic drug manufacturing, a fundamental plan like granting incentives to private investments in order to produce raw materials and intermediate pharmaceutical products is being developed with the participation of the United Nations Industrial Development Organization (UNIDO).

To rationalize the DOH procurement program, purchases of medicines and drugs will be based on generic nomenclature and on the National Drug Formulary (NDF). The NDF is a list of medicines officially recognized and approved by the DOH and classified as either essential or useful. This formulary

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was prepared by the National Drug Committee and will be regularly revised and updated.

The success of this program, however, depends primarily on medical practitioner's prescribing of medicines using generic names and on the pharmacies and sales establishments by providing information concerning generic names of brand-name drugs and their comparative prices. These services also give consumers wider and more informed choice of medicines for their needs.

The Generics Act of 1988 was signed into law on September 13, 1988. The Act seeks to promote, require and ensure the production of an adequate supply, distribution, use and acceptance of drugs and medicines identified by their generic names. A generic name is the international name or a simple term for the scientifically recognized active ingredient of a drug. Using generic names reduces the cost of treatment by reducing the promotion and advertising costs associated with brand-name drugs.

The Generics Act is part of the National Drug Policy (NDP). It was created to ensure the rational use of drugs by consumers and health professionals. The Act requires the use of generic name in product labeling, dispensing and prescribing of drug products in conformity with the guidelines issued by DOH. In product labeling, the generic name must be printed with the largest letters or character point size and should be enclosed exclusively by an outlined box rendered in the same color as the brand name.

In dispensing medicines and other pharmaceutical products, ethical drugs need a written order of a registered physician, dentist or veterinarian. Over-the-counter drugs may be dispensed even without such written order in duly licensed drug outlets where the pharmacist shall be given the necessary information and direction for use of the drug. To ensure the informed choice of medicine by the consumer, all drug outlets shall post in their respective establishments a list of drug products using generic names with their corresponding current prices.

7.2 Welfare

7.2.1 Social Welfare Services and Programs

In pursuance of the goal of enhancing and increasing the chances of every man for a long and productive life, social welfare services and programs were undertaken by various government agencies.

7.2.1.1 The Department of Social Welfare and Development (DSWD)

Executive Order 123 of January 30, 1987 reorganized the DSWD and mandated the Department to assume the commitment of the state "to the care, protection and rehabilitation of that segment of the country's population (in-

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dividuals, families, groups and communities) which has the least in life in terms of physical, mental and social well-being and which needs social welfare assistance and social work intervention to restore their normal functioning and participation in national development. In accordance with the thrust of the government to strengthen its full-time services, the DSWD came up with the following realigned key programs: assistance to socially disadvantaged communities and families; promotion of the welfare of socially disadvantaged women; care, protection and rehabilitation of children and youth in difficult situations; disability prevention and rehabilitation of disabled persons; and relief and rehabilitation of victims of natural calamities and social disorganizations. In order to obtain its objectives, the following programs and services are undertaken by the DSWD:

The Child and Youth Welfare Program. Developed by the Bureau of Child and Youth Welfare, this program adheres to the care and protection of abandoned, neglected, abused or exploited children and youth, delinquent youth, offenders, the disturbed, street children, victims of prostitution and others for their social adjustment, growth and development.

To carry out the objectives of the program, various services were implemented:

a) Day Care Service trains preschoolers as well as street children to develop character and moral values;

b) Supplemental Feeding provides food assistance to underweight and malnourished children to improve their nutritional status;

c) Peer Group Service provides opportunities for psychological, social, spiritual and leadership development of youth through group activities;

d) Protective Service serves the abandoned, neglected, physically or sexually abused or exploited children and youth through immediate intervention; and offers guidance and counseling to parents deprived of their parental responsibilities.

Other services include Self-Employment Assistance, Child Placement Service, Special Services for Delinquent Youth and Youth Offenders, and the After Care Service which provides opportunities for child and youth from institutions to go back to the mainstream of community life and participate in productive community activities.

Family and Community Welfare Program. Developed by the Bureau of Family and Community Welfare, this program provides assistance to the socially disadvantaged families and communities, including family planning outreach programs, to develop their capability in defining needs and formulating solutions as well as setting up viable community structures which bring about desired social changes.

In this program, various services were undertaken: a)Parent Effectiveness Service program which provides knowledge and techniques to parents on early childhood enrichment, health care, husband, wife and parent-child relation-

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ships and responsible parenthood; b) Planned Responsible Parenthood Services which is addressed to married couples of reproductive age with problems on home management and to those who have expressed desire and acceptance of any family planning method. Other services include Family Enterprise Assistance, Social Services for Solo Parents, Marriage Counseling Service, Family Casework Service, and Practical Skills Development and Job Placement for family heads or male adults.

The Disabled Persons Welfare Program. Developed by the Bureau of Disabled Persons Welfare, this program is concerned with disability prevention and rehabilitation of the physically, mentally, and socially disabled persons including the elderly.

Women's Welfare Program. The Bureau of Women's Welfare undertakes this program to promote the welfare of disadvantaged women giving special attention to the prevention and eradication of exploitation of women in any form, including prostitution, illegal recruitment, as well as promotion of skills for employment and self-actualization. Services rendered under this program include social communication skills development, maternal and child care, livelihood and self-enhancement of community participation, counseling and substitute home care.

Emergency Assistance Program. This provides relief to and rehabilitation of victims of natural calamities and social disorganization of cultural communities, and of other distressed and displaced persons. This program is carried out through services like giving aid to individuals in crisis situation in cash or in kind; emergency relief in the form of rescue; mass feeding or relief at evacuation centers; emergency shelter assistance to the victims of typhoons and fires in the form of limited capital or material assistance to help them in reconstruction of their houses.

In 1989, there were 11,528,792 clients assisted by the department. Brought about by the natural and man-made disasters that struck the country, the number of clients assisted through the Emergency Assistance Program constituted 35.68 percent or 4,113,532 persons. Day Care Services or the Child Welfare Program had the second highest number of persons assisted by the department with a total of 3,118,041 beneficiaries. Other programs such as self-employment assistance, planned parenthood, community welfare and special social services accounted for the remaining clients assisted by the program. (See Table 7.10.)

7.2.1.2 The Philippine National Red Cross (PNRC)

The PNRC was officially established by Republic Act 95 as amended by R.A. 855 and 6373. It aims to furnish volunteer aides to the sick and wounded personnel of the Armed Forces in times of war; to act in matters of voluntary relief and as a medium of communication between the Filipino people; to

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establish and maintain a system of national and international relief in times of peace and in times of war and apply the same in meeting the emergency needs caused by typhoons, floods, fires, earthquakes and other natural disasters; and to device and promote the health, safety and welfare of the Filipino people.

The PNRC implements six service programs, namely, Blood Program Disaster Preparedness and Relief Service, Safety Services, Nursing Service, Red Cross Youth, and Social Services. In addition, PNRC assists refugees in locating their missing kins through the Tracing and Mailing Service.

Blood Program. This program deals with the collection, storage and giving out of blood free to hospital patients. The blood program is one of the most essential services of the Red Cross. It operates nationwide through a network of 70 regional and chapter blood centers, extension services and blood stations.

In addition, the blood program makes possible the preparation at the Red Cross National Blood Center in Manila of packed red cells, liquid plasma, platelet-rich plasma and platelet concentrate of human blood.

Disaster Preparedness and Relief Services. This is extended to families rendered homeless or who suffered from the effects of such natural calamities as fire, flood, typhoon, volcanic eruption or earthquake. The emergency assistance that the Red Cross extends to disaster victims comes in the form of food, shelter, first aid, medical or health and social services.

In normal times, the Red Cross carries out a nationwide program of training individuals or groups of individuals in disaster preparedness with emphasis on the trainee's participation in disaster relief work during actual emergencies.

The PNRC, together with the Delegation of the International Committee of the Red Cross, extends assistance to the people affected by insurgency-related disturbances, mainly in Mindanao. Under their joint assistance program, medical surveys were carried out and feeding centers were established especially for undernourished children.

On community health, services undertaken included health education for malaria prevention and control, personal hygiene and sanitation and follow-up of treatment of discharged patients in coordination with the PNRC Hospital and dispensaries.

Another service program carried out by the PNRC is the Mother and Baby Care Program. This service includes periodic prenatal and postnatal examinations, instructional classes on proper mother and baby care, septic cord dressing, personal hygiene and sanitation, prenatal and postnatal exercise, campaign for breast feeding, family planning, health monitoring and referrals.

Safety Services. These include teaching first aid, swimming, water safety, accident prevention and life saving. This program is aimed at equipping individuals with vital skills and knowledge to enable them to face an emergency with confidence.

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Red Cross chapters throughout the country conduct free safety classes for the youth and adults alike. Individuals may enroll in an instructor's course to enable them to conduct training classes themselves. These safety classes may be arranged with the Red Cross chapter in the community.

As road accidents run high, the PNRC puts up highway first aid stations in strategic places to help motorists who meet accidents.

Nursing Service. This service involves the teaching of women, particularly housewives, in such basic home nursing courses as health care in the home (care of the sick and injured, mother and baby care, and basic nutrition), care of elderly people and the chronically ill, and mother's aide course (baby sitting). In addition to these, the Nursing Service provides instruction in family planning and disaster nursing.

The Red Cross also participates in the government nutrition program aimed at combating malnutrition among preschool children. This task involves the carrying out of a supplementary feeding program for children belonging to the six-month to six-year age group. The Nursing Service has also embarked on the training and mobilization of volunteer rural health workers as its participation in the national primary health care program of the government.

Red Cross Youth. This program seeks to accomplish three objectives, namely, to develop and practice the ideals of service, to promote personal and community health and to foster international friendship and world peace among the people.

Under this program, Red Cross youth members are encouraged to participate in the organization's varied humanitarian activities which include disaster relief work, first aid blood donor recruitment and helping the aged and mentally or physically handicapped.

They are also provided with opportunities to take part in such meaningful community activities as food production, cleanliness, beautification and health drives, collecting and donating articles for welfare institutions, orphanages, leprosaria and hospitals, and youth leadership training.

The Red Cross Youth Program embraces both in-school (elementary, secondary and collegiate) and out-of-school youths and provides the members with certain activities suitable to their needs, capacities and interests.

Social Services. This program of the Red Cross aims to promote family and community welfare in the form of counseling and guidance, inquiry and communication facilitation, information dissemination on government benefits and claims, health and welfare reports and referral to other welfare agencies.

Through this program of assistance, people and families with multifarious problems concerning the stability of the family as a social unit or the individual's well-being are assisted by social workers to reach a solution. Filipino servicemen in the US Armed Forces or civilians residing abroad can avail themselves of the Red Cross emergency communication service relating to the health and welfare

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of their family in their home and country. Military authorities make their decisions concerning discharged, furlough or clemency on the basis of Red Cross reports.

In addition, the Red Cross provides medically approved recreation program for hospitalized and active military personnel as well as their dependents. Skills training and vocational courses are also conducted by Red Cross social workers for the military dependents to develop their innate talents and enhance their usefulness to the community.

Tracing and Mailing Service. The tracing and mailing service (TMS) of the PNRC was organized in 1979 specifically to help the Indo-Chinese refugees locate and get reunited with their missing kins. Funded by the International Committee of the Red Cross, its broader functions are to obtain from competent authorities (civilian or military) or from the Central Tracing Agency of the International Committee of the Red Cross in Geneva, or when possible from the people concerned, all relevant information on the identity, state of health, place of residence or detention, death, etc., of persons who have been displaced, captured, or reported missing, etc.; to establish a card-index which contains not only the information collected, but also request received; to follow up all requests for tracing information from families, other National Societies, the Central Tracing Agency, or other bodies by means of the card-index.

7.2.1.3 The Government Service Insurance System (GSIS)

The GSIS is a social institution in charge of administering the funds and the laws that govern social security and insurance benefits of all Philippine government employees. Its main mission is to help the Filipino civil servant when he can no longer help himself and his family.

In response to the changing human and economic conditions, the GSIS Act of 1977 was revised through P.D. 1146 which was created to preserve at all times the actuarial solvency of the funds administered by the system; to guarantee to the government employees all the benefits due them; and to expand, increase and improve the social security and insurance program benefits made available to the employee and his dependents.

The following are compulsorily covered by the GSIS: all permanent employees who are already covered by R.A. 4968 at the time of the effectivity of P.D. 1146; all nonpermanent employees of the national government agencies and local governments, upon approval of the President of the Philippines and subject to availability of funds; and all nonpermanent employees of government-owned or controlled corporations upon approval by the system of request for membership of their governing boards.

Among the benefits of GSIS members are Compulsory Life Insurance Benefits; Optional Life Insurance; Disability Benefits; Funeral Benefits; Medicare Benefits; Retirement Benefits; Survivorship Benefits; and General Insurance Benefits. There are also other privileges provided for by the GSIS to its members such as the salary loan; policy loan; educational assistance loan;

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Fly-PAL-Pay-Later Loan; and mass housing loan. (See Tables 7.11 and 7.11a for the benefits and dividends paid by the GSIS.)

Compulsory Life Insurance Benefits. The life of the civil servant is compulsorily insured with the GSIS. Proper life insurance benefits such as death and disability benefits would be provided to him and his family should an untoward incident occur in his life. Likewise, his insurance coverage provides him with other benefits that come in the form of maturity and cash surrender value.

Optional Life Insurance Benefits. In addition to the compulsory life insurance coverage, the civil servant has the privilege to secure from the GSIS additional optional life insurance policies. This insurance augments the proceeds of the compulsory life insurance coverage of the member during times of need. In 1984, two new optional insurance packages were introduced, namely, the Hospitalization Insurance Plan and the College Education Assurance Plan. These were offered starting 1985.

Disability Benefits. For work-related injury or sickness, the GSIS, through the Employee Compensation Fund, pays for the hospitalization expenses of the civil servant and provides him with income benefits to substitute for his lost income for the duration of his ailment.

Funeral Benefits. A funeral benefit of P1,000 is provided by the system to beneficiaries upon the death of a member. In January 1, 1991, an increased bereavement aide of P5,000 was granted to supplement the existing funeral benefits.

Medicare Benefits. The GSIS Medicare Fund shoulders approximately 30 percent of the hospitalization expenses not only of the civil servant but also of his dependents. The ailment or sickness of the civil servant or his dependents need not be work-connected to qualify for medicare benefits. To meet the demands of the changing economic conditions, two successive increases in medicare benefits were implemented, thus a 30 percent increase in 1984 and a 33 percent increase in 1985.

Retirement Benefits. Retirement ensures that the civil servant is well provided for during the time when he can no longer work (due to old age) for his daily needs. Through the payment of gratuities and pensions, the GSIS provides its members with much needed resources that can either be used for the basic needs of the individual or rechanneled to a more productive concern that could generate income for the retiree. In January 1, 1991, minimum monthly pension of GSIS retirees was increased to P600.

Survivorship Benefits. Survivorship benefits are provided by the system to beneficiaries or dependents of deceased civil servants. Benefits may come in the form of lump sum or pensions depending on the respective qualifications of

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survivors. In both cases, the survivor is assured of substantial financial support from the GSIS.

General Insurance Benefits. All properties of government instrumentalities are compulsorily insurable with the GSIS. This means that should any government office suffer a loss due to fortuitous or unforeseen events, the GSIS shall indemnify that instrumentality up to the amount of insurance on the property.

Salary Loan. The GSIS provides members with a salary loan up to a maximum amount equivalent to his three (3) months salary. When the civil servant suffers financial losses due to natural calamity, he is granted a maximum amount equivalent to his five (5) months salary.

Policy Loan. The civil servant can draw on his equity in the life insurance fund of the system through a policy which is equivalent to ninety (90) percent of the cash value of his policy at the time of the loan application.

Educational Assistance Loan. Any deserving student (not necessarily children of GSIS members) entering college may avail of the GSIS Study-Now-Pay-Later Plan. This is in line with the national government's social development program.

Fly-PAL-Pay-Later Loan. Any civil servant who plans to travel within the Philippines may avail of the GSIS Fly-PAL-Pay-Later Loan. This is given in the form of PAL tickets.

Mass Housing Loan. The civil servant can acquire a house and lot on any GSIS housing project. This means housing loan has a "deferred payment plan." Under this plan, the housing unit is turned over to the buyer for occupancy, the buyer signs the deed of conditional sale, pays the monthly amortization, and upon full payment is issued a deed of absolute sale. No down payment is required and a maximum loanable amount of P300,000 will be granted based on the borrower's basic salary.

As of 1990, GSIS has paid total benefits of P3,707.95 million to all government employees covered. Nearly three fourths (72.17 percent) of total benefit payments had been paid to social insurance beneficiaries and 11.23 percent or P416.45 million went to the health insurance or medicare benefit of the employee. Collectively, State and General insurances and Optional Life Insurance benefits accounted for the remaining P615.51 million benefits paid by the GSIS. (See Table 7.11 for details.)

7.2.1.4 The Social Security System (SSS)

The SSS was created in 1957 by virtue of R.A. 1972. In 1972, a number of measures were issued to expand and strengthen the social security program. P.D. 24 provided for substantial increase in SSS benefits, introduced new

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benefits and new social security program, expanded the category of beneficiaries, and liberalized the eligibility conditions for benefits.

SSS collects and invests the contributions of workers and employees. The contribution and investment earnings go into the Trust Funds to pay for the benefits of three social insurance programs to qualified workers or their families, namely, social security (i.e., sickness, maternity, permanent partial disability, permanent total disability, retirement, survivors (death); funeral grant; medicare (hospitalization, surgery and medical care); and employees compensation (employment injury and occupational disease).

Social Security Benefits. Sickness benefits entitle a member with at least three (3) monthly contributions within the year prior to sickness confinement of at least four (4) days and has used up all current company sick leaves with pay, a cash allowance equivalent to 85 percent of his average daily salary not less than P4 but not more than P20. The member is entitled to a maximum of 120 days a year and another 120 days in the succeeding year if it is of the same confinement. However, confinement lasting for more than 240 days may be deemed as permanent disability.

Maternity benefit. This is a cash allowance granted to a female member equivalent to 100 percent of her daily salary credit for 45 days due to childbirth, miscarriage or abortion. Payment of this benefit is only for the first four (4) complete deliveries after March 13, 1973.

Disability benefit. A member who becomes permanently disabled, either totally or partly, is entitled to a monthly pension or a lump sum amount depending on the number of monthly contributions paid. The minimum lump sum in case of total disability is P1,000. A disabled member is entitled to a monthly pension of not less than P400 if he has paid at least 36 monthly contributions.

Retirement benefit. This is a cash benefit paid to a member who has reached old age. Members who are 60 years old, separated from employment, or if employed but receiving less than P300 a month, and has paid at least 120 monthly contributions prior to retirement, is granted a lifetime pension. In addition, his dependent children (not more than 5) are granted dependents' pension. In the event of death, 80 percent of his pension is transferred to his primary beneficiaries (e.g., legitimate spouse and minor children). However, if he has not paid the required 120 monthly contribution, he will receive a lump sum retirement benefit equivalent to the total contributions he had paid, plus employee's share, with interest. When he reaches age 65 and he has paid the required 120 monthly contributions, he will receive a monthly pension even if he still continues to work.

In the event of death, the primary beneficiaries are paid a monthly pension provided that the member had already paid at least 36 monthly contributions. If not, his primary beneficiaries are granted a lump sum amount of not less than P1,000. If he is not survived by his primary beneficiaries, the lump sum amount

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is given to his secondary beneficiaries, or in their absence, any other person designated by him regardless of the number of contributions.

Funeral grant is a benefit of P4,000 paid to the beneficiaries or to any other person who actually shouldered the burial expenses of the deceased member or pensioner. (See Table 7.12 for the amount of benefits paid by SSS.)

Medical Care Benefits. All persons subject to compulsory SSS coverage are automatically covered under the Medicare Law. A member or his legal dependent confined in a hospital due to illness or injury and has paid at least three (3) monthly medicare contributions within the 12-month period prior to hospitalization is entitled to such benefits as hospitalization expenses, surgical and medical expenses for professional services and even sterilization expenses. Period of entitlement is 45 days per year for the member and another 45 days for his legal dependents, or a total of 90 days per year. Increased medical care benefits were granted under Executive Order 949 on May 1, 1984 and Executive Order 1075 on January 20, 1986.

New Employees Compensation Benefits. All covered employees who suffer work-connected sickness or injury resulting in disability, and his beneficiaries in the event of death, are entitled to benefits under this program. The benefits under this program include medical services; appliances and supplies; rehabilitation services consisting of medical, surgical and hospital treatment including a balanced program of remedial treatment for the handicapped; and income cash benefits in the form of daily allowances or pension benefits depending on the nature of the contingency. Funeral benefit is also extended by this program amounting to P6,000.

Other Services. The SSS also renders other services in the form of loan services like salary loan, housing loan, educational and community hospital loan and loans under the Study-Now-Pay-Later Plan Program. The SSS also caters to self-employed members.

7.2.1.5 The Philippine Medical Care Commission (PMCC)

The Philippine Medical Care Commission was created by virtue of Republic Act 1611 and later amended by P.D. 1519 or the revised Philippine Medical Care Act.

The Commission is firmly committed to pursue the goals of the Health Insurance Fund. Sustained efforts have been made to achieve progress in several priority areas, which are, among others, to work for the integration of the Health Insurance Fund handled by SSS and GSIS, and make Medicare a truly single health insurance system; to continue working for more realistic benefits for members and their legal dependents; to seek and work for the amendment of the Medicare Law to make health insurance a more responsive instrument in the implementation of the Philippine Medical Care Plan.

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Sources:

7.1 Department of Health; Philippine Council for Health Research and Development.
7.2 Department of Social Welfare and Development.
7.2.1.2 Philippine National Red Cross.
7.2.1.3 Government Service Insurance System.
7.2.1.4 Social Security System.
7.2.1.5 Philippine Medical Care Commission.

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Table 7.1 Overview of the Health of the Nation: 1985-1992
(Rate per thousand population)

Health indicator	1985	1986	1987	1988	1989	1990	1991	1992
Crude Birth Rate (CBR)	26.3	26.7	27.6	26.7	23.2	22.4	22.7	22.9
Crude Death Rate (CDR)	6.1	5.8	5.8	5.5	4.4	4.0	3.7	3.8
Infant Mortality Rate (IMR)	38.0	35.0	32.1	30.1	31.5	22.9	18.7	38.5
Maternal Mortality Rate (MMR)	1.0	1.1	1.0	1.1	0.7	0.8	1.02	0.8
Communicable diseases, death rate	206.7	187.1	194.2	168.6	n.a.	204.5	212.6	190.1
Diseases of the heart, death rate	66.3	69.9	67.7	69.1	n.a.	72.5	52.6	58.9
Malignant neoplasms, death rate	33.2	32.8	35.5	36.1	n.a.	33.1	30.8	33.3
Proportionate mortality (50 years and over), death rate	n.a.	n.a.	n.a.	n.a.	n.a.	42.3[a]	43.4[a]	44.6
Life expectancy (in years)[1]	63.1	63.4	63.7	64.0	64.3[1]	64.6[1]	64.9[1]	65.2[1]
Population[2]	54,668,332[b]	56,004,130[b]	57,356,042[b]	58,721,307[b]	60,047,034[b]	61,480,180[2]	62,110,982[2]	63,570,590[3]

Note: 1989 figures are actual data based on regional health office reports.

[1] NSO estimate.
[2] Population estimate used by DOH may differ from population figures/projections of the NSO.
[3] NSO (Projected Population based on 1990 CPH).
[a] DOH projection.
[b] Based on the 1980 moderate fertility decline and moderate mortality decline population projection of the NSO.

Source: Department of Health.

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Table 7.2 Ten Leading Causes of Morbidity: 1989-1992
(Rate per 100,000 population)

Cause[1]	1989 Number	1989 Rate	1990 Number	1990 Rate	1991 Number	1991 Rate	1992 Number	1992 Rate
Bronchitis	951,305	1,583.1	602,851	1,076.4	725,818	1,265.5	609,203	958.3
Diarrhea[2], gastroenteritis and colitis	894,116	1,487.8	1,051,362	1,710.1	808,305	1,301.4	1,101,411	1,732.6
Acute respiratory tract infection	875,289	1,456.5	3,624,770	5,895.8	2,991,718	4,816.4	a	-
Upper respiratory tract infection	840,215	1,398.1	a	-	a	-	a	-
Influenza	694,956	1,156.4	537,360	874.0	547,334	382.0	477,587	751.3
Intestinal parasitism	245,827	409.1	285,681	464.7	204,851	329.8	147,196	231.54
Pneumonia	204,959	341.1	162,257	203.9	209,552	337.4	2,762,145	4,344.8
Avitaminosis	206,164	343.1	500,993	814.9	577,320	929.5	537,965	846.2
Tuberculosis, all forms	208,436	346.8	227,190	369.5	112,225	180.7	111,272	175.0
Accidents	132,472	220.4	160,564	261.2	136,596	219.9	147,196	231.5
Malaria	a	-	71,028	115.5	56,795	91.9	a	-
Diseases of the heart[3]	a	-	a	-	a	-	49,865	78.4
Measles	a	-	a	-	a	-	a	-
Population	60,047,034[4]	-	61,480,180[4]	-	62,110,982[5]	-	63,570,590[5]	-

[1] Based on 1989 ranking.
[2] Includes dysentery (all forms) and food poisoning.
[3] Declared notifiable disease in 1984.
[4] Based on the 1980 moderate fertility decline and moderate mortality decline projection of the NSO.
[5] NSO (Projected Population based on 1990 CPH).

a Not included in the top ten for the year.

Source: Department of Health.

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Table 7.3 Ten Leading Causes of Mortality: 1989-1992
(Rate per 100,000 population)

Cause [1]	1989 Number	1989 Rate	1990 Number	1990 Rate	1991 Number	1991 Rate	1992 Number	1992 Rate
Pneumonia	50,609	84.2	39,094	63.6	32,149	51.8	36,811	57.9
Diseases of the heart	33,917	56.4	22,655	36.8	32,682	52.6	40,892	64.3
Diseases of the vascular system	26,436	43.9	31,424	51.1	6,340	10.2	1,013	1.6
Tuberculosis, all forms	20,949	34.9	17,468	28.4	18,840	30.3	15,893	25.0
Accidents	15,193	25.3	15,626	25.4	13,091	21.1	12,485	19.6
Malignant neoplasm	14,723	24.5	14,274	23.2	19,124	30.8	14,000	22.0
Diarrhea	5,777	9.6	4,697	7.6	5,403	8.7	4,489	7.1
Septicemia	2,049	3.4	2,806	4.6	3,042	4.9	a	-
Avitaminosis and other nutritional deficiency	1,897	3.2	a	11.0	a	-	1,006	1.6
Prematurity	1,840	3.1	a	-	a	-	a	-
Senility	a	-	a	-	a	-	a	-
Measles	a	-	a	-	a	-	a	-
Diseases of the esophagus, stomach and duodenum	a	-	a	-	a	-	a	-
Population	60,047,034[2]		61,480,180[2]		62,110,982[2]		63,570,590[3]	

Note: Based on reports of regional health offices.

[1] Based on 1989 ranking.
[2] Based on the 1980 moderate fertility decline and moderate mortality decline projection of the NSO.
[3] NSO (Projected Population based on 1990 CPH).

a Not included in the top ten for the year.

Source: Department of Health.

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Table 7.3a Ten Leading Causes of Infant Deaths, Philippines: 1989-1992

Cause[1]	1989	1990	1991	1992
Pneumonia	11,492	8,819	9,259	9,620
Prematurity/immaturity	4,786	2,661	1,940	2,257
Diarrhea	2,430	2,088	1,683	1,816
Septicemia	2,212	1,427	1,928	1,479
Congenital anomalies	1,705	1,216	1,048	2,194
Respiratory conditions of fetus and newborn	1,167	a	883	1,053
Asphyxia neonatum	949	1,929	787	654
Diseases of the heart	773	a	397*	544
Bronchitis	730	a	a	a
Tetanus neonatum	544	a	a	318
Acute bronchitis and bronchiolitis	a	a	a	a
Measles	a	a	333	430
Birth injury and difficult labor	a	a	a	a
Avitaminosis and other nutritional deficiency	a	376	a	a
Meningitis	a	a	315	a

Note: Based on reports of regional health offices.

[1] Based on 1989 ranking. * Regions 1, 4 and 5 only.
a Not included in the top ten for the year.

Source: Department of Health.

Table 7.4 Schistosomiasis Control Activities by Region: 1992

	Region	Stool examination	Positives	Treatment
I.	Ilocos	-	-	-
II.	Cagayan Valley	-	-	-
III.	Central Luzon	-	-	-
IV.	Southern Tagalog	30,368	492	481
V.	Bicol	28,707	827	822
VI.	Western Visayas	-	-	-
VII.	Central Visayas	6,657	3	3
VIII.	Eastern Visayas	469,276	20,239	17,708
IX.	Western Mindanao	140,064	3,216	3,215
X.	Northern Mindanao	374,797	12,822	12,558
XI.	Southern Mindanao	262,943	11,982	11,718
XII.	Central Mindanao	75,966	23,112	3,711
	Autonomous Region in Muslim Mindanao (ARMM)	13,478	1,560	1,557

Source: Department of Health.

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Table 7.5 Family Planning Acceptors: 1982-1992

Year	Total	Pills	IUD	Methods Rhythm/ natural	Vasectomy/ sterilization	Others	Basal body temperature
1982	191,993	92,162	18,667	11,148	20,796	49,220	-
1983[a]	108,205	48,186	10,641	6,654	17,906	24,818	-
1984[b]	179,603	74,855	15,099	37,413	9,575	42,661	-
1985[c]	144,658	68,112	13,018	19,640	9,653	34,235	-
1986	346,595	178,721	30,827	31,034	10,176	50,802	45,035
1987	389,123	239,714	-	d	33,927	90,930	24,552
1988	423,121	275,504	-	d	32,644	97,310	17,663
1989	694,351	468,719	-	34,282	38,896	126,018	26,436
1990	681,955	422,564	37,483	63,552	422	157,934	-
1991	804,302	485,370	43,769	93,210	452	181,501	-
1992	833,170	476,134	81,830	83,955	1,210	190,041	-

[a] 35 percent complete.
[b] As of Februrary 25, 1985.
[c] Data for the first three quarters of 1985.
d Included in others.

Source: Department of Health.

Table 7.6 Number of Medical and Paramedical Manpower: 1989-1992

Category [1]	1989	1990	1991	1992
Physician	7,270	7,431	7,328	6,748
Nurse	10,239	10,270	10,117	14,853
Midwife	12,529	11,604	12,408	12,339
Dentist	1,673	1,550	1,523	1,614
Pharmacist	595	565	562	531
Sanitary inspector	2,552	2,380	2,362	2,442
Medical technologist	1,512	1,562	1,567	1,441
Dietician/nutritionist	684	666	669	795
Health educator	123	109	157	96
Barangay health worker	n.a.	n.a.	n.a.	n.a.
Information officer	n.a.	n.a.	n.a.	n.a.
Sanitary engineer	125	127	124	111

[1] Under the Department of Health only.

Source: Department of Health.

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Table 7.7 Number of Health Facilities by Region: 1991 and 1992

Region	Health centers		Barangay health stations		Puericulture centers*	
	1992	1991	1992	1991	1989	1988
Philippines	2,385	2,299	11,423	10,673	162	149
National Capital Region (NCR)	359	360	7	353	-	-
Cordillera Administrative Region (CAR)	85	85	417	-	-	-
I. Ilocos	144	144	827	752	35	19
II. Cagayan Valley	98	98	554	517	-	-
III. Central Luzon	239	236	1,301	1,402	18	41
IV. Southern Tagalog	275	275	1,538	1,536	46	32
V. Bicol	127	124	861	816	17	14
VI. Western Visayas	161	164	1,222	1,271	17	15
VII. Central Visayas	200	200	948	948	8	6
VIII. Eastern Visayas	165	164	663	600	9	10
IX. Western Mindanao	95	125	460	541	-	-
X. Northern Mindanao	124	123	827	729	11	11
XI. Southern Mindanao	101	102	757	714	-	-
XII. Central Mindanao	49	99	362	494	1	1
Autonomous Region in Muslim Mindanao (ARMM)	163	-	679	-	-	-

* No data for 1991 and 1992.

Source: Department of Health.

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Table 7. 8 Distribution of Hospitals and Bed Population Ratio by Region: 1992

Region	Total Number	Total Bed Capacity	Government hospitals Number	Government hospitals Bed Capacity	Private hospitals Number	Private hospitals Bed Capacity	Population	Bed Population Ratio
1992								
Philippines	1,742	83,441	639	53,023	1,103	36,799	63,600,940	1:756
National Capital Region (NCR)	162	28,198	39	18,197	123	9,997	8,403,570	1:192
Cordillera Administrative Region (CAR)	63	-	31	1,480	32	232	1,198,728	1:1,897
I. Ilocos	99	3,170	32	2,041	67	1,129	3,691,154	1:116
II. Cagayan Valley	83	2,166	38	1,513	45	653	2,435,692	1:112
III. Central Luzon	168	6,119	54	3,728	114	2,409	6,522,949	1:107
IV. Southern Tagalog	253	8,492	101	4,330	152	4,162	8,777,686	1:103
V. Bicol	142	3,936	48	2,020	94	1,916	4,002,615	1:102
VI. Western Visayas	91	4,745	50	2,713	41	2,032	5,585,947	1:115
VII. Central Visayas	91	5,336	42	2,847	49	2,489	4,774,030	1:895
VIII. Eastern Visayas	75	2,775	49	2,090	26	685	3,109,192	1:112
IX. Western Mindanao	76	2,070	27	1,094	49	976	2,573,429	1:124
X. Northern Mindanao	90	4,578	45	7,220	45	2,358	3,683,190	1:805
XI. Southern Mindanao	204	6,484	42	1,775	162	4,709	4,720,252	1:728
XII. Central Mindanao	119	3,909	19	1,170	100	2,739	2,170,908	1:555
Autonomous Region in Muslim Mindanao (ARMM)	26	1,463	22	805	4	313	1,951,598	1:133

* Including the 15 hospitals under the Office of the Secretary.

Sources: Department of Health; Bureau of Licensing and Regulations.

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Table 7.8a Metro Manila Homes for Children and Total Cases Served: 1987-1991

Homes	1987	1988	1989	1990	1991
Total	7,421	11,510	11,817	5,432	5,291
Nayon ng Kabataan	386	659	621	566	517
Marillac Hills	318	377	405	491	500
Elsie Gaches Village	385	494	426	420	535
Jose Fabella Center	835	2,441	1,794	2,040	1,670
Golden Acres, Home for the Aged and Visayan Village	397	492	460	466	415
Reception and Study Center for Children	660	770	1,210	536	583
National Vocational Rehabilitation Center (Rehabilitation Sheltered Workshop/VRD)	1,736	3,480	3,274	513	582
Regional Youth Rehabilitation Center[1]	1,292	578	624	-	-
Rehabilitation Center for Drug Dependents	-	49	53	-	-
Silungan Center and Halfway Homes	735	-	-	-	-
Lingap Center and Nazareth Bagong Buhay Center	292	1,325	2,249	250	286
Home for Unwed Mothers, Saup Lugud and Arajellas Home	385	140	137	-	-
Youth Hostel	-	585	379	-	-
Sanctuary	-	120	115	150	203
Regional Agricultural Training and Production Center	-	-	70	-	-

[1] Includes data for Malaya Center, Rehabilitation Center for Drug Dependents, JNRC and National Training Schools for Boys and Detention Home for Youth.

Source: Department of Social Welfare and Development.

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Table 7.9 Outreach Count in Homes for Children and Adults: 1987-1991

Homes	1987	1988	1989	1990	1991
Total	7,421	11,502	12,066	25,225	20,343
Nayon ng Kabataan	386	659	621	566	517
Marillac Hills	318	377	405	491	500
Elsie Gaches Village	385	494	426	443	535
Jose Fabella Center	835	2,441	1,794	2,040	1,670
Golden Acres, Home for the Aged and Visayan Village	397	492	460	531	494
Reception and Study Center for Children	660	770	1,210	1,409	1,414
National Vocational Rehabilitation Center (Rehabilitation Sheltered Workshop/VRD)	1,736	3,480	3,274	7,374	3,338
Regional Youth Rehabilitation Center [1]	1,292	570	624	641	685
Rehabilitation Center for Drug Dependents	-	49	53	-	-
Silungan Center and Halfway Homes	735	-	249	-	-
Lingap Center and Nazareth Bagong Buhay Center	292	1,325	2,249	2,979	3,046
Home for Unwed Mothers, Saup Lugud and Arajellas Home	385	140	137	143	18
Youth Hostel	-	585	379	897	371
Sanctuary	-	120	115	150	203
Regional Agricultural Training and Production Center	-	-	70	281	-
Women Center	-	-	-	-	1,312
Facilitation for Disabled Persons and Special Group (Adult)	-	-	-	7,280	6,240

[1] Includes data for Malaya Center, Rehabilitation Center for Drug Dependents, JNRC and National Training Schools for Boys and Detention Home for Youth.

Source: Department of Social Welfare and Development.

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Table 7. 10 Number of Clients Assisted by the Department of Social Welfare and Development by Type of Major Services Extended: 1987-1991

Major services	1987	1988	1989	1990	1991
Total	10,251,509	11,470,425	11,528,792	14,963,586	5,323,793
Self-employment assistance [1]	304,574	336,650[a]	157,133	167,640	231,491
Community welfare program	273,591	305,294	1,127,824	1,115,049	747,462
Assistance to socially disadvantaged families/ planned parenthood and youth	2,432,410	1,635,069	1,529,549	1,527,486	633,887
Day care and other child and youth welfare services	3,081,739	2,685,030	3,118,041	2,951,455	1,856,455
Emergency assistance	3,684,265	5,969,562	4,113,532	9,201,956	1,854,498
Special social services[2]	474,930	538,820	1,482,713	-	-

[1] Includes practical skills and job placement.
[2] Includes welfare of socially disadvantaged women and disability prevention and rehabilitation of disabled persons.

[a] Includes support services.

Source: Department of Social Welfare and Development.

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Table 7. 10a Total Cases Served by Institution: 1985-1991

Institution	1985	1986	1987	1988	1989	1990	1991
Total	5,677	3,383	3,361	5,533	4,926	17,137	12,402
Nayon ng Kabataan	660	486	386	659	621	566	517
Marillac Hills	319	343	318	377	405	491	500
National Training School for Boys	278	-	-	-	-	-	-
Elsie Gaches Village	303	299	385	494	406	443	535
Jose Fabella Center	532	718	835	2,441	1,794	2,040	1,670
Golden Acres	314	343	360	423	399	531	494
Halfway Homes	48	31	-	-	-	-	-
Reception and Study Center for Children	685	419	322	385	492	1,409	1,414
Malaya Center	143	112	140	-	-	-	-
National Vocational Rehabilitation Center	292	244	151	211	258	304	-
Rehabilitation Sheltered Workshop	110	142	154	176	209	209	-
Regional Youth Rehabilitation Center	308	-	-	-	-	641	685
Area Vocational Rehabilitation Center	969	-	-	-	-	7,374	3,338
Silungan Center (IX)	716	-	-	-	-	-	-
Lingap Center	-	246	310	247	227	2,979	3,046
Sanctuary	-	-	-	120	115	150	203

Source: Department of Social Welfare and Development.

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Table 7. 11 Total Benefits Paid by the Government Service Insurance System: 1987-1992
(Million pesos)

Type of benefit	1987	1988	1989	1990	1991	1992
Total	2,246.16	2,580.18	2,948.38	3,817.95	5,425.00	6,372.00
Insurance	2,182.90	2,518.49	2,892.49	3,707.95	5,307.00	6,240.00
Social insurance	1,620.87	1,888.10	2,096.60	2,675.99	4,004.00	4,815.00
Optional life insurance	57.45	62.85	77.32	81.25	93.00	102.00
General insurance	65.96	51.33	206.24	204.04	136.00	78.00
Health insurance[1]	224.50	239.32	276.55	416.45	708.00	830.00
State insurance[2]	214.12	276.89	235.78	330.22	366.00	415.00
Dividends	63.26	61.69	55.89	110.00	118.00	132.00

[1] Medicare benefit.
[2] Employees' compensation benefit.

Source: Government Service Insurance System.

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Table 7. 11a Dividends Paid by the Government Service Insurance System: 1962-1992 (Thousand pesos)

Year	Amount	Increase/(Decrease) Amount	Percent
FY			
1962-63	8,181	-	-
1963-64	12,261	4,080	49.87
1964-65	15,641	3,380	27.57
1965-66	18,402	2,761	17.65
1966-67	21,372	2,970	16.14
1967-68	23,607	2,235	10.46
1968-69	25,873	2,266	9.60
1969-70	27,807	1,934	7.47
1970-71	30,825	3,018	10.85
1971-72	36,073	5,248	17.03
1972-73	71,493	35,420	98.19
1973-74	49,010	(22,483)	(31.45)
1974-75	49,884	874	1.78
1975-76	60,617	10,733	21.52
CY			
1977	66,775	6,158	10.16
1978	61,889	(4,886)	(7.32)
1979	57,389	(4,500)	(7.27)
1980	52,921	(4,468)	(7.79)
1981	55,718	2,797	5.29
1982	53,549	(2,169)	(3.89)
1983[a]	44,789	(8,760)	(16.36)
1984	58,055	13,266	29.62
1985	63,108	5,053	8.70
1986	62,538	(570)	0.90
1987	63,261	723	1.16
1988	61,688	(6,009)	9.50
1989	55,890	(5,798)	9.40
1990	110,000	54,110	96.82
1991	118,000	8,000	7.27
1992	132,000	14,000	11.86

[a] Includes P3.27 million uncollected.

Source: Government Service Insurance System.

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Table 7.12 Benefits Paid by the Social Security System: 1975-1991
(Million pesos)

Year	Cumulative total	Total	Death	Disability	Sickness	Retirement [1]	Maternity
1975	728.8	148.5	31.3	7.7	42.1	67.4	-
1976	892.2	163.4	28.1	8.4	44.6	82.3	-
1977	1,077.1	184.9	35.9	9.9	46.5	92.6	-
1978	1,358.7	281.6	67.1	1.8	58.5	121.0	17.4
1979	1,702.2	343.7	88.7	2.1	64.1	136.1	34.4
1980	2,149.7	447.3	111.7	50.5	63.3	184.0	37.9
1981	2,690.3	540.6	148.5	43.1	69.4	231.3	48.3
1982	3,416.1	725.9	205.1	61.1	82.2	317.1	60.4
1983	4,281.5	865.4	262.1	82.9	82.8	375.9	61.7
1984	5,298.8	1,017.3	312.3	105.1	85.9	445.7	68.3
1985	6,498.2	1,199.3	387.7	124.0	96.1	510.9	80.6
1986	7,968.5	1,470.3	482.9	137.6	91.3	678.0	80.5
1987	10,064.8	2,096.3	751.8	193.4	133.3	924.6	93.2
1988	13,028.0	2,963.2	987.1	274.6	316.0	1,195.8	189.7
1989	16,562.3	3,534.3	1,230.2	316.5	373.4	1,404.2	210.0
1990	21,733.3	4,815.5	1,723.2	497.8	444.8	1,884.4	265.3
1991	28,397.8	6,431.5	2,372.9	678.4	508.1	2,594.7	277.4

Note: Death figures from 1981 to 1989 include funeral benefits.

[1] Includes refund of contribution of retirable members not qualified for pension but opts to get refund with interest.

Source: Social Security System.

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Chapter 8
Scientific and Industrial Research

Socio-economic development depends on the extensive use and application of science and technology. The Department of Science and Technology (DOST), as the Premier Science and Technology body, assumes the most vital role in the advancement of Science (S) and Technology (T) in the country. This chapter describes the different agencies under the DOST involved in S and T activities. It also presents the programs and projects undertaken by the department. In addition, the Science and Technology Agenda for National Development (STAND), approved by the president last April 20, 1993, which pursues the strategies of the Science and Technology Master Plan (STMP) is also discussed in the concluding section.

8.1 Department of Science and Technology

On January 30, 1987, Executive Order No. 128 elevated the National Science and Technology Authority (NSTA) to the Department of Science and Technology (DOST), the premier science and technology policy-making and program-implementing body of the government.

The reorganization order gave DOST the expanded functions and responsibilities in order to effectively pursue the declared state policy of supporting local scientific and technological efforts, developing reliance, promoting public and private sector partnership in S and T activities, and encouraging private sector to take greater role in research and development efforts. The DOST is mandated to provide central direction, leadership and coordination of scientific and technological efforts, and ensure maximum social and economic benefits for the people. It shall formulate and implement policies, plans, programs and projects for the development and promotion of science and technology in both public and private sectors. It shall also continually review the state and needs of science and technology in the context of the country's development goals. The DOST supervises, coordinates and controls the activities of 20 other organizations consisting of five sectoral councils, seven research and development institutes, six service agencies and two collegial and scientific bodies that make up the DOST system.

Sectoral Planning Councils. The Sectoral Planning Councils are responsible for formulating policies, plans, programs, projects and strategies for S and T development; programming and allocating funds; monitoring of research and development projects; and generating external funds. The five Sectoral Councils are the Philippine Council for Industry and Energy Research and Develop-

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ment (PCIERD); the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCAFNRRD); the Philippine Council for Health Research and Development (PCHRD); the Philippine Council for Aquatic and Marine Research and Development (PCAMRD); and the Philippine Council for Advanced Science and Technology Research and Development (PCASTRD).

Research and Development Institutes. The seven Research and Development Institutes of DOST are the following: Industrial Technology Development Institute (ITDI), Philippine Nuclear Research Institute (PNRI), Food and Nutrition Research Institute (FNRI), Forest Products Research and Development Institute (FPRDI), Philippine Textile Research Institute (PTRI), Metal Industry Research and Development Center (MIRDC) and Advanced Science and Technology Institute (ASTI).

Service Institutes. The following are the six Service Institutes under the DOST: Science Education Institute (SEI); Science and Technology Information Institute (STII); Technology Application and Promotion Institute (TAPI); Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA); Philippine Institute of Volcanology and Seismology (PHIVOLCS); and Philippine Science High School (PSHS).

Collegial and Scientific Bodies. The two collegial and scientific bodies are the Philippine National Science Society (PNSS) which promotes cooperation in research locally and abroad to give encouragement to individual initiatives which contribute to the advancement of science; and the National Academy of Science and Technology (NAST) which provides incentives and recognition to those engaged in scientific and industrial research, serves as an advisory body to the government on S and T through the DOST, and establishes linkages with foreign academies and similar bodies.

8.1.1 Inter-Council Review Board

The Inter-Council Review Board was created to review the plans of the sectoral planning councils and the National Science and Technology Plan. It is composed of Department Secretaries or their designated Undersecretaries, who are members of the sectoral planning councils.

8.1.2 Science and Technology Coordinating Council

The Science and Technology Coordinating Council (STCC) was created as part of infrastructure development on April 4, 1989 under Executive Order No. 123. It reviews, revises and adopts new policies for more focused science and technology directions. Through the various sectoral panels of the STCC, coordination among concerned government agencies, the academe and the private sector in S and T planning and implementation was strengthened.

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8.1.3 Philippine Science Communities

Science communities are groups of scientific and academic institutions physically located near each other and are bound by common missions and goals. These institutions are engaged in research and development, instruction, services and extension work in the field of health and allied sciences. The creation of science communities was mandated by Section 20 of Executive Order No. 784. There are four geographic communities established by the DOST as follows:

The Bicutan Science Community. This community revolves around the DOST proper and consists of S and T institutions located within the Bicutan area and its vicinity. It is involved primarily in research and development administration and coordination, in the provision of technical and consultancy services, and in the conduct of industrial and energy research and development. The community also includes agencies engaged in science promotion and education, inventions development, food processing and marketing, technical training, and extension activities. The PCIERD is the sectoral council responsible for coordinating the community's programs and activities.

The Diliman Science Community. This is a complex of S and T institutions that are located within the campus of UP Diliman and engaged in education and training, research and development, and various technical and consultancy services. The principal focus of this community are the natural sciences and social sciences centered in the College of Arts and Sciences and College of Social Sciences in UP Diliman. The community also includes various applied science institutions which conduct training and research in atmospheric and geophysical sciences, nuclear sciences and technology, volcanology, nonconventional energy, minerals and other natural resources, environmental science, engineering and others. The PCASTRD is the sectoral council responsible for this community.

The Ermita Health Science Community. The EHSC is envisioned to promote and encourage sharing of libraries, equipment and other facilities among academic and scientific institutions to help actualize an effective, productive and interactive community of scientific institutions, researches and scholars. This community is mandated to establish a system for effective sharing and utilization of physical, financial and manpower resources among its member-institutions in the conduct of researches in health, nutrition and allied sciences; develop and strengthen manpower resources; promote effective dissemination and proper utilization of health research findings; develop effective and harmonious working relationship within the EHSC and establish linkages with research institutions outside the EHSC. The PCHRD is the DOST science and technology council responsible for the EHSC.

The Los Baños Science Community. This is a group of academic and research institutions with the University of the Philippines at Los Baños, Laguna as its

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nucleus. Among its members are agencies under the umbrella of the DOST such as the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCAFNRRD) and the Forest Products Research and Development Institute (FPRDI); and the Department of Environment and Natural Resources, one international organization and one Southeast Asian regional center, which are engaged in manpower development, extension activities, and research and development in agricultural and natural resources.

The main thrust of the community is to accelerate rural development. This involves the generation, verification, packaging and dissemination of technologies and information for promoting agricultural and natural resources development. The PCAFNRRD serves as the DOST coordinating council of the community.

8.1.4 Scientific Career System

One of the significant features of the reorganization of the S and T machinery is the adoption of a Scientific Career System (SCS), an innovative approach in scientific manpower development within the government civil service. The SCS is a system of recruitment, career progression, recognition and reward for scientists in the public service. The system serves as a means to develop a pool of highly effective and productive scientific manpower through attractive awards and incentives and a career path which allows scientists to develop within their areas of expertise without having to change their status.

8.2 The National Academy of Science and Technology

The National Academy of Science and Technology (NAST) is one of the collegial and scientific bodies of the DOST established to provide meaningful incentives and recognition to those engaged in scientific and technological researches. It serves as an advisory body to the government on S and T and provides linkages with foreign academies and similar bodies.

The NAST was formally organized in 1978. The members are outstanding Filipino scientists with doctoral degrees in any field of the sciences (agriculture, engineering, medical sciences, mathematics and social sciences) from an accredited university who have demonstrated and earned distinction in independent research or significant innovative achievement in the basic and applied sciences. In highly meritorious and extremely exceptional cases, the doctoral degree requirement may be waived. The prospective member is nominated by at least three members of the Academy and is screened on the basis of the nominee's researches and published works in recognized scientific and technical journals.

Members of the Academy carry the title "Academician" from which National Scientists, the highest honor conferred to men and women of science, are chosen. Membership is for life unless terminated for cause or by voluntary resignation.

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The Academy was organized with only ten members in 1978. Eight new academicians were added to the list in 1992-1993 bringing the total membership to 47 as of 1993. For a complete list of National Scientists and Academicians and their respective fields of specialization from 1978 to 1993, refer to Table 8.1.

8.3 S and T Programs and Projects in 1991

To meet the needs and requirements of the scientific community and clients in related activities, the DOST system conducts a wide spectrum of S and T activities in the following areas: Research and Development, Technology Transfer, S and T Services, Manpower Development and Institution Building, and International Linkages.

8.3.1 Research and Development

In response to the national development thrusts, emphasis was placed on Research (R) and Development (D) projects that would yield immediate gains to accelerate the country's most pressing problems on unemployment, depleting foreign exchange revenues, worsening balance of payments position and capital formation. In 1991, a total of 99 R and D projects have been completed, that is, have undergone the various stages of R and D spectrum namely: basic research, applied research, experimental development and pilot testing. See Table 8.3 for the sectoral breakdown of R and D projects completed by DOST.

Agriculture and Natural Resources. Research in Agriculture and Natural Resources include among others the development of parasitoids and microbial insecticides to control Diamond blackmoth in cabbage, development of a rotary flash palay dryer to minimize postharvest losses, development of new corn hybrid - six yellow hybrids and one white hybrid. New rice varieties such as PSBRC-6 were also developed. These new varieties are high yielding, resistant to pests and diseases, have good grain quality for lowland irrigation and tolerant to drought. In aquaculture, sample stations were established in selected areas to gather samples of agar and algin for testing. Other achievements include development of monitoring kits to detect recurring contamination of shellfish by red tide, development and breakthrough on the hatchery of giant freshwater prawn in earthen ponds, development of a prophylactic treatment for freshly cut bamboo species before transporting from the forest plantation, development of an alternative material for packaging fruits using selected forest vines and bamboo, and the development of the optimum conditions for the manufacture of gypsum bonded boards using coconut woodwool which will result in efficient use of gypsum.

Industry and Energy Sector. The Industry and Energy sector conducted researches and supported several projects aimed at harnessing the country's S and T capabilities. Some of these projects were the following: design and

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development of a multipurpose thermal-heated oil furnace type dryer; development of insulation materials from woodbarks and volcanic ash; utilization of volcanic ash for mold production; utilization of waste pulping liquor of commercial production of abaca pulp as cement additive; development of a lumber dryer heated by non- conventional energy sources; production of calf serum for mammalian cell cultivation; study on the genetics of erythromycin-producing streptomyces erythreus; development of a slow release type fertilizer from dolomitic limestone and rice hulls that can be an import substitute to potassium fertilizer; bench-scale production of alkyl phosphate which is used as an anti-static agent for textile that may mean substantial saving for the textile industry; software development for visualization of fluid motion using computer graphics; and the small-scale production of methyl ester as diesel fuel substitute which was proven to be economically viable. To maximize the use of indigenous materials, studies were done on sericulture implements from sawmill residues, bamboo and pandan leaves, and on high affinity natural dyes for silk fabric using narra sawdust, coconut husks and *talisay* leaves.

Health and Nutrition. In this area, researches and studies were done on the following: the ability of *lagundi* syrup and akapulco lotion to reduce the genetoxicity of three mutagens or cancer-causing cells; histologic evaluation of tissue compatibility of locally made implants for internal fixation of fractures; quinine from cinchona trees as a possible alternative to high cost anti-malarial drugs; molasses as a local substitute for fermentation of penicillin and G-APA; epidemicology of acute and chronic lung disease as a result of passive smoking among children; and the effects of calcium supplementation on blood pressure.

Nutrition of Filipino children, one of the socio-economic concerns, was given attention through researches which resulted in the development of the following: canned tuna loaf which has high protein content, a new anthropometric standards for children essential in growth monitoring, and an energy-equivalent table which will be useful in calculating the appropriate amount of energy needed for effective weight control.

Natural Hazards and Mitigation. As of 1991, regional seismic zonation maps for the Philippines, which will serve as important input for micro seismic zonation were prepared. The development of maps of the 1991 pyroclastic flows and lahar hazards maps were also completed. These maps will be the basis for the re-evaluation of the hazards due to pyroclastic flows and secondary hydroeruptions and will be of great help to disaster and relief agencies. A map of active faults and excavated fault trace was also developed, including a map of landslides and liquifaction prone areas in the Philippines.

A preliminary national inventory of green house gasses emissions as well as two research activities on rainfall forecasting in Metro Manila were completed. The research outputs, if operationally feasible, will improve flash warnings and will directly benefit urban residents.

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8.3.2 Technology Transfer

On September 29, 1989, DOST launched the Comprehensive Technology Transfer and Commercialization (CTTC) Program to intensify the policy of the Technology Application and Promotion Institute (TAPI). The program enjoys strong financing support from the Development Bank of the Philippines (DBP), Technology and Livelihood Resource Center (TLRC), Land Bank of the Philippines (LBP) and Private Development Bank of the Philippines (PDBP). Recently, a community organizer of broad based commercial activities, the Philippine Business for Social Progress (PBSP) joined the CTTC program. The program, which is focused on an aggresive pursuit to ensure that Science and Technology creates a substantial impact on economic recovery, poverty alleviation and people empowerment has been successful in implementing its objectives. In 1991, there were about 94 new and existing technologies including the manufacture of the following: iron fortified rice, spawn bags, and granular water filter with backwashing mechanism and refractory sprue and runner. In 1992, there were 112 new and existing technologies commercialized such as the manufacture of cement bonded sugarcane bagasse boards, production of compressed food products for use as survival ration of military personnel, extraction of oils from leaves of plants to be used as perfume, fabrication of fermentor battery for recording temperature and PH, and production of silica gel from rice hull wastes.

The application of these technologies will yield an expected rise in production and employment opportunities.

8.3.3 S and T Services

Agencies under the DOST provide services to both the public and private sectors in the form of the following: testing and calibration; quality control; advisory and consultancy services; training; patenting and licensing; design and engineering and library and information-related services. Various assistance are provided to inventors and to the public on disaster control, prevention and mitigation; radiation protection; industries assistance programs; and information through print and broadcast media, tours and lectures, seminar workshops and symposia.

8.3.4 S and T Manpower Development and Institution-Building

To provide a critical mass of S and T professionals and technicians required for national development efforts, DOST through its councils and institutes embarked on several manpower development projects and programs. The groundwork for this manpower development lies in the improvement of the country's educational system which includes the upgrading of the capabilities of the faculty, improving facilities and equipment, strengthening the foundation schools (grade and high schools) and maintaining linkages with R and D institutions locally and abroad.

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To help meet the goal for high quality scientific manpower, DOST offers scholarship grants in various levels and fields of specialization. In 1991 and 1992, a total of 1,713 scholars were admitted making a total of 4,004 scholars. In addition, DOST conducted youth programs such as the National Science Quiz and Art Contest, the National Science Club Month which included the holding of conferences and seminar workshops, the annual Science Awards and the Philippine Science talent search which give recognition to outstanding young scientists. Moreover, several youth programs were supported by the DOST in cooperation with the private sector such as the Math Olympiad, and the Australian Mathematics competition.

DOST also initiated the Engineering and Science Education Project (ESEP) which aims for industrialization in the Philippines by increasing the supply of well-trained S and T manpower. In 1992, ESEP awarded a total of 403 scholarship grants in the graduate level. Aside from these, DOST upgraded the ranks of science experts to scientist and gave awards to deserving young scientists. The Philippine Science High School which provides quality science education at the secondary level was able to produce 3,977 scholars from 1969-1992. In addition, 47 in-country group trainings for the research network were sponsored and participated in by 1,672 researchers, technicians and farmers. Also, 673 researchers/administrators participated in various training activities such as: attendance to scientific conferences/symposia, international non-degree courses and study tours.

8.3.5 International Linkages

The DOST has carried on with its objective in keeping abreast with the latest S and T developments including relevant market and trade development through cooperative efforts and active participation in international gatherings and conferences.

In 1991, DOST initiated the program "Global Search for Technology" to search for foreign technologies and ensure the inflow of modern technologies to the production sector. Eleven scientists searched for nine foreign technologies in the USA, Australia, Singapore, Thailand and Sweden. Early in December 1991, a four-man Philippine mission made representations with the World Bank and successfully negotiated a loan to finance S and T projects starting 1992. Grants were also made available through invitations and sponsorships of various international research and development institutions like the Asian Research and Information Center (ARIC) and the Tropical Agricultural Research Center. Likewise, DOST availed of the programs of the Japan Society for the Promotion of Science (JSPS), in which three seminars were conducted in the following areas: Agriculture, Breeder Sciences and Medical Sciences. In 1992, the DOST councils and agencies on their own maintained linkages with foreign institutions. DOST actively sought the assistance of multilateral and bilateral sources of funds such as the World Bank, Japan International Cooperation Agency (JICA) for the implementation of its projects. Filipino

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scientists visited Japan as exchange scientists under FY 1992 DOST-JSPS scientific cooperation program. The recently concluded meeting of the ASEAN Committee on Science and Technology (COST) which was held in Malaysia last August 1993 intensified cooperation in science and technology in the ASEAN region in a rapidly changing global environment. The meeting also reviewed the progress of the 65 COST projects, proposed new projects and raised issues related to intensifying collaborative effort in the field of science and technology. ASEAN COST considered the status of the ASEAN science fund and reiterated the need to enlarge the present amount of the fund. The meeting agreed that the 29th ASEAN COST meeting, the sixth S and T Ministers meeting and the Senior Officials meeting will be held in January - February 1994 in Manila.

8.4 Private Sector Participation

Joint research projects/ventures with the private sector refer to any project fully or partially financed by a DOST council or any private establishment/entity and undertaken by any of the DOST R and D Institutes.

The private sector has been actively involved in a wide spectrum of S and T activities of the DOST and its agencies. It has availed of the assistance and technical services offered and its participation was in turn solicited in the planning of research and development projects to ensure better utilization of results.

In 1991, DOST conducted 47 researches with the private sector, 16 of which were new projects. Thirty one projects were completed during the year, of which ten were new projects. The researches were in the areas of nutrition, process, construction, nuclear science and information technology. ITDI conducted 16 projects followed by FNRI with 11 projects. For the same year, the DOST-DTI joint program was implemented. Under this program, private firms can avail of research incentive for their projects. One of these firms was the TDS Philippines for their electronics research and development project. (See Table 8.4 for the breakdown of these projects by agency.)

8.5 S and T New Direction

The Department of Science and Technology recognizes its vital role in the social and economic development of the country. The Science and Technology Master Plan (STMP), already on its third year since it was implemented in 1990 continues to provide signals to both public and private sectors on the desired direction of S and T development in the Philippines. DOST sets the desired goals and objectives to enable the country to attain the status of a newly industrialized country by year 2000. At a cabinet meeting held last April 20, 1993, DOST presented the Science and Technology Agenda for National Development (STAND) which was approved by the president. STAND spells

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out the areas which will be the focus of national scientific and technological efforts in the next six years (1993-1998). STAND emphasizes the development and utilization of superior technologies to a level of competitive advantage. Domestic production is expected to be upgraded for greater efficiency and better quality products.

The STAND shall be a market-oriented, private sector-led, short to medium term action plan. It has the following objectives to achieve: To reach an export level of US$23B by year 2000, a per capita GNP of at least US$1000/year and reduce poverty incidence to 30 percent or below. STAND will carry out its objectives through the following strategies: a) utilization of emerging technologies, b) increasing private sector participation, c) networking, d) manpower development, e) review of policies affecting Science and Technology and f) technological dynamism and monitoring. STAND's priority areas are the following: products and services which have high potentials in the world market, the basic domestic needs, support industries (that is, plastics, canning, glass) and the coconut industry. Through its intervention, DOST hopes to revitalize the coconut industry because one third of the population depends on it directly or indirectly.

Source:

Department of Science and Technology.

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Table 8.1 Members of the National Academy of Science and Technology and Their Field of Specialization: As of June 25, 1993

Name	Field of specialization	Year of membership	Remarks
Ramon I. Abarquez	Cardiology	1993	
Encarnacion Alzona, Ph.D.	Education (History)	1979	Proclaimed N.S. 1985
Clare R. Baltazar, Ph.D.	Systematic Entomology	1981	
Luz Oliveros Belardo, Ph.D.	Pharmaceutical Chemistry	1980	Proclaimed N.S. 1982
Solita Camara-Besa, M.D., M.S.	Biochemistry	1987	
Benjamin D. Cabrera, M.D., M.P.H.	Medical Parasitology and Public Health	1981	
Filomena F. Campos, Ph.D.	Plant Breeding/Cytogenetics	1987	
Paulo C. Campos, M.D.	Internal Medicine	1978	Proclaimed N.S. 1989
Magdalena C. Cantoria, Ph.D.	Botany	1980	
Gelia T. Castillo, Ph.D.	Rural Sociology	1983	
Leopoldo S. Castillo, Ph.D.	Animal Science	1990	
Mercedes B. Concepcion	Population	1992	
Lourdes J. Cruz, Ph.D.	Biochemistry	1987	
Conrado S. Dayrit, M.D.	Cardiology and Clinical Pharmacology	1980	
Ernesto O. Domingo	Internal Medicine	1992	
Salcedo L. Eduardo	Parasitology	1993	
Jose Encarnacion, Jr., Ph.D.	Economics	1979	Proclaimed N.S. 1987
Pedro B. Escuro, Ph.D.	Genetics	1979	
Raymundo A. Favila, Ph.D.	Mathematics	1979	
Edito G. Garcia, M.D.	Medical Parasitology	1987	
Edgardo D. Gomez, Ph.D.	Marine Biology	1993	
Rafael D. Guerrero	Fisheries	1992	

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Table 8.1 Members of the National Academy of Science and Technology and Their Field of Specialization: As of June 25, 1993 (continued)

Name	Field of specialization	Year of membership	Remarks
Carmen Ll. Intengan, Ph.D.	Nutrition	1987	
Emil Q. Javier, Ph.D.	Plant Breeding and Genetics	1982	
Bienvenido O. Juliano, Ph.D.	Organic Chemistry	1979	
Jose O. Juliano, Ph.D.	Nuclear Chemistry and Physics	1983	
Quintin L. Kintanar, Ph.D.	Environmental Medicine	1985	
Alfredo V. Lagmay, Ph.D.	Experimental Psychology	1978	Proclaimed N.S. 1988
Ricardo M. Lantican, Ph. D.	Plant Genetics	1988	
Melecio S. Magno, Ph.D.	Physics	1979	
Evelyn Ma. T. Mendoza	Biochemistry	1992	
Tito A. Mijares, Ph.D.	Statistics	1978	
Fe del Mundo, M.D.	Pediatrics	1979	Proclaimed N.S. 1980
Quirino O. Navarro, Ph.D.	Nuclear Physics	1985	
Apolinario D. Nazarea, Ph. D.	Biochemistry	1990	
Bienvenido F. Nebres, S.J., Ph.D.	Mathematics	1983	
Faustino T. Orillo, Ph.D.	Plant Pathology	1983	
Dolores A. Ramirez, Ph.D.	Biochemical Genetics	1987	
Joventino D. Soriano, Ph.D.	Cytogenetics and Mutations Research	1980	
Clara Y. Lim-Sylianco, Ph.D.	Biochemistry and Organic Chemistry	1980	
Teodulo M. Topacio	Veterinary Medicine	1993	
Dioscoro L. Umali, Ph.D.	Genetics and Plant Breeding	1978	Proclaimed N.S. 1986
Jose R. Velasco, Ph. D.	Plant Physiology	1983	
Carmen C. Velasquez, Ph.D.	Parasitology (Zoology)	1978	Proclaimed N.S. 1983

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Table 8.1 Members of the National Academy of Science and Technology and Their Field of Specialization: As of June 25, 1993 (concluded)

Name	Field of specialization	Year of membership	Remarks
Benito S. Vergara, Ph.D.	Plant Physiology	1987	
Ruben L. Villareal, Ph.D.	Plant Breeding	1990	
Prescillano M. Zamora, Ph.D.	Plant Anatomy-Morphology	1987	

Source: Department of Science and Technology.

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Table 8.2 Type of Scientific and Technological Services Rendered by the DOST System by Agency

Agency	1	2	3	4	5	6	7	8	9
1. Department of Science and Technology		*			*	*			*
2. Philippine Council for Agriculture, Forestry and Natural Resources Research and Development		*					*	*	*
3. Philippine Council for Health Research and Development							*		
4. Philippine Council for Industry and Energy Research and Development	*	*							
5. Philippine Council for Aquatic and Marine Research and Development		*							
6. Philippine Council for Advanced Science and Technology Research and Development		*							
7. Food and Nutrition Research Institute	*	*					*		*
8. Forest Products Research and Development Institute	*	*					*		
9. Industrial Technology Development Institute	*	*		*	*	*	*		
10. Metals Industry Research and Development Center	*	*					*		*
11. Philippine Nuclear Research Institute	*	*	*	*	*		*		
12. Philippine Textile Research Institute	*	*							
13. Advanced Science and Technology Institute									
14. Philippine Atmospheric, Geophysical and Astronomical Services Administration		*			*		*		
15. Philippine Institute of Volcanology and Seismology				*	*				
16. Science Education Institute									*
17. Science and Technology Information Institute							*	*	
18. Technology Application and Promotion Institute		*	*				*		*
19. Philippine Science High School							*		
20. National Academy of Science and Technology							*		
21. Philippine National Science Society							*	*	*

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Table 8.2 Type of Scientific and Technological Services Rendered by the DOST System by Agency (concluded)

Legend:

1. Testing, standardization, metrology and quality control;
2. Regular routine work on the counselling of clients designed to help them use scientific, technological, and management information, e.g., technical assistance and training;
3. Activities relating to patents and licenses;
4. Prospecting and related activities designed to locate and identify oil and mineral resources;
5. Topographical, geological and hydrological surveying; meteorological; seismological observation; surveying of soils and of plants, fish and wildlife resources; routine soil, atmosphere, and water testing; routine checking and monitoring of radioactivity levels;
6. S and T services provided by museums of science and/or technology, botanical and zoological gardens and other S and T collections (anthropological, archeological, geological and others).
7. S and T services provided by libraries, archives, information and documentation centres, reference departments, scientific congress centres, data banks, and information processing departments;
8. Systematic work on the translation and editing of S and T books and periodicals; and
9. Gathering information on human, social, economic and cultural phenomena, usually for the purpose of compiling routine statistics, e.g., population censuses, market studies, social and cultural statistics.

Source: Department of Science and Technology.

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Table 8.3 Number of R and D Projects Completed by the DOST System by Sector: 1991

Sector	Number
Total	99
Agriculture and Natural Resources	24
Aquatic and Marine Resources	3
Industry and Energy	31
Health and Nutrition	7
Science and Technology Services	20
Advanced Science and Technology	14

Source: DOST Councils, Institutes and Agencies.

Table 8.4 Number of Joint Research Projects/Ventures with the Private Sector of the DOST System by Sector: 1991

Agency	Number
Total	47
Industrial Technology Development Institute	16
Food and Nutrition Research Institute	11
Forest Product Research and Development Institute	10
Philippine Nuclear Research Institute	6
Philippine Textile Research Institute	3
Advanced Science and Technology Institute	1

Source: DOST Councils, Institutes and Agencies.

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Table 8.5 Technologies Under the Comprehensive Technology Transfer and Commercialization (CTTC) Program: 1991-1992

Technology	Agency
Rice Hull Ash Cement Hollow Blocks	FPRDI
Small Scale Biomass Pyrolyser for Farm Irrigation	FPRDI
Small Scale Charcoal Briquetting Plant	FPRDI
Tilapia Production	PCAMRD
Mudcrab Juvenile Production	PCAMRD
Portable Rice Mill	PCARRD
Multi-Crop Dryer	PCARRD
Freshwater Pearl Culture	PCAMRD
Small Farm Reservoir	PCARRD
Carabao Upgrading	PCARRD
Cement Bonded Production from Agroforest Wastes	FPRDI
Forage Chopper	PCARRD
Interlocking Bricks	ITDI
Inorganic Bonded Composite Panel Products	FPRDI
Bamboo/Rattan Pole/Wood Dryer	FPRDI
Rooftiles and Decorative Tiles	ITDI
Underchassis Spare Parts	MIRDC
Heat Treatment Chamber Furnace	MIRDC
Compound Table	MIRDC
Spin Casting	MIRDC
Ceramic Extrusion Press	MIRDC
Plating on Plastics	MIRDC
Semi-Temperate Mushroom	ITDI
Spawn Bags	ITDI
Soy Sauce	ITDI
Granular Water Filter with Backwashing Mechanism	ITDI
Cottage Bleaching and Dyeing Technology	PTRI
Refractory Sprue and Runner	ITDI
Batik Printing	PTRI
Handloom Weaving Using the Jack-type Loom	PTRI
Handloom Weaving Using Counter Balance Loom	PTRI
Iron Fortified Rice	FNRI
Soy Tempe Flour	FNRI
Production of Industrial Grade Salt	ITDI
Activated Bleaching Clay	ITDI
Bricks and Rooftiles	ITDI
Calcium Silicate Blocks	ITDI

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Table 8.5 Technologies Under the Comprehensive Technology Transfer and Commercialization (CTTC) Program: 1991- 1992 (continued)

Technology	Agency
Organic Fertilizer Production	ITDI
Coco-Diesel	ITDI
Cataract Surgical Set	PCHRD
Electromyogram	ASTI
Vacuum Packed Smoked and Dried Fruit and Vegetables	ITDI
Triple Strength Fruit Juices	ITDI
Private Automatic Branch Exchange	ASTI
Pulse Width Modulation Inverter	ASTI
Packet Radio Terminal	ASTI
Chronolog Time Recorder	ASTI
Seaweeds Noodles	FNRI
Shrimp Powder Fortifier	FNRI
Cereal Legume Foods	FNRI
Rootcrop/Plaintain-Legume Supplementary Food	FNRI
Soybean Production	FNRI
Fish and Other Aquatic Products	FNRI
Construction of Small Farm Reservoirs (SFR)	FPRDI
Treated Cocolumber	FPRDI
Cement-bonded	FPRDI
Sugarcane bagasse boards	FPRDI
Surimi	ITDI
Gulachi	ITDI
Integrated Coconut Products	ITDI
Citric Acid	ITDI
Beauty Care Products	ITDI
Low-Cost Laundry Soap Production	ITDI
Chemical Crucibles	ITDI
Artware and Terra Cotta Products	ITDI
Kiln Furniture	ITDI
Computerized Maintenance Management System for Iron and Steel and Other Industries	MIRDC
Software Development of Fluid Flow	PCASTRD
PC-Based Text Retrieval System	PCASTRD
Programmable Logic Controller	PCASTRD
A-Scribe	PCASTRD
Manufacture of Antibiotic Sensitivity Disk (ASD)	PCHRD
USP Grade Dextrose	PCHRD

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Table 8.5 Technologies Under the Comprehensive Technology Transfer and Commercialization (CTTC) Program: 1991-1992 (concluded)

Technology	Agency
Textile Oil from Coconut and Castor	PCIERD
Modified Starches from Cassava	PCIERD
Aflatoxin Field Testing Kit for Copra and Copra Meal	PCIERD
Lysine Production	PCIERD
Gemstone Processing	PCIERD
Value Added Products from Cephalopod	PCIERD
Production of Composting Inocula	PCIERD
Fiber Concrete Roofing	PCIERD
Ricehull Gasifier Combustor	PCIERD
Ferrocement	PCIERD
Sterile Insect Technique	PNRI
Tissue Grafts	PNRI
Survey Meters	PNRI
Gamma Irradiation	PNRI
Production of Textile Material from Pineapple Fibers	PTRI
Degumming of Cocoon Waste	PTRI
Handspinning of Degummed Cocoon Waste	PTRI
Silk Cocoon Reeling Technology	PTRI
Silk Production	PTRI
Electrocardiogram (ECG) Monitor	ASTI
Heat Treatment Common Service Facilities	MIRDC

Source: Department of Science and Technology.

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Chapter 9
Agriculture and Fisheries

9.1 Agriculture

Agriculture is the prime mover of the country's economy, being at present the least import-dependent activity. It offers the best potential for economic growth through which the battle for long-term development will be won.

From 1988 to 1990, agriculture sector's contribution to the country's real Gross National Product (GNP) ranged from 17.09 percent to 17.70 percent. In 1989, it accounted for P689.69 billion or 17.55 percent of the real GNP.

This section outlines the different policies and programs undertaken by the government to improve farmers' income and accelerate food production towards self-sufficiency. It presents statistics on agricultural land utilization; quantity and value of production of Philippine crops; number of livestock and poultry; number and area of farms by land use and size; wages of farm workers; and agricultural loans granted by financial institutions.

9.1.1 Agricultural Policies and Programs

The Department of Agriculture (DA) is the primary body mandated to oversee the country's agricultural activities. In support of the government's decentralization thrusts, the Department has completed its reorganization scheme which was started in 1987 and began implementing its new and redefined functions, objectives and mandate. As a result, the following now comprise the major services of the Department: creation of policy reforms for an environment conducive to increased incomes in agriculture; generation, verification and dissemination of information relevant to productivity and development; production, testing and dissemination of superior plant and animal germ plasm; facilitation of market access; promotion of agriculture-based enterprises; regulation and implementation of empowerment programs; and stabilization of supplies and prices of rice and corn.

The following subsections present in brief some of the various policies or programs undertaken by the agency:

9.1.1.1 Policy Environment Conducive to Increased Incomes in Agriculture

To come up with policies that would address the problems of increasing farmers' incomes, the DA conducted a series of consultations with farmer or fisherfolk groups, nongovernmental organizations (NGOs), other government agencies and concerned interest groups. It reviewed policies on grains stabilization, endorsed the approval of Magna Carta for Small Farmers, updated the agricultural chapter of the Medium-Term Philippine Development Plan and

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completed the Five-Year Philippine Agricultural Development Plan. In addition, it initiated the completion of geographical commodity and service agricultural development plans and drafted the 1990 commodity situation and outlook reports for some selected crops. Lastly, it designed rice and corn action programs aimed at achieving self-sufficiency in these major staples.

9.1.1.2 Programs for Disadvantaged Groups

To give priority attention to malnourished children and pregnant mothers, upland farmers and cultural minorities, the DA established the Special Concerns Office (SCO) which implemented the following projects:

Philippine Food and Nutrition Program (PFNP). It addresses the problem of malnutrition, focusing on the nutritionally-at-risk population groups. This program is a joint effort of the government and NGOs. In 1989, there were 1.5 million preschoolers and 2.4 million schoolchildren who benefitted from this program. In addition, food supplements were also provided to 130,000 pregnant and lactating mothers.

Lalakas ang Katawang Sapat sa Sustansiya (LAKASS) Program. This is the agency's principal contribution to the PFNP program. This project, with a funding of P23 million caters to the nutritionally depressed and malnourished preschoolers who came from poor families. Most of the funds were spent in income-generating and nutrition-related projects. In 1989, a total of P21.5 million or 93 percent of its funds were released to 115 nutritionally depressed municipalities all over the country.

Highland Agricultural Development Project (HADP). This project was implemented in 1987 with the aim of uplifting the socioeconomic conditions of upland farming communities in Benguet and Mt. Province. Its accomplishments in 1989 were the following: conduct of training courses on community organizations, cooperatives development and skills upgrading; establishment of three soil conservation demonstration farms in Benguet with an area of three hectares; completion of two barangay markets in Mt. Province and a municipal market in Sagada (still under construction); completion of 13 new communal irrigation systems and rehabilitation of 11 existing ones; and completion of 11 nurseries and 9 seed potato storage facilities.

Central Cordillera Agricultural Programme (CECAP). This 19.8 million European Currency Units (ECU) program is the first major integral rural development project in the Cordilleras designed to raise rural incomes and standards in the project area; support ecologically stable and diversified farming systems; and strengthen local capabilities in planning, implementing, monitoring and evaluating development efforts. In 1989, the project implemented nine pilot microprojects that served 1,107 families in Nueva Vizcaya and Mt. Province. Consultations with NGOs, state colleges and farmers' as-

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sociations were undertaken to ensure that projects which will be implemented are necessary and acceptable to the communities for which these are intended.

Tribal Agricultural Support Services Program (TASSP). This training program aims to enhance the capability of tribal communities for sustainable upland agricultural development and community mobilization. Some of the services provided under this program are the following: establishment of tribal nurseries, provision of planting materials, livestock dispersal and distribution of farm tools. In 1989, 4,070 families of 28 tribes from eight regions received these services. This program is being implemented in Regions 1 to 5 and 10 to 12.

9.1.1.3 Resource Conservation

Small Water Impounding Project. To help prevent soil erosion and degradation and to make water available for farming, various conservation and management techniques were disseminated. In 1989, the Department constructed 246 small water impounding units to irrigate about 4,504 hectares of farmland. Aside from providing irrigation, these structures served either as sources of potable water or as fishponds.

Crop Protection. Specific regulations were strictly implemented by the Department to prevent the introduction and spread of plant pests and diseases in the country. The program serves specifically through the Integrated Pest Management (IPM), Plant Quarantine Services and Quality Control of Inputs.

The IPM is the core of the Philippine crop protection policy for it has the best pest control tactics. The IPM technology restores ecological balance and reduces the cost of pest control through the use of natural enemies of pests combined with a minimum level of pesticide application. As of 1989, there were 242,300 farmers who adopted IPM and these farmers saved around P900 per hectare in production expenses.

The 12 regional offices of the DA maintained Plant Quarantine Stations and substations in sea and airports to check on incoming and outgoing plant materials. It had inspected 649,600 pieces of plant materials imported into the country, 29,300 pieces bound for foreign destinations and 1.3 million pieces which moved in domestic routes. Some 420,690 licenses, permits and clearances were issued to traders, exporters and importers.

The DA is continuously improving its research in production, testing and dissemination of superior plant species to promote economically advantageous varieties of crops. In 1989, 652,537 farmers were given around 22,246 metric tons of seeds and 12.8 million pieces of seedlings. These seeds were distributed by PHILRICE, Bureau of Plant Industry (BPI), Institute of Plant Breeding at the University of the Philippines, Los Baños (UPLB) and other private entities. The DA, through the Fertilizer and Pesticide Authority (FPA), approved licenses of 322 fertilizer and 934 pesticide handlers and registered more than

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280 fertilizer products, 506 warehouses, and 178 pesticide products to ensure the quality and safety of the farm inputs. To prevent the entry or use of hazardous pesticides, close coordination with the Department of Health and the Bureau of Food and Drugs was done.

Animal Protection. To prevent the decline in the number of livestock herd in the country and to beef up stocks, the following services were rendered: veterinary, vaccine production, livestock quarantine, increased livestock resources and feed quality control. The veterinary services instituted preventive and curative measures to protect the livestock population. In response to the need for low-priced animal vaccines and other pharmaceuticals, the DA designed a national animal health program and produced vaccines to support the implementation of disease prevention and control measures.

In 1990, the Bureau of Animal Industry laboratories produced 748,718 and 6,766,177 doses of bacterial and viral vaccines, respectively. About 416,950 milliliters and 14,960 grams of pharmaceuticals were also produced. Under the National Health Program, the bureau had distributed 3,902,770 doses of bacterial and viral vaccines, 519,780 doses of FMD and 152,219 doses of rabies vaccine. However, due to shortage of veterinary drugs, regional offices' capacity to produce vaccines was expanded through the Agricultural Support Services Project (ASSP). Trainings in regional offices were also conducted to update the technical know-how of regional employees.

In 1991, the National Artificial Breeding Center had inseminated 15,417 animals. Semen produced from cattle or carabao reached 43,617 straws; from sheep, 235; and from goat , 264.

9.1.1.4 Crop Diversification

The Department continued to pursue crop diversification to strengthen production systems in the agricultural sector. This supports the government's objectives of ensuring adequate food supply, greater employment opportunities, increased farm incomes and reduced dependence on traditional export commodities now facing declining demand in the world market. In 1990, the department extended appropriate technologies and extension services on diversified crops to some 26,600 farmers cultivating a total of 9,115 hectares.

The second Rice Production Enhancement Program (RPEP II) which was launched in November 1989 aims to boost the country's palay production and ensure adequate buffer stocks for the National Food Authority (NFA). The program covers some 800,000 hectares of fully irrigated ricelands in 73 provinces nationwide.

9.1.2 Agricultural Statistics

The Bureau of Agricultural Statistics (BAS) is the major data-collecting arm of the DA which provides data on crops, livestock and poultry, prices paid and received by farmers and agricultural labor through periodic surveys. These

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data were formerly published in crop year (i.e., a twelve-month period ending June 30 of the named year). But for consistency and comparability with data gathered by other agencies, BAS started to present them in calendar year. For this purpose, current data on cropland utilization, production and value are presented in calendar year. (See Tables 9.1-9.3.)

Censuses in agriculture which are conducted by the National Statistics Office (NSO) provide basic data on land resources, farm input and output, farm management and practices, including estimates on selected characteristics such as the number, size and area of farms, farm equipment, land utilization, crop and livestock/poultry production. Agricultural censuses in the country were undertaken in 1903, 1918, 1939, 1960, 1971 and 1981.

The 1991 census was not undertaken as scheduled due to budgetary constraints. However, it was conducted on February 13, 1992 and the enumeration period lasted for about three weeks. In addition to the data gathered in previous censuses, the 1991 census included basic characteristics on farm location, tenure, status, source of irrigation and crops planted. The objectives of the 1991 Census of Agriculture were as follows: determine the structure and characteristics of agricultural holdings; generate baseline data for improving the reliability of current estimates; draw up a sampling frame to be used for other statistical undertakings; and gather basic data for use in national as well as local development planning.

9.1.2.1 Cropland Utilization, Production and Value

Agricultural land utilization during the calendar year 1992 covered 12.52 million hectares or 41.73 percent of the country's total land area of 30 million hectares. This is 0.02 million hectares or 0.15 percent smaller than the previous year's coverage of 13.15 million hectares.

Agricultural crops planted to the area produced a total of 63.84 million metric tons, 21.54 percent of which were cereals, 64.74 percent were major crops and 13.72 percent were other crops. Although the 1992 total production decreased by 0.42 percent, production of major crops and other crops rose by 238.40 million metric tons and 70.20 million metric tons or 0.58 percent and 0.80 percent, respectively. Meanwhile, the cereals yield of 13.75 million metric tons was 0.58 million metric tons short of the previous year's total of 14.33 million metric tons.

Total production value in 1992 amounted to P172.71 billion. Major crops accounted for P76.54 billion or 44.32 percent of the total, while cereals and other crops took the remaining 37.46 percent and 18.21 percent, respectively. The value of cereals, major crops and other crops rose by 5.73 percent, 5.25 percent and 2.12 percent, respectively, and this may be due to the increase in volume of cereals, major crops and other crops produced.

Cereals consist of palay and corn only. Major crops, on the other hand, include coconut, sugarcane, banana, pineapple, coffee, mango, tobacco, abaca, rubber, cacao, cassava, camote, peanut, mongo, onion, garlic, tomato, eggplant,

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cabbage and citrus. Meanwhile, other crops include other fibercrops, other rootcrops, tubers, spices, fruit-bearing vegetables, leafy/stem vegetables, other legumes, other fruit nuts and others.

The decline in major crops production started in 1988 and 1989. But in 1992, it decreased by 2.96 million metric tons or 7.66 percent.

Value of production generally had an increasing trend from 1985 to 1992 with tremendous increases in 1988, 1989 and 1992. In 1992, major crops amounted to P76.54 billion or an increase of 5.25 percent from 1991 value of P72.52 billion. (See Tables 9.1- 9.3 for details.)

Palay. Agricultural land planted to palay in 1993 had a total area of 3.28 million hectares, an expansion of 2.57 percent (84,300 hectares) from the 3.20 million hectares recorded in 1992. Although the quantity of production rose by 3.24 percent (from 9.13 million metric tons in 1992 to 9.43 million metric tons in 1993), its value increased by 14.80 percent (from P43.79 billion in 1992 to P51.40 million in 1993). The top three rice-producing regions in the country in 1993 were the following: Central Luzon (1.60 million metric tons), Western Visayas (1.48 million metric tons) and Southern Tagalog (1.08 million metric tons). Central Luzon reported the highest yield per hectare of 3.36 metric tons. Northern Mindanao was second with 3.30 metric tons per hectare followed by Central Mindanao with 3.26 metric tons per hectare. (See Table 9.4 for the regional breakdown.)

Corn. Area planted to corn decreased from 3.33 million hectares in 1992 to 3.15 million hectares in 1993. Corn harvest of 4.62 million metric tons worth P21.26 billion in 1992 went up to 4.80 million metric tons worth P20.84 billion in 1993, or an increase of 3.73 percent in quantity and a decrease of 1.97 percent in production value. Corn is the second most important crop raised by farmers especially in rice-deficit areas of the country. Southern Mindanao harvested the bulk of the country's total corn produced in 1993 with 1,284.60 billion metric tons or 26.77 percent of the total. This was closely followed by Central Mindanao which harvested 886,200 billion metric tons of corn (18.47 percent). The top three corn-producing regions were Southern Mindanao, Central Mindanao and Northern Mindanao. On the other hand, Central Luzon and CAR had the least corn production of .02 million metric tons and .03 million metric tons, respectively.

Coconut. Under the major crops, coconut contributed the highest hectarage utilized and value produced. The total coconut production in 1992 was 11.40 million metric tons which covered an area of 3.08 million hectares valued at P23.04 billion pesos. Coconut production for the past eight years (1985-1992) varied. Increases were observed only in 1986, 1990 and 1992 at 11.75 percent, 1.10 percent and 1.00 percent, respectively, while the rest showed declines in production. The top three coconut- producing regions in 1992 were the following: Southern Mindanao (3.92 million metric tons with an area of 562,968

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hectares), Southern Tagalog (1.93 million metric tons with an area of 542,419 hectares) and Western Mindanao (1.27 million metric tons with an area of 362,827 hectares). Meanwhile, CAR and Central Luzon had the least coconut production. (See Table 9.6 for the regional breakdown.)

Sugarcane. Sugarcane was one of the major crops produced in 1992, with 21.80 million metric tons or 52.75 percent of the aggregate major crop's production for the year. This, however, was 0.02 million metric tons or 0.10 percent less than the 1991 produce of 21.82 million metric tons. The decrement could be attributed to the decrease of 4,519 hectares in the area planted to sugarcane. On the other hand, the value of production increased by P1.07 billion or 8.19 percent over the previous year's total production of P14.62 billion.

Table 9.7 presents sugarcane's area of land utilized and quantity produced by region from 1988 to 1992. For the past five years, Western Visayas had consistently utilized the largest area and produced the most. In 1992, the said region yielded 13.28 million metric tons or 60.92 percent of the total produce covering 157,660 hectares of land (59.05 percent of total land area planted to sugarcane). Central Visayas followed with a total area of 29,479 hectares and 1.81 million metric tons production. Also included in the top five sugarcane-producing regions were the following: Southern Tagalog (2.26 million metric tons), Central Luzon (2.04 million metric tons) and Central Visayas (1.81 million metric tons).

Banana. In 1992, total area planted to banana covered 321,381 hectares or 2.57 percent of total agricultural land with production of 3.06 million metric tons, valued at P10.52 billion. Among the country's major crops, banana is the third largest contributor in terms of production and value. As there was an increase of 3.23 percent in hectarage utilization in 1992, a 3.66 percent improvement from the previous year's production of 2.95 million metric tons was likewise reported. Three Mindanao regions topped in banana production in 1992. Southern Mindanao contributed the highest production at 1.28 million metric tons and area utilized at 55,470 hectares. Northern Mindanao followed with 416,383 metric tons covering about 49,870 hectares while Central Mindanao produced 287,417 metric tons and utilized 13,023 hectares. Furthermore, Southern Tagalog and Western Visayas regions came in third and fourth in terms of area of plantation but only managed to place fifth and fourth, respectively, in terms of quantity of bananas produced. (Table 9.8 presents the regional breakdown from 1988 to 1990.)

Pineapple. Total area utilized for pineapple reached 60,588 hectares in 1992, producing 1.14 million metric tons. This is 4.69 and 1.59 percent increase from previous year's area and production, respectively. (Regional values are presented in Table 9.9.)

After registering a 2.37 percent growth in 1987, pineapple production took a complete turnaround in 1988 by posting a 9.38 percent decline. (Refer back

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to Table 9.2) From then on, the country's pineapple industry was on a downtrend. Despite setbacks in production, value of produce increased from 1987 to 1989. In 1992, it went up by 2.29 percent from P4.69 billion the previous year. Northern Mindanao had the highest production at 624,536 metric tons with an area of 35,457 hectares, followed by Southern Mindanao where production was 391,588 metric tons and hectarage was 13,843. Southern Tagalog was far third producing 61,341 metric tons which covered about 6,240 hectares. ARMM contributed the least production of only 134 metric tons.

Coffee. Area planted to coffee decreased from 143,139 hectares in 1991 to 141,695 hectares in 1992. Consequently, the value of production also decreased from P3.16 million to P2.62 billion (20.71 percent). Southern Mindanao was consistently the highest coffee producer since 1988. In 1992, it produced a total of 36,478 metric tons of coffee, accounting for 20.58 percent of the total production. Southern Tagalog followed with 28,204 metric tons (22.10 percent) and Northern Mindanao came in third with 27,477 metric tons (21.53 percent). (See Table 9.10 for regional breakdown.)

Mango. In 1992, total mango production reached 330,131 metric tons, utilizing 57,170 hectares. This was a 7.01 percent increase from the previous year's total production of 306,978 metric tons but 0.45 percent more than the 56,910 hectares covered. During the five-year period (1988-1992), it was only in 1989 when quantity of mango produced experienced an increase (2.48 percent). Table 9.11 presents the regional breakdown for mango production while Table 9.3 shows the value of production. A fluctuating trend was noted in the value of production from 1985 to 1992. The top three mango producers in 1992 were Western Visayas (88,727 metric tons), Central Luzon (69,270 metric tons) and Ilocos Region (58,197 metric tons).

Tobacco. Area planted to tobacco increased from 67,936 hectares in 1991 to 95,046 hectares in 1992. Volume of production posted at 117,899 metric tons in 1992 was 32,717 metric tons or 27.55 percent higher than the previous year's level of 85,182 metric tons. Similarly, its value improved by P678.00 million, from P2.63 billion in 1991 to P3.30 billion in 1992. Ilocos, the top regional producer of tobacco contributed 94,804 metric tons or 80.41 percent of the country's total in 1992. It was followed by Cagayan Valley with 10,052 metric tons. (See Table 9.12.)

Abaca. The introduction of synthetic fibers in the world market adversely affected the abaca industry as indicated by the fluctuating production volume from 1985 to 1992. (See Table 9.2.) From a harvest of 84,300 metric tons in 1983, production of abaca is the same as in 1992. The 1.01 percent decline in production in 1992 resulted to P1.46 billion in value. This was harvested from a total land area of 107,057 hectares, 0.33 percent less than the area utilized during the previous year. (See Table 9.13 for the regional breakdown.)

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9.1.2.2 Livestock and Poultry

Table 9.14 presents the number of livestock and poultry from 1960 to 1992. Livestock includes carabao, cattle, hog and goat, while poultry consists of chicken and duck. Except for goat, which showed an increase of 117,439 or 5.53 percent, livestock production for 1992 suffered setbacks as shown by a negative production in carabao, cattle and hogs. On the other hand, duck production increased by 80,601 or 0.97 percent and chicken production decreased by 2,352,905 or 3.59 percent from the previous year's level.

9.1.2.3 Census of Agriculture

This section presents statistics on the number, area and average size of farms, and area of farms by land use. For purposes of comparison, the results of 1971 Census of Agriculture, 1975 Integrated Census of Population and Its Economic Activities and 1980 Census of Agriculture are presented in Table 9.15. The 1980 figures were based on a complete count of all farms, while the 1971 estimates were based on sample farms. The 1975 figures were taken from the reports of sample households. Within a span of almost ten years (1971-1980), the number of farms posted an increment of 45.27 percent, from 2.35 million in 1971 to 3.42 million in 1980. Farm area was recorded at 9.72 million hectares in 1980, comprising 32.40 percent of the country's total land area of 30 million hectares. Compared with 1971, total farm area in 1980 increased by 14.50 percent. Resulting partly from the decrease in the number and area of farms for the same period is the reduction of the average farm size from 3.61 hectares to 2.84 hectares. (Refer to Table 9.15 for regional and provincial details.)

Arable land in 1980 increased by 12.04 percent compared to the 1971 level. Area under permanent crops likewise expanded by 37.79 percent and this contributed mainly to the increase in the total farm area. Area under permanent meadows and pastures registered a decline of 23.30 percent. (For details, see Table 9.16.)

9.1.2.4 Farm Wages

The average daily wage rates (without meals) of farm workers increased from P57.14 in 1991 to P65.16 in 1992. Agricultural farm wages, however, varied according to type of crops like palay, corn, sugarcane and coconut, and to the type of farm operations performed by farm workers such as plowing, harrowing, planting or transplanting, weeding, care of crops, harvesting, splitting or shelling and others.

While recipients of highest wage rate varied among palay, sugarcane and coconut farm workers, lowest rate has always been given to corn farm workers from 1985 to 1992. In 1992, highest daily pay of P69.79 went to coconut farm workers, while the least daily wage of P59.83 was given to corn farm workers. (See Table 9.17.)

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On farm operations, plowing by man and animal offered the highest pay of P58.78. It was closely followed by harrowing by man and animal at P56.92. Table 9.18 presents the details.

Farm workers for all crops in Southern Tagalog received the highest average daily pay of P78.80 in 1992. This was 20.93 percent more than the national daily rate of P65.16. By kind of crop workers, palay and corn farm workers from the same region were also leading. On the other hand, farm workers for all crops in Central Visayas was paid lowest at an average daily pay of P53.07, almost a third (18.55 percent) lower than the national average. (See Tables 9.19-9.21.)

9.1.3 Food Marketing and Market Development

The National Food Authority (NFA), which was then known as the National Grains Authority, continues to implement the agency's missions and mandate in accordance with its reorganization scheme which started in 1986. In 1990, the agency has maintained price stability for rice and corn in the market; developed and strengthened farmers' organizations through cooperative-oriented institutional projects and activities; and provided marketing support services to producers of grains and other food commodities alike to complement the agency's stabilization efforts.

For more details, see topic on NFA in Chapter 17. (Domestic, Wholesale and Retail Trades, Services and Tourism.)

9.1.4 The Agrarian Reform Program

Agrarian reform is an integrated program which covers a set of measures to effect land tenure improvement and provide production and support services not only to eliminate obstacles to development but also to accelerate the process of development. Under this concept, the Philippine agrarian reform program delivers to the farmer-beneficiaries a package of services, namely, credit support, infrastructure, farm extension, legal assistance, electrification, and development of rural institutions. To ensure successful program implementation, an integrated approach is adopted whereby all government offices are enjoined to extend full cooperation and assistance to the Department of Agrarian Reform (DAR).

The DAR is the administrative machinery organized to implement the government's agrarian reform program. Its four staff bureaus which are responsible for the development of policies, plans, programs and standard operating procedures on their respective areas of responsibility are the following: Bureau of Land Tenure Improvement (BLTI), Bureau of Land Acquisition, Distribution and Development (BLADD), Bureau of Agrarian Reform Importation and Education (BARIE), and Bureau of Agrarian Legal Assistance (BALA).

The Land Bank of the Philippines (LBP) was created to provide financial support to all phases of the agrarian reform program. It is primarily tasked to transfer ownership of agricultural lands to tenant farmers, help farmer-

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beneficiaries of land reform to increase their productivity and income, and shift landowner resources to industry or to some other productive endeavors.

9.1.4.1 Historical Background

Early attempts at agrarian reform by past presidents of the country, from the confiscation of friar lands by Aguinaldo through the institution of systematic land registration and public land disposition by the Americans, social justice program of Quezon, land-for-the-landless program of Magsaysay to the land reform pilot projects of Macapagal, were all considered limited in scope and hardly changed the plight of the masses nor broke the backbone of feudalism in the Philippines. With the declaration of martial law by then President Marcos on September 21, 1972, the entire country was proclaimed a land reform area. On October 21, 1972, through the issuance of P. D. 27, farmers in rice and corn lands became beneficiaries of Operation Land Transfer and Operation Leasehold. This program decreed the emancipation of tenants from the bondage of the soil, transferring to them the ownership of lands they till and providing them with the necessary instruments and mechanisms.

Other supporting laws were issued from time to time in the form of decrees, letters of instruction, rules and regulations, and orders to give more protection and integrated assistance to both landowners and tenant-farmers. These included, among others, the strengthening of the cooperative movement, giving incentives to affected landowners, establishing the LBP as its financing arm, and prohibiting and penalizing the dismissal of tenant-tillers from their holdings.

Agrarian reform implementation accelerated upon the assumption into office of former President Corazon C. Aquino on February 25, 1986. The program which was called the Comprehensive Agrarian Reform Program (CARP) was expanded to include landholdings planted to crops not only of rice and corn, but also of coconut, sugar, aquatic and other croplands.

9.1.4.2 Objectives of Agrarian Reform

The following are the objectives of the Agrarian Reform Program: to promote social justice and equity by prioritizing the welfare and socioeconomic status of small farmers and by protecting their rights to own the land they till, self-organize, act collectively and demand for autonomy; promote owner-cultivatorship of economic family-sized and collectively/cooperatively cultivated farms to form the foundations of Philippine agriculture; to accelerate acquisition and distribution of all agricultural lands in accordance with the priorities and retention limits of R.A. 6657 subject to just compensation and with due regard to ecological and environmental concerns; to maintain adequate food supply by preventing further conversions of prime agricultural lands into nonagricultural uses; to implement stewardship in the disposition or utilization of public lands suitable to agriculture, subject to prior rights, homestead rights of small settlers and the rights of cultural minorities to their ancestral lands; to provide support to farmer-beneficiaries in their agricultural and

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agro-industrial activities; to strengthen partnership among government, farmers/farm workers, people's organizations (POs) and concerned NGOs in agrarian reform implementation and monitoring; to provide support to landowners in the investment of proceeds of the sale of their priorities to agro-industries; and to recognize the role of women in the implementation of the CARP.

9.1.4.3 The Comprehensive Agrarian Reform Program (CARP)

Proclamation No. 131, dated July 22, 1987, instituted the Comprehensive Agrarian Reform Program which covers, regardless of tenurial arrangement and commodity produced, all public and private agricultural lands and other lands of the public domain suitable to agriculture.

The program aims to eliminate the wide disparity between the rich and the poor and remove the root cause of the twenty-year communist insurgency.

Provisions for the mechanisms needed initially to implement the CARP are set in Executive Order (EO) 229 also dated July 22, 1987. The EO calls for the breakup and redistribution of some 3.7 million hectares of public and private agricultural lands, including vast tracts of coconut and sugar plantations to 2.13 million landless tenants and agricultural workers.

The EO left the setting of retention limits, priorities and mode of compensation for Congress to legislate. Thus, on June 10, 1988, then President Corazon C. Aquino signed Republic Act 6657, the Comprehensive Agrarian Reform Law of 1988, which instituted CARP to promote social justice and industrialization in the country. The act was a consolidation of Senate Bill 249 and House Bill 400 which were passed by both Senate and House of Representatives on June 7, 1988.

Among the main features of the program are the following: a retention limit of five hectares plus three hectares for every direct heir and tiller who is 15 years of age and above; coverage of all private and public agricultural lands as provided by Executive Order 229, including public lands, regardless of tenurial arrangement and crops produced; and lands to be acquired and distributed over a period of ten years.

The Program has three phases of implementation. Phase I covers all idle and abandoned, voluntarily offered or foreclosed public lands devoted to agriculture, to be acquired and distributed upon the effectivity of the Law and to be completed within four years. Phase II covers all alienable and disposable public and arable agricultural lands as well as privately owned lands in excess of five hectares to be completed within four years. Phase III begins on the fourth year and covers all other private agricultural lands from 24 to 50 hectares with a retention limit of 24 hectares, the implementation of which will take place on the sixth year of the program.

In 1990, implementation of the CARP was made faster and steadier through the coordinated activities of nine implementing agencies, namely, Department of Agrarian Reform (DAR), Department of Environment and Natural Re-

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sources (DENR), Department of Agriculture (DA), Land Bank of the Philippines (LBP), Department of Trade and Industry (DTI), National Irrigation Authority (NIA), Department of Public Works and Highways (DPWH), Land Regulatory Authority (LRA) and Department of Labor and Employment (DOLE). Also, policy adjustments made by the President facilitated the distribution of lands and the delivery of services to CARP beneficiaries. In June 1990, the President issued Executive Order (EO) 405, transferring the valuation function from DAR to LBP to enable the department to concentrate on activities related to land distribution; EO 406, mandating the CARP implementing agencies to focus their operations on the 24 strategic operation provinces where the bulk of lands for distribution are situated; and EO 407, directing government financial institutions, state colleges and government agencies to turn over their agricultural lands and cancelled public land leases to the DAR for immediate distribution to qualified farmer beneficiaries. To date, it had distributed 293,427 hectares of land to 172,556 farmer-beneficiaries.

9.1.5 Financial Assistance to Agriculture

9.1.5.1 The Agricultural Credit Policy Council (ACPC)

As provided for in Section 5 of Executive Order 113, the ACPC was established to replace the Presidential Committee on Agricultural Credit (PCAC) and the Technical Board for Agricultural Credit (TBAC) and to render the following services: assist the DA in synchronizing all credit programs; review and evaluate the economic soundness of all ongoing reports and proposed agricultural credit programs; and receive all reports and documents of all programs with agricultural credit and financing components.

The primary thrust of the council, which is to consolidate a number of agriculture-related loanable funds into the Comprehensive Agricultural Loan Fund (CALF), was successfully implemented in the few years of its existence.

In consonance with the overall economic objectives of the national government, the council streamlined all policies and measures on agricultural credit. It pursued agricultural development and created a package of policy and institutional reforms to achieve its target. Also, it continued to formulate and advocate policies and programs which enhanced the efficiency and effectiveness of the Philippine rural financial market with the end view of increasing the flow of credit to agriculture. These efforts were taken up precisely to promote the profitability of small farmers by increasing their timely access to adequate financing. As part of its mandate, the council reviewed several agricultural-credit programs and helped package economically viable rural-based projects.

In 1989, ACPC carried out its key programs in the field of research, analysis and advocacy of rural financial policies and programs, and monitoring, evaluation and management of the CALF. As a research agency, it continued to address critical issues in rural finance through its studies on crop insurance,

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agrarian reform credit, rural savings mobilization, bank branching and informal credit markets.

9.1.5.2 The Comprehensive Agricultural Loan Fund (CALF)

On December 24, 1986, the Comprehensive Agricultural Loan Fund (CALF) was created under Executive Order 113 to initially consolidate 17 out of 39 separate loan funds previously implemented by the DA. This integration of various funds into CALF was deemed necessary because many of these funds were not being used effectively. General inefficiency of the various government agencies in handling these funds resulted in high administrative costs, and the loans granted covered only a small portion of the agricultural sector and a large amount remained uncollected.

The CALF works as a guarantee fund. It encourages private banks and other financial institutions to lend to small farmers and farmer-groups who have no access to formal credit by assuming up to 85 percent of the risks which lead to default. In some cases, target beneficiaries who cannot provide acceptable collateral may use the guarantee fund as substitute collateral. The ACPC, with the government and the NGOs, provides infrastructure support and appropriate organizational and technological training to improve the credit worthiness of target beneficiaries who cannot avail of assistance because banks view them as credit risks.

Administration of fund is done by the DA through the ACPC. However, processing or extension of loans to farmers and fishermen cannot be done by the Department. Only the participating private banks can do so through any of the following guarantee institutions: Guarantee Fund for Small and Medium Enterprises (GFSME), for small- and medium-sized agricultural projects; Quedan Guarantee Fund Board (QGFB), for projects involving grains and other storable commodities; Philippine Crop Insurance Corporation-CALF (PCIC-CALF), for agricultural production projects of small farmers; and Bagong Pagkain ng Bayan (BPnB), for rural-based projects of local government units.

As of September 1990, loans guaranteed under the CALF totalled P1.51 billion or an increase of P846 million from the previous year. They were broken down as follows: P944 million QGFB loans given to 37 integrated borrowers, P347 million PCIC loans benefitting 43,570 borrowers, and P218 million GFSME loans extended to 43,570 borrowers. The total number of clientele beneficiaries increased from 26,292 in 1989 to 72,281 in 1990 or an increase of 174.92 percent.

To check the performance of the support guarantee program, active monitoring and periodic assessment were carried out in 1990. The assessment yielded the following needs: refocus the QGFB's CALF-supported programs to reach more small farmers and restructure PCIC-CALF program to ensure more effective operational systems and wider small farmer-borrower participation. As a result, effective August 1990, CALF fund support to Quedan financ-

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ing for traders or businessmen has been gradually phased out in favor of small farmer-cooperatives.

9.1.5.3 Agricultural Credit

Table 9.22 presents the summary of agricultural production loans granted by different institutions in 1989 and 1990. Total loans granted to agriculture amounted to P38.12 billion in 1990. This represents a 22.13 percent growth from the previous year's level of P31.21 billion.

Most of the loans (99.73 percent) were granted by private banks, while the remaining 0.27 percent was provided by government banks. Private banks included Private Commercial Banks (PCBs), Savings and Mortgage Banks (SMBs), Private Development Banks (PDBs), Rural Banks (RBs), and Stock Savings and Loan Associations (SSLAs). For the past ten years, government banks such as the Philippine National Bank (PNB), Development Bank of the Philippines (DBP) and Land Bank of the Philippines (LBP) had not released agricultural loans while Specialized Government Banks granted a total of P102.1 million. From 1989 to 1990, private banks expanded their credit service. From a total of P31.00 billion in 1989, agricultural loans granted by these banks reached P38.01 billion in 1990 or a 22.63 percent increase. On the contrary, loans extended by government banks decreased from P211.70 million in 1989 to P102.10 million in 1990.

Most of the loans were extended to food commodities (63.04 percent) while export and commercial crops accounted for the remaining 36.95 percent. Under food commodities, livestock and poultry received 28.95 percent of the total loans granted; fisheries, 23.79 percent; cereals, 9.44 percent; and fruits, vegetables and root crops, 0.86 percent. Among the export and commercial crops, sugarcane received the most, taking 19.57 percent of the total share while coconut came in second (11.96 percent). (See Table 9.23.)

The summary of agricultural loans granted by the rural banking system from 1960 to 1990 is shown in Table 9.24.

9.1.5.4 Crop Insurance

To protect farmers from the risks and hazards inherent in agriculture, the crop insurance program was launched in May 1981. Agricultural insurance is an effective instrument to stabilize farmers' income, especially those farming in risk-prone areas. Many of these areas lie in the typhoon belt, while other areas are affected by plant diseases and pest infestations, prompting the need for crop insurance.

Initially, only palay standing crops were covered by the insurance in 1981 since the bulk of the farmer population is made up of palay-producing farmers. The corn crop insurance program became operational only during the second semester of 1982.

Coverage of insurance is limited to production inputs invested by the farmer in his farmlot. The program covers all losses to palay and corn crops

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caused by natural calamities (e.g., typhoon, flood, drought, earthquake, volcanic eruption), plant diseases of all types and pest/rodent/insect infestations. In 1988, the livestock insurance program was launched with the Philippine Crop Insurance Corporation (PCIC) joining the Pool of Livestock Insurers (PLI).

In 1992, under the rice crop insurance program, a total of P2.22 billion worth of policies was issued to 224,703 farmers tilling 355,232 hectares. The corn crop insurance covered 28,584 farmers cultivating 42,176 hectares of cornland. The insurance policies amounted to P262.60 million. On livestock insurance, a total of 41,929 policies worth P435.97 million were issued in 1992 to farmers raising carabaos, cattle, swine and poultry.

As of 1992, total claims paid to both rice and corn crops reached P172.51 million, which is 61.96 percent higher than the 1991 level. Beneficiaries were 70,168 rice and corn farmer-claimants, tilling almost 117,459 hectares of damaged farmland.

Tables 9.25 and 9.26 present regional breakdown of rice and corn insurance and claims in 1992, respectively.

9.2 Fisheries

In 1990, the fisheries sector contributed P30.78 billion or 4.29 percent of GNP at constant 1985 prices. An estimate for 1991 placed a P31.50 billion or 4.40 percent contribution to GNP. This shows an 8.05 percent improvement in production of the fishery sector in 1990 over the 2.09 percent production growth in 1989.

A total of one million fishermen and fish farmers are estimated to be directly employed in the fishing industry. Indirectly, the industry likewise provides employment to those engaged in fish marketing and distribution, fish processing, operation of ice plants and cold storages, and those in allied industries such as netmaking, boatbuilding and others.

9.2.1 Fishery Resources

The Philippines is blessed with an abundant wealth of aquatic resources. From these, the Filipino people derive fish and aquatic products which are part of their daily subsistence and are highly in demand as exports. Fishery resources are divided broadly into marine and inland resources. The marine waters of the Philippines now covers a total area of 2,200,000 square kilometers (from its original area of 1,666,000 square kilometers) as a result of the declaration of the 200-mile exclusive economic zone (P.D. 1599). Some 266,000 square kilometers of total marine waters are coastal areas which cover 200 meters deep while the present traditional fishing grounds consist of only 126,000 square kilometers. The Philippine coral reef area which is estimated at 27,000 square kilometers is the source of about 15 percent of the total finfish production of the country.

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Inland water resources comprise about 200,000 hectares of lakes; 19,000 hectares of reservoirs; 31,000 hectares of rivers; and an aggregate area of 222,000 hectares of developed brackishwater and freshwater fishpond.

For fish production purposes, fishery resources are further subdivided into two, namely, marine and aquaculture. Marine consists of commercial and municipal fisheries while aquaculture (the scientific farming of aquatic species) consists of brackishwater fisheries, freshwater fisheries and seafarms.

Commercial Fish Species. A total of 2,157 fish species have already been identified in the country. The ten (10) major species of fish caught in Philippine waters are the following: round scad (*galunggong*), sardines (*tamban, tunsoy*), frigate tuna (*tulingan*), anchovy (*dilis*), slipmouth (*sapsap*), yellow fish (*albacora*), big-eyed scad (*matang baka*), threadfin bream (*bisugo*), round herring (*tulis*) and skipjack (*gulayasan*).

Varieties of fish that abound and are caught in great quantities in marine waters are called marine fishes. Tuna fish is a highly valued marine fish species because of its great demand in foreign market. Some of its most valued varieties are the yellowfin and big-eyed tuna, skipjack and *albacora*, whose white meat makes the finest canned tuna. With the use of modern fishing techniques, sardines and round scads are now caught in great quantities. Another popular fish species is the anchovies which is a good source of protein, calcium, phosphorus and other minerals. Other important species include mullet (*banak*), fusilier (*dalagang-bukid*), threadfin bream, grouper (*lapu-lapu*), cavalla (*talakitok*), slipmouth (*hasa-hasa*) and mackerel (*alumahan*).

Inland fishes are those which thrive and breed in inland waters such as bangus (*Chanos chanos*) and tilapia. Bangus culture in brackishwater fishponds has been practiced for many years and the conversion of swamplands into fishponds and the seeding of bangus in fishpens, lakes and rivers have considerably increased its production. Tilapia is ideal for fishpond culture because it matures in just four months and breeds the whole year round at two to three-month interval. It also thrives in almost all kinds of water conditions, in nearly all sizes of ditches, rivers, lakes, swamps, and others, and is inexpensive to maintain as it lives in all kinds of feedstuffs. Other inland fishes are catfish and *kanduli*.

Shellfish (crustaceans and mollusks) such as shrimps, prawns, crabs and mussels also abound in Philippine waters. Among the commercial shrimp species, the jumbo tiger-shrimp or *sugpo* is the most popular. Other varieties of shrimps are the acetes (*alamang*), *atya, hipon, tagunton* and crayfish (*ulang*). *Alimango*, one of the principal crab species, is produced commercially by raising young crabs in fishponds where they grow into marketable size within six months. A very popular shellfish is the green bay mussel commonly known as *tahong*. Because of its high protein value, easy and inexpensive breeding and fast growth, *tahong* raising has intensified in recent years, making the Philippines one of the largest mussel producers in the world.

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9.2.2 Fisheries Statistics

The Bureau of Fisheries and Aquatic Resources (BFAR) was formerly responsible for the generation of fishery data and statistics in coordination with the National Statistics Office (NSO) and the Fishery Industry Development Council (FIDC). With the implementation of Executive Order 116 on January 1987, this task was handed over to the Fishery Statistics Section of the Bureau of Agricultural Statistics (BAS), a staff bureau of the Department of Agriculture (DA).

Fish Production. Fish production has grown considerably since the seventies. From 1970 to 1992, quantity of fish posted an average annual growth of 4.82 percent and 19.32 percent in terms of value. Total fish production in 1992 reached 2.60 million metric tons valued at P65.44 billion, posting an increase of 1.01 percent in quantity and 8.26 percent in value over the 1991 production.

The country has three major sources of fish production, namely, commercial fisheries, aquaculture, and municipal fisheries and sustenance fishing, which are further subdivided into marine and inland. Municipal fisheries accounted for the biggest fish output in 1992 (41.30 percent), followed by commercial fisheries (30.65 percent) and the rest from aquaculture (28.05 percent).

Among the three sources of fish supply, aquaculture attained the highest growth rate in production. Between the period 1970-1990, it grew at an average annual rate of 10.43 percent. Harvests from aquafarms totalled 736,381 metric tons valued at P25.97 billion. This was an improvement of 5.97 percent in volume and 12.81 percent in value over the 1992 level.

Brackishwater fishponds, producing mainly milkfish and prawns, accounted for 40.06 percent of aquaculture's volume of output. Harvests from freshwater fishponds (*tilapia* and *carpa*) represented 5.49 percent of the total. Marine operations (mariculture or seafarming), which harvested mostly seaweeds, contributed 322,176 metric tons (48.01 percent) while freshwater fishpens and fishcages (bangus, tilapia, *carpa*) generated 66,241 metric tons (9.87 percent). (See Table 9.27.)

Municipal fisheries and sustenance fishing produced 1.08 million metric tons in 1992 valued at P22.66 billion, 5.44 percent lower than the previous year's volume and 2.31 percent higher than the previous year's value. Of the sector's total production, 78.82 percent were caught in marine waters while the rest came from inland freshwater.

In 1992, production from commercial fishing recorded an improvement of 5.59 percent in volume and 9.26 percent in value over the previous year's level. Total output was posted at 804,866 metric tons worth P16.80 billion. (See Table 9.28 for fish production and sources.)

Fishponds in Operation. *Fishpond* refers to a body of water (artificial or natural) where fish and other aquatic products are cultured, raised or cultivated under controlled conditions.The area and production of fishponds operating in the country as of 1988 are shown in Table 9.29. The collective area occupied by

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all fishponds in operation was 224,528 hectares which generated a total production of 273,128 metric tons.

Area covered by brackishwater farms was 210,680 hectares with total production of 240,206 metric tons. This type of fishpond was operated mostly in the regions of Western Visayas, Central Luzon and Southern Tagalog. The most abundant harvests on brackishwater farms came from the provinces of Bulacan, Pampanga and Capiz. Their aggregate production of 92,527 metric tons represented more than one-third (38.52 percent) of the total brackishwater production.

Freshwater fishponds occupied a total area of 13,846 hectares in 1988 with an output equivalent to 32,922 metric tons. Among the regions, Central Luzon had the largest area (9,114 hectares) and the biggest quantity of harvest (27,311 metric tons). On the provincial level, the most extensive and productive was Pampanga, sharing more than 70.00 percent of the total regional area and production.

Census of Agriculture and Fisheries (CAF). All data on the operation of fishing households and establishments in the country are gathered by the National Statistics Office (NSO) through the CAF which is conducted every ten years. In 1960, collection of data on fishery sector was done independently from the Census of Agriculture. However, starting in 1970 these two were merged into one undertaking. Census on fisheries, thus, started only in 1970. The 1971 Census of Fisheries provided data on the operation of fishing establishments and fishing households in both marine and inland waters. In 1981, it was conducted to gather information on the various features of fishpond operations such as area size, quantity of harvest, employment and type of ownership.

Due to budgetary constraints, the 1990 CAF, which is a joint venture of the NSO and the DA and which was supposed to be conducted in early 1991, was moved to 1992.

The 1991 Census of Agriculture and Fisheries collected and compiled statistics on the nation's agriculture and fisheries sector to serve as basis for economic and development planning by policy makers and planners. It was a complete count of all farms and fishing operators in the Philippines. It gathered basic characteristics of each farm such as size, location, tenure, status, source of irrigation, crops planted, livestock or poultry raised, agricultural pesticides, as well as type of fishing operations, fishing gears used, and type and size of aquafarm.

The 1991 CAF is the fourth of a series of decennial census on agriculture and the third census on fisheries in the Philippines. The last census was undertaken in 1981 with 1980 as reference period.

Table 9.30 shows the results of the 1970 and 1980 censuses. In 1980, about 19,896 operators were engaged in fishpond operations involving a total of 20,635 fishpond units spread over an area of 142,145 hectares. Total harvest from the operation was 106,017.22 metric tons. Comparatively, there were 12,094 more fishpond units in 1980 than in 1970. Likewise, the number of operators reported

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(11,504), the area operated (55,846 hectares) and the total quantity of harvest (66,766.33 metric tons) were larger in 1980.

In terms of production, the biggest quantity of harvest in 1970 came from Western Visayas at 17,510 metric tons. In 1980, Central Luzon topped production with 41,531.99 metric tons.

As presented in Table 9.31, there were 15,121 brackishwater and 5,514 freshwater fishponds operated in 1980. Majority were privately owned (73.03 percent) while the rest were either government-owned (14.18 percent) or operated on leases (12.79 percent).

The number of persons employed in fishpond operations by type of worker and by region in 1980 are shown in Table 9.32. Fishpond operations generated a total employment of 124,741. Majority (64.92 percent) of the fishpond workers were nonoperators' household members while 35.08 percent were operators' household members. The nonoperators' household members were engaged in fishpond operations as managers or supervisors (3.05 percent), fishing workers (80.45 percent) and other types of workers (16.50 percent). Most of the fishpond workers in the country were concentrated in the areas of Central Luzon (26,411), Ilocos (25,910) and Western Visayas (24,525).

Marine Fish Production. The total quantity of marine fishes caught in the country in 1990 reached 1.60 million metric tons, more than half (56.09 percent) of which was generated from municipal fishing while 43.91 percent was accounted to commercial fishing. (See Table 9.33 for details.)

Commercial Fishing. The quantity of marine fish landed by commercial fishing vessels, by region and province from 1982-1992, is shown in Table 9.34. In 1992, it reached 804,866 metric tons, the highest level recorded since 1982. The bulk of the catch was landed in National Capital Region (NCR), 223,489 metric tons; Western Mindanao, 151,748 metric tons; and Western Visayas, 150,081 metric tons. On the other hand, Ilocos had the least quantity of fish caught at 3,610 metric tons.

Table 9.35 presents the production of commercial fishing vessels by species from 1982 to 1990. The biggest quantity of fish caught comprised of jacks, scads, mullets, garfish, and others. These aggregated to 260,070 metric tons or 37.61 percent of the country's total commercial production in 1990. The second biggest catch was the group of Spanish mackerels, tunas and billfishes which yielded 164,583 metric tons (23.80 percent).

Commercial fishing vessels gathered most of their catch using purse seine. Accounted to this fishing gear was a total of 467,438 metric tons or 58.08 percent of the 1992 total production. Other gears with big catches were ring net (109,418 metric tons) and trawl (90,547 metric tons). (See Table 9.36.) In 1988, there were 2,191 commercial fishing vessels operating in the country. Of the total, 707 or 32.27 percent were engaged in trawl fishing while others used bag nets (512) and ring nets (493). (See Table 9.37.)

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Fish Indices. The quantum and value indices of fish production from 1972 to 1990, with 1978 as the base year, are presented in Table 9.38. Quantity and value index series are computed by taking the ratio of fish production in a given period to its quantity in the base period.

Quantum indices from 1972 to 1983 showed an upward trend, from 71.0 in 1972 to 133.5 in 1983.

The reduction of fish production in 1984 and 1985 have resulted to lower quantum indices of 131.6 and 129.8, respectively. However, it began to rise in 1986 at 132.2, 143.6 in 1988 and 158.4 in 1990.

Since 1972, the value of fish production grew continuously. From P2.90 billion in 1972, it increased by almost four times in 1979 (P10.54 billion), with value index of 111.2. In 1985, value index rose to 330.2, 444.4 in 1988 and 550.6 in 1990.

Fisheries Exportation and Importation. For over two decades (1967-1992), exports of fish, crustacean/mollusk and preparations thereof had grown tremendously. From a total quantity of 1,590.3 metric tons worth $758,000 in 1967, overseas demand increased to 102,755.8 metric tons valued at $392.17 million in 1992. Within the period covered, the yearly export level showed a generally increasing trend. Highest export level in the series was in 1991 at 111,401.6 metric tons equivalent to $466.21 million. For 1992, exports slightly declined by 7.76 percent over the 1992 level. (See Table 9.39.)

From 1967 to 1977, the volume of imported fish, crustacean/mollusk and preparations thereof had exceeded exports. However, from 1978 to 1987, this trend was reversed. Imports in 1992 totalled 123,515.3 metric tons valued at $61.12 million. The volume of imports was higher than the volume of exports posted in 1992. On the other hand, import value was considerably lower than export value.

Presented in Table 9.40 are exports of shrimps and prawns from 1988 to 1992. Shrimps and prawns are considered the top exports of the fishing sector. In 1988, total exports of these commodities reached 24,292 metric tons worth $251.77 million. In the succeeding year, exports volume rose by 10.19 percent while its value decreased by 7.20 percent. In 1992, both quantity (23,622 metric tons) and value (P211.45 million) decreased, the former by 13.98 percent and the latter by 22.54 percent.

Of the total shrimps and prawns traded in 1992, a bigger portion was exported fresh, chilled or frozen (97.38 percent), while 2.53 percent was either salted, dried or simply cooked, and the remaining was prepared or preserved (0.09 percent).

From 1990 to 1992, Japan continued to be the country's biggest buyer of shrimps and prawns. In 1992, it absorbed the bulk of the country's exportations of fresh, chilled or frozen shrimps and prawns (73.32 percent) and the salted, dried or simply cooked (96.49 percent). United States was a distant second in both categories. However, United States and Australia absorbed more than

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three-fourths (81.35 percent) of the country's exports of prepared or preserved shrimps in 1992.

9.2.3 The Bureau of Fisheries and Aquatic Resources (BFAR)

By virtue of Executive Order 116 signed on January 30, 1987, the BFAR under the DA is tasked to formulate plans for accelerated development, and proper management and utilization of the country's fishery and aquatic resoures. For this purpose, the Bureau shall undertake studies on the economics of various phases of the fishing industry to form the bases for the formulation of policies and programs on fisheries and aquatic resources; render technical assistance and advisory services in the proper procurement, construction, and operation of fishing vessels as well as the determination and designation of fish lending points for all commercial fishing boats; recommend programs and policies; and provide technical assistance in the implementation of the same. The BFAR undertakes various programs which are summarized into the following sectoral concerns: resource conservation, crop diversification, and research and extension services.

Resource Conservation. The major concern of this program is to solve the problem of rapid depletion of fishery resources. Specifically, activities designed under it have the following objectives: promote programs for ecological conservation so as to ensure an adequate supply of food and source of income; enforce regulations against illegal fishing, overexploitation of marine resources and pollution of inland and marine waters; continue providing fish and fishery products quarantine services in all ports of entry and exit; encourage diversification in cultured species, production systems and fish processing; and concentrate efforts on a few selected high-value products such as prawns, seaweeds and other aquatic organism.

Bantay Dagat Program. This program was launched in February 1989 to intensify efforts to minimize illegal fishing activities and promote the conservation of fishery resources. The Bantay Dagat Program is being implemented by the Presidential Committee on Anti-Illegal Fishing and is composed of various fishery law enforcement and education agencies to ensure a more comprehensive approach to the problem of illegal fishing. In 1989, the BFAR deputized some 3,468 fish wardens to implement this program.

Fisheries Sector Program (FSP). This program is focused on environmental rehabilitation and conservation to accelerate the replenishment of fish stocks. One of its projects is the installation of artificial reefs (ARs). In 1990, an additional 3,931 ARs were built. The three priority bays which were identified for implementation of this program were Calauag, Carigara and Panquil Bays. In 1990, six major fish sanctuaries and 3,100 hectares of mangrove reforestation were identified in the priority bays.

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Crop Diversification. The major objective of crop diversification is to promote increased supply of quality fish strains and breeding stocks. Among its ongoing projects and activities are the production and dispersal of quality tilapia and carp fingerlings and broad stocks; monitoring and coordination of the National Bangus Breeding Program Stations (NBBPS); field testing of rabbitfish culture, polyculture of milkfish and mud crab, and semiintensive and intensive culture of prawn; field testing of rice-fish, *gabi*-fish, livestock-fish, and integrated polyculture systems; and prawn feed testing to evaluate the performance of various commercial feeds.

Research and Extension Services. The following are the main objectives of the research and extension services: intensify extension programs with fisherman participation based on appropriate existing technologies; implement the program on commodity diversification for fisheries to ensure an adequate supply of food and minimize importations; and provide support services to national and regional research and extension programs.

9.2.4 Fish Marketing

Executive Order 772, which was signed on February 8, 1982, renamed the Philippine Fish Marketing Authority (PFMA) to the Philippine Fisheries Development Authority (PFDA). The PFDA is now the government agency authorized and responsible for providing adequate and essential facilities for the efficient handling and distribution of the production and harvest of fishery operators.

The Navotas Fishing Port Complex (NFPC) is under its exclusive jurisdiction, control and supervision. Known as the largest fishing port and fish market complex in the Philippines and in Southeast Asia, the NFPC is the traditional landing place of commercial fishing boats operating in various fishing grounds.

Before the port's construction, fishing boats had to anchor some 1.5 kilometers offshore and wait for three (3) days before amphibian trucks could take the first tubs from the boats and bring them to the fish market. With its opening, fish tubs are now directly unloaded at the quayside near the new market halls.

The improved system and procedures for harbor and market operations being implemented by the PFDA helped in the reduction of time required for fish and other aquatic products to reach consumers. Handling had also been considerably improved, resulting to quality fish that reach the market everyday.

9.2.5 Fisheries Research

The Bureau of Fisheries and Aquatic Resources (BFAR). Researches are being conducted by BFAR in support of policy formulation on fisheries development and conservation. The Bureau operates national centers, stations and laboratories which serve as areas for research as well as generation or field testing of aquaculture and fishing technology and other fishery activities. These

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are the National Freshwater Fisheries Technology Research Center (NFFTRC) in Muñoz, Nueva Ecija; Fishery Biological Station Complex (FBSC) in Butong, Taal, Batangas; Tanay Freshwater Experimental Station (TFES) in Tanay, Rizal; National Brackishwater Aquaculture Technology Research Center (NBATRC) in Pagbilao, Quezon; and National Commercial Fisheries Development Center (NCFDC) in Sangley Point, Cavite City.

Among the projects and activities which are being undertaken in the field of research are as follows: study on *Harengula tawilis* fishing in Taal Lake; investigation on invertebrate resources associated with seaweeds in Eastern Sorsogon; researches on improved gear design and construction; survey and monitoring of red tide in the bays of Samar, Zambales and other provinces; resource assessment and biological studies on fish and fishery aquatic products; researches on fish parasites and bacteria of public health significance; bacteriological and chemical analyses of fish and fishery products for quality control measures; exploration of fishery resources in nontraditional fishing grounds through appropriate fishing technology; research/development of fish feeds particularly for prawn and milkfish; development of appropriate technology in mariculture (mollusk, shellfish, seaweeds and finfish); physicochemical and biological surveys on the Exclusive Economic Zone (EEZ) waters off northwestern Palawan; development of appropriate technology for improved fishing techniques as well as for fish handling and processing; and studies for the development of new fishery products and on institutional industry and economic phases of fisheries.

The Department of Science and Technology (DOST). Researches being conducted by the Department (DOST) in the field of fisheries have resulted to new findings and development of technologies beneficial to the sector.

The installation of artificial reefs which consist of eight pyramidal bamboo structures with a midwater fish attraction device called *payao* have increased fishermen's annual income from P11,000 to P24,000. This finding was substantiated through constant monitoring of fish catch data and fish recruitment patterns in project areas.

The restoration of seagrass habitat through transplantation have likewise rehabilitated degraded coastal areas and consequently increased the population of fishes. Furthermore, fish yield increased by two to three times more than usual through proper utilization of fertilizers in brackishwater ponds. This technology involves the use of inorganic as well as organic fertilizers derived from animal manures and crop byproducts.

The Southeast Asian Fisheries Development Center (SEAFDEC). The Aquaculture Department (AQD) of the SEAFDEC also conducts researches for the development of appropriate fishery technologies in support of national and regional programs to increase food production. The Philippine government is the host government to the AQD.

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The SEAFDEC is a regional treaty organization founded in 1967 by six nations, namely, Malaysia, Philippines, Singapore, Thailand, Vietnam and Japan. The two other departments of SEAFDEC known as the Marine Fisheries Training Department and Marine Fisheries Research Department are situated in Thailand and Singapore, respectively. Research activities at AQD focus on problem areas specific to economically important aquatic groups: finfishes, crustaceans, mollusks and seaweeds. Among the significant accomplishments of the department were the spawning of premature milkfish in cages; seed production of sea bass and siganidae at the Leganes and Tigbauan Research Stations (LRS, TRS); and the induced spawning of Chinese carps at the Binangonan Research Station (BRS). These accomplishments show that the technologies that have been developed were suitable to local conditions, thus leading a step closer to solving the major problem of fry availability. The successful induced spawning of sea bass, siganidae, and carp shows promise for the breeding of other commercially important species. The modular culture system for prawn and the technology in production, processing, and utilization of *Artemia* are being field-tested and verified in selected sites. On the other hand, postharvest treatment on oysters and mussels had encouraging results.

Sources:

9.1.1	Department of Agriculture.
9.1.2 - 9.2.2	Bureau of Agricultural Statistics; National Statistics Office.
9.1.5.5	Agricultural Credit Policy Council; Philippine National Bank; Central Bank of the Philippines; Philippine Crop Insurance Corporation.
9.2-3 - 9.2.5	Bureau of Fisheries and Aquatic Resources.
9.2.4	Philippine Fisheries and Development Authority.
9.2.5	Southeast Asian Fisheries Development Center; Department of Science and Technology.

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Table 9.1 Agricultural Crop Area Harvested: Calendar Year 1985-1992
(Thousand hectares)

Item	1985	1986	1987	1988	1989	1990	1991	1992
Area harvested	13,032.1	13,300.4	12,986.9	13,127.6	13,147.1	13,096.3	12,983.7	12,520.4
A. Cereals	6,817.4	7,059.2	6,938.5	7,137.8	7,186.5	7,138.3	7,014.5	6,529.5
Palay	3,306.5	3,464.2	3,255.9	3,392.7	3,497.3	3,318.7	3,425.0	3,198.1
Corn	3,510.9	3,595.0	3,682.6	3,745.1	3,689.2	3,819.6	3,589.5	3,331.4
B. Major crops	4,973.5	4,947.6	4,897.1	4,792.5	4,725.0	4,698.2	4,716.2	4,730.6
Coconut	3,270.3	3,284.0	3,251.6	3,221.8	3,110.4	3,112.0	3,093.3	3,076.7
Sugarcane	368.5	300.1	269.3	215.7	261.7	235.3	271.5	267.0
Banana	289.8	292.7	298.9	294.6	295.5	300.2	311.3	321.4
Pineapple	58.0	60.9	63.1	60.5	61.0	59.7	57.7	60.6
Coffee	137.2	141.3	143.2	142.5	143.2	143.2	143.1	142.0
Mango	53.7	54.4	55.5	55.7	56.4	56.7	56.9	57.2
Tobacco	60.2	64.2	68.7	61.4	63.3	63.2	67.9	95.0
Abaca	120.4	116.8	114.8	108.3	107.7	106.7	107.4	107.0
Rubber	80.7	82.6	83.9	84.6	86.1	86.3	88.0	84.2
Cacao	15.5	16.8	17.5	17.7	18.2	18.4	17.3	16.8
Cassava	204.6	211.4	209.7	217.1	213.1	213.8	211.0	204.3
Camote	150.2	155.2	149.6	144.1	138.3	136.7	136.5	140.8
Peanut	50.4	50.9	55.3	51.0	50.4	44.5	39.1	44.6
Mongo	35.5	36.0	34.7	36.7	35.7	36.7	34.3	32.7
Onion	7.1	6.6	7.0	5.8	6.5	6.4	6.4	5.8
Garlic	6.3	6.8	6.3	5.6	6.1	6.4	4.5	4.2
Tomato	16.7	18.1	18.0	18.4	19.7	20.0	19.5	18.2
Eggplant	14.4	14.5	14.8	15.3	15.4	16.4	14.5	15.5
Cabbage	6.2	6.4	6.5	6.4	6.9	6.4	6.9	7.5
Citrus	27.8	27.9	28.7	29.3	29.4	29.2	29.1	29.1

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Table 9.1 Agricultural Crop Area Harvested: Calendar Year 1985-1992 (concluded)
(Thousand hectares)

Item	1985	1986	1987	1988	1989	1990	1991	1992
C. Other crops	1,241.2	1,293.6	1,151.3	1,197.3	1,235.6	1,259.8	1,253.0	1,260.3
Other fiber crops	92.2	89.2	35.0	40.0	37.0	33.4	31.5	37.7
Other root crops	106.8	109.7	112.9	113.5	108.0	109.6	107.6	109.2
Tubers	101.0	111.0	109.4	122.0	125.7	135.7	134.9	132.8
Spices	42.6	42.6	39.6	35.3	35.9	38.6	36.1	36.9
Fruit bearing vegetables	333.1	368.1	306.9	304.1	313.2	328.0	314.5	313.9
Leafy or stem vegetables	151.7	159.4	147.4	157.1	166.7	171.2	172.8	174.5
Other legumes	25.6	26.0	27.4	28.5	30.2	30.5	31.1	31.2
Other fruits and nuts	299.2	304.5	299.6	316.8	331.7	327.7	338.1	339.2
Others	89.0	83.1	73.1	80.0	87.2	85.1	86.4	84.9

Sources: Bureau of Agricultural Statistics; Philippine Coconut Authority; Sugar Regulatory Administration.

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Table 9.2 Agricultural Production: Calendar Year 1985-1992
(Thousand metric tons)

Item	1985	1986	1987	1988	1989	1990	1991	1992
Agricultural crops	58,831.6	59,010.1	56,685.3	59,788.4	64,207.3	61,566.5	64,109.3	63,837.4
A. Cereals	12,668.4	13,337.5	12,818.0	13,399.0	13,981.0	14,173.3	14,328.3	13,747.8
Palay	8,805.6	9,246.8	8,539.9	8,971.0	9,458.8	9,319.4	9,673.3	9,128.9
Corn	3,862.8	4,090.7	4,278.1	4,428.0	4,522.2	4,853.9	4,655.0	4,618.9
B. Major crops	38,300.3	37,528.4	35,964.3	38,115.4	41,648.3	38,684.6	41,091.1	41,329.5
Coconut	12,827.8	14,334.9	13,730.5	12,481.8	11,810.4	11,940.4	11,290.9	11,404.9
Sugarcane	17,542.1	14,831.1	13,797.0	17,363.0[a]	21,425.0[a]	18,666.9	21,824.5	21,801.9
Banana	3,127.1	3,192.6	3,157.4	3,067.3	3,190.3	2,913.3	2,951.1	3,059.2
Pineapple	1,030.0	1,273.2	1,303.4	1,181.2	1,178.8	1,155.8	1,117.1	1,135.2
Coffee	137.3	145.3	140.1	141.9	155.9	134.1	133.4	127.6
Mango	355.7	372.9	367.1	361.1	370.1	337.6	307.0	330.0
Tobacco	74.3	74.2	82.8	76.4	79.9	81.7	85.2	117.9
Abaca	81.3	83.6	82.0	84.1	88.4	80.5	85.2	84.3
Rubber	145.9	146.0	147.2	156.4	171.9	185.4	180.7	172.5
Cacao	7.0	8.0	8.8	9.1	9.4	9.9	9.6	7.5
Cassava	1,686.7	1,724.1	1,784.3	1,865.9	1,846.9	1,854.0	1,815.7	1,784.9
Camote	701.7	726.2	716.9	695.0	660.3	668.9	662.3	677.2
Peanut	41.3	42.2	43.0	39.9	37.6	34.8	31.4	34.0
Mongo	25.3	25.9	25.3	26.6	25.1	26.7	25.1	23.2
Onion	53.1	54.2	60.9	45.9	65.3	61.5	60.3	56.7
Garlic	15.0	15.5	15.4	14.1	17.2	17.9	12.4	11.8
Tomato	150.4	165.7	166.9	167.9	178.7	184.0	177.2	165.4
Eggplant	102.7	104.5	107.7	109.8	111.6	112.7	104.0	110.4
Cabbage	66.1	69.0	71.3	70.3	75.9	68.3	75.8	83.2
Citrus[r]	129.5	139.3	156.3	157.7	149.6	150.2	142.2	141.7

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Table 9.2 Agricultural Production: Calendar Year 1985-1992 (concluded)
(Thousand metric tons)

Item	1985	1986	1987	1988	1989	1990	1991	1992
C. Other crops	7,862.9	8,144.2	7,903.0	8,274.0	8,578.0	8,708.6	8,689.9	8,760.1
Other fiber crops	204.8	195.1	68.0	76.0	64.6	58.4	77.6	92.9
Other root crops	121.1	126.4	126.8	127.5	121.3	132.3	128.7	128.5
Tubers	146.8	162.0	159.6	198.0	214.0	201.4	198.4	206.4
Spices	25.6	26.1	24.9	25.5	26.3	27.0	26.5	26.8
Fruit bearing vegetables	2,633.3	2,740.8	2,691.4	2,680.6	2,887.6	2,910.2	2,812.7	2,895.4
Leafy or stem vegetables	1,122.4	1,141.7	910.5	1,058.0	1,097.2	1,080.2	1,124.6	1,110.4
Other legumes	30.1	31.8	31.3	32.0	34.0	34.3	35.0	34.7
Other fruits and nuts	3,104.7	3,239.6	3,451.0	3,595.2	3,639.3	3,764.9	3,784.4	3,762.2
Others	474.1	480.7	439.5	481.2	493.7	499.9	502.0	502.8

[a] Revised based on SRA data.
[1] Calamansi, Pomelo, Mandarin, Orange.

Sources: Bureau of Agricultural Statistics; Philippine Coconut Authority; Sugar Regulatory Administration.

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Table 9.3 Value of Agricultural Production: Calendar Year 1985-1992
(Million pesos)

Item	1985	1986	1987	1988[r]	1989[r]	1990[p]	1991	1992
Agricultural crops	103,489.1	103,798.5	107,472.8	125,313.1	144,407.1	162,801.3	164,311.5	172,710.3
A. Cereals	39,513.4	36,648.6	38,298.9	43,186.0	57,463.2	64,698.6	60,993.3	64,704.6
Palay	28,718.7	26,389.7	26,122.3	30,612.6	39,359.6	45,671.6	43,723.1	42,996.4
Corn	10,794.7	10,258.9	12,176.6	12,573.4	18,103.6	19,027.0	17,270.2	21,708.2
B. Major crops	46,723.8	43,916.1	47,561.4	57,907.0	66,703.4	65,238.0	72,524.7	76,543.6
Coconut	17,958.9	12,328.0	14,966.2	19,222.0	22,439.8	18,865.2	18,968.7	23,038.1
Sugarcane	5,788.9	5,042.6	6,208.7	9,202.4	12,854.9	10,962.6	14,622.4	13,552.1
Banana	5,191.0	5,140.1	4,830.8	4,754.3	5,008.8	7,224.2	9,738.6	10,523.7
Pineapple	1,792.2	2,253.6	2,893.5	3,768.0	5,328.2	4,751.2	4,691.8	4,801.9
Coffee	3,394.1	4,967.8	3,857.0	3,881.0	3,325.3	2,659.9	3,157.6	2,615.8
Mango	2,888.3	4,128.0	3,942.7	4,954.3	3,797.2	5,313.4	4,405.5	4,456.4
Tobacco	1,108.6	1,003.9	1,793.4	1,333.2	2,044.6	2,200.1	2,626.7	3,304.7
Abaca	507.3	403.0	525.6	736.7	901.7	886.4	1,226.9	1,465.1
Rubber	665.3	773.8	1,017.2	828.9	825.1	1,047.1	1,201.7	1,145.4
Cacao	188.4	218.8	266.0	218.5	181.0	221.9	265.8	274.2
Cassava	1,990.3	2,120.6	1,855.7	2,276.4	2,696.5	3,485.3	3,921.9	3,195.0
Camote	1,277.1	1,328.9	1,190.1	1,237.1	1,439.5	1,799.6	2,125.9	2,465.0
Peanut	354.4	405.5	352.6	345.9	376.4	695.1	413.5	412.8
Mongo	303.1	321.4	270.5	316.8	376.8	401.8	399.3	392.8
Onion	577.2	471.0	549.9	420.9	592.3	523.4	604.8	530.2
Garlic	698.9	596.3	330.8	905.8	1,159.5	569.5	494.5	875.6
Tomato	616.6	725.8	642.6	851.3	750.5	923.7	928.5	793.9
Eggplant	438.5	491.2	535.3	563.3	698.6	713.0	638.6	663.5
Cabbage	342.4	428.5	307.3	357.1	496.4	526.3	557.1	638.1
Citrus	642.3	767.3	1,225.5	1,733.1	1,410.3	1,468.1	1,534.9	1,399.3

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Table 9.3 Value of Agricultural Production: Calendar Year 1985-1992 (concluded)
(Million pesos)

Item	1985	1986	1987	1988[r]	1989[r]	1990[p]	1991	1992
C. Other crops	17,251.9	23,233.8	21,612.5	24,220.1	20,240.5	32,864.7	30,793.5	31,462.1
Other fiber crops	987.3	682.8	651.0	727.1	696.4	664.4	1,098.9	1,062.8
Other root crops	309.8	379.2	443.7	463.6	346.0	542.2	519.0	533.6
Tubers	179.0	225.6	223.4	309.5	261.1	415.8	384.9	402.2
Spices	88.4	91.4	99.6	210.7	967.5	1,516.0	1,454.9	1,494.3
Fruit bearing vegetables	5,303.8	9,172.4	6,420.3	7,494.2	6,346.9	8,570.4	8,801.3	9,042.2
Leafy or stem vegetables	2,356.7	2,730.2	277.6	2,484.5	2,067.1	3,159.4	3,062.3	3,147.3
Other legumes	132.3	159.0	187.4	189.3	160.1	250.9	240.2	246.5
Other fruits and nuts	6,258.3	7,943.7	9,402.4	10,271.9	7,687.0	15,003.5	12,637.8	12,863.0
Others	1,636.3	1,849.5	1,907.1	2,069.3	1,708.4	2,742.1	2,594.2	2,670.2

[1] Calamansi, Pomelo, Mandarin, Orange.

Sources: Bureau of Agricultural Statistics; Philippine Coconut Authority; Sugar Regulatory Administration.

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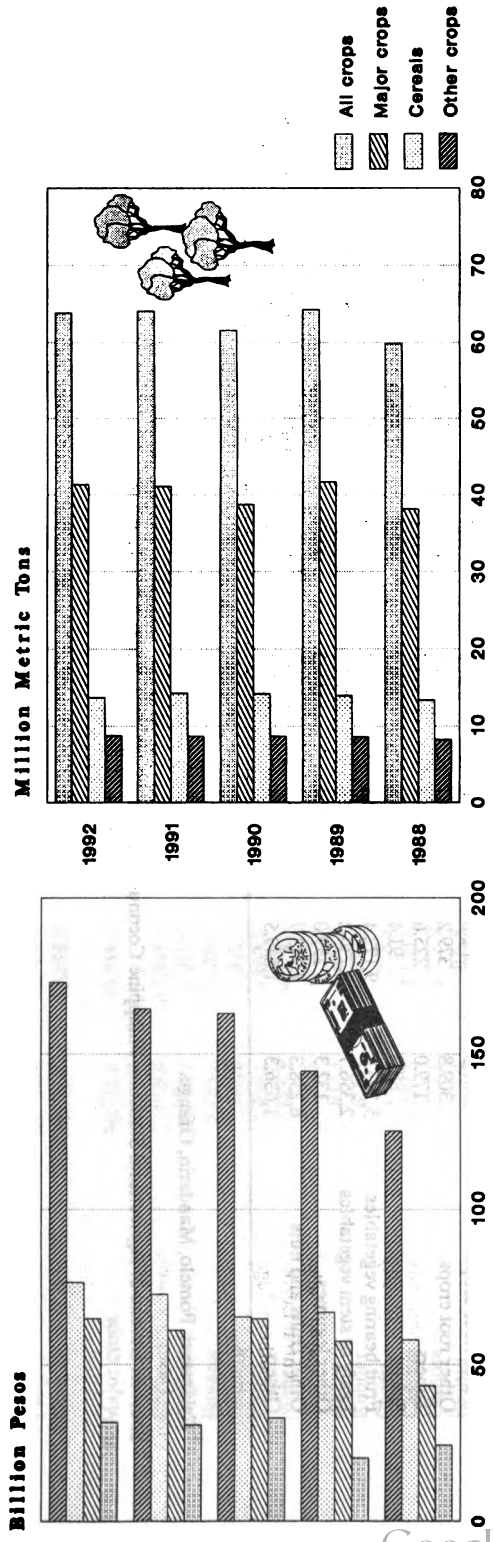
Figure 9.1 Quantity and Value of Production By Kind of Crop: Calendar Years 1988-1992



Value

Production

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Table 9.4 Palay: Area, Quantity and Value of Production by Region: Calendar Year 1991-1993
(Area in hectares, quantity in metric tons, value in million pesos)

Region	1991 Area	1991 Production Quantity	1991 Value	1992 Area	1992 Production Quantity	1992 Value	1993 Area	1993 Production Quantity	1993 Value
Philippines	3,425,000	9,673,300	43,884.5	3,198,100	9,128,900	43,788.0	3,282,400	9,434,300	51,395.3
Cordillera Administrative Region (CAR)	59,300	152,600	737.6	60,000	156,500	762.6	59,600	167,000	899.0
I. Ilocos	312,200	898,600	4,173.4	305,200	826,100	4,150.0	310,300	838,300	5,032.1
II. Cagayan Valley	325,300	1,033,600	4,607.3	326,200	1,088,700	4,884.5	294,900	891,700	4,873.7
III. Central Luzon	499,900	1,748,500	8,213.1	471,600	1,735,900	8,558.7	477,000	1,604,300	9,729.9
IV. Southern Tagalog	411,900	1,118,100	5,344.3	411,300	1,079,900	5,381.4	400,200	1,080,300	5,990.5
V. Bicol	295,500	744,200	3,158.7	284,900	715,400	3,072.2	267,800	665,100	3,292.4
VI. Western Visayas	456,200	1,183,900	5,339.0	445,300	1,238,700	5,780.1	468,900	1,484,900	7,802.5
VII. Central Visayas	124,400	207,700	955.1	95,700	163,700	831.9	109,200	198,700	1,041.8
VIII. Eastern Visayas	221,700	383,000	1,604.0	215,000	362,100	1,759.3	195,900	388,900	2,061.1
IX. Western Mindanao	132,000	399,000	1,829.6	104,600	309,500	1,595.0	113,800	373,200	1,889.8
X. Northern Mindanao	170,100	531,800	2,202.3	133,600	397,900	1,862.2	151,900	501,000	2,435.7
XI. Southern Mindanao	205,600	688,300	3,171.9	158,800	515,500	2,545.8	181,600	560,800	2,880.7
XII. Central Mindanao	147,600	584,000	2,548.2	127,600	415,400	2,604.3	155,600	507,800	2,658.3
Autonomous Region in Muslim Mindanao (ARMM)	63,300	-	-	58,300	123,600	-	95,700	172,300	807.8

[a] Excludes July-December 1991 estimates of Tawi-Tawi.

Source: Bureau of Agricultural Statistics.

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Table 9.5 Corn: Area, Quantity and Value of Production by Region: Calendar Year 1991-1993
(Area in hectares, quantity in metric tons, value in million pesos)

Region[1]	1991 Area	1991 Production Quantity	1991 Value	1992 Area	1992 Production Quantity	1992 Value	1993 Area	1993 Production Quantity	1993 Value
Philippines	3,589,500	4,655,000	16,349.4	3,331,400	4,618,900	21,255.0	3,149,300	4,798,000	20,844.1
Cordillera Administrative Region (CAR)	21,100	20,700	67.9	22,100	30,700	151.2	20,500	28,400	152.9
I. Ilocos	84,000	96,800	351.3	67,200	65,400	303.4	467,700	73,600	400.2
II. Cagayan Valley	304,500	465,800	1,642.8	328,400	648,100	3,290.8	252,600	443,300	2,325.2
III. Central Luzon	12,400	19,300	77.9	11,500	17,000	83.8	11,700	21,700	119.3
IV. Southern Tagalog	230,100	211,200	725.4	215,300	195,400	907.5	89,900	106,800	461.4
V. Bicol	189,500	150,700	614.9	175,400	136,400	698.4	163,000	129,200	555.8
VI. Western Visayas	70,400	40,700	146.9	66,700	54,800	270.7	74,400	69,000	334.1
VII. Central Visayas	458,100	237,600	981.6	404,900	201,100	962.0	286,400	169,500	814.4
VIII. Eastern Visayas	215,500	216,900	695.2	149,100	143,400	596.4	132,000	120,300	497.1
IX. Western Mindanao	263,700	236,200	877.8	234,000	208,100	905.7	227,800	212,700	833.0
X. Northern Mindanao	324,800	456,600	1,589.7	319,000	522,300	2,289.6	391,700	759,200	3,135.7
XI. Southern Mindanao	752,100	1,251,700	4,418.0	710,400	1,171,100	5,154.5	747,800	1,284,600	5,583.4
XII. Central Mindanao	377,100	785,600	4,160.0	347,700	762,500	5,641.0	410,500	886.200	3,618.2
Autonomous Region in Muslim Mindanao (ARMM)	286,200	465,200		279,700	462,600		273,300	493,500	2,013.4

[1] Region excludes July - December 1991 estimates of Tawi-Tawi.

Source: Bureau of Agricultural Statistics.

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Table 9.6 Coconut: Area and Quantity of Production by Region: Calendar Year 1988-1992
(Area in hectares, quantity in metric tons)

Region	1988 Area	1988 Quantity	1989 Area	1989 Quantity	1990 Area	1990 Quantity	1991 Area	1991 Quantity	1992 Area	1992 Quantity
Philippines	3,259,710	12,481,778	3,110,423	11,810,404	3,111,978	11,940,363	3,093,265	11,290,882	3,076,725	11,404,900
Cordillera Administrative Region (CAR)	230	1,409	228	1,437	233	1,452	239	1,472	241	1,448
I. Ilocos	13,670	87,503	13,437	82,795	13,452	83,734	13,443	86,374	13,432	82,545
II. Cagayan Valley	6,390	19,385	6,340	18,342	6,345	18,551	6,351	19,655	6,366	20,916
III. Central Luzon	2,250	3,645	2,228	2,005	2,248	2,026	2,132	1,719	2,161	1,583
IV. Southern Tagalog	550,160	2,334,528	542,517	1,936,242	542,542	1,957,580	542,475	1,889,875	532,419	1,933,820
V. Bicol	369,800	715,499	366,803	737,052	366,853	745,160	366,660	736,749	372,598	759,122
VI. Western Visayas	115,570	273,250	113,984	295,788	114,034	299,039	108,170	213,521	108,683	238,147
VII. Central Visayas	137,740	458,825	136,509	412,943	136,559	417,506	136,686	325,250	135,320	332,457
VIII. Eastern Visayas	336,980	1,049,611	334,003	959,146	334,203	969,696	330,375	773,697	327,322	825,622
IX. Western Mindanao	501,360	1,553,778	375,317	1,224,828	375,480	1,238,287	368,994	1,261,809	362,827	1,265,453
X. Northern Mindanao	373,140	1,001,102	369,201	981,080	369,536	991,870	368,984	797,809	370,177	797,359
XI. Southern Mindanao	563,960	3,873,331	562,436	3,850,200	562,936	3,892,525	563,447	3,898,896	562,968	3,915,255
XII. Central Mindanao	288,460	1,109,912	100,191	510,987	100,240	516,617	97,998	530,806	94,346	-
Autonomous Region in Muslim Mindanao (ARMM)	-	-	187,229	797,560	187,316	806,320	187,310	753,250	185,866	728,805

The figures in this table include both manufactured and unmanufactured coconut products.

Source: Bureau of Agricultural Statistics.

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Table 9.7 Sugarcane: Area and Quantity of Production by Region: Calendar Year 1988-1992
(Area in hectares, quantity in metric tons)

Region	1988		1989		1990		1991		1992	
	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity
Philippines	215,650	17,423,054	344,420	21,425,108	235,270	18,666,861	271,494	21,824,490	266,975	21,801,961
Cordillera Administrative Region (CAR)	-	-	-	-	-	-	-	-	-	-
I. Ilocos	410	33,005	520	32,260	530	44,446	524	31,789	447	27,402
II. Cagayan Valley	820	66,733	1,010	62,865	700	55,459	831	68,861	672	56,548
III. Central Luzon	25,950	2,102,553	35,834	2,210,089	26,520	2,178,020	22,987	1,906,419	24,223	2,040,702
IV. Southern Tagalog	30,210	2,447,596	34,460	2,190,532	22,700	1,789,633	24,125	2,000,790	26,882	2,264,722
V. Bicol	600	48,484	1,035	64,434	890	49,158	1,001	83,024	2,032	171,124
VI. Western Visayas	122,260	9,906,610	214,981	13,291,016	138,120	11,119,738	165,558	13,730,105	157,660	13,282,050
VII. Central Visayas	13,540	1,097,168	24,136	1,523,086	18,130	1,349,014	30,073	1,821,132	29,479	1,809,344
VIII. Eastern Visayas	7,930	613,527	9,982	631,948	9,700	674,382	9,771	810,327	8,542	803,924
IX. Western Mindanao	-	-	-	-	-	-	-	-	-	-
X. Northern Mindanao	11,060	874,642	15,369	964,439	15,350	1,225,957	14,038	1,164,180	14,069	1,185,259
XI. Southern Mindanao	2,870	232,736	7,093	454,139	2,630	181,054	2,586	207,863	1,970	160,886
XII. Central Mindanao	-	-	-	-	-	-	-	-	-	-
Autonomous Region in Muslim Mindanao (ARMM)	-	-	-	-	-	-	-	-	-	-

Source: Bureau of Agricultural Statistics.

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Table 9.8 Banana: Area and Quantity of Production by Region : Calendar Year 1988-1992
(Area in hectares, quantity in metric tons)

Region	1988		1989		1990		1991		1992	
	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity
Philippines	294,630	3,067,318	295,590	3,190,324	300,200	2,913,247	311,314	2,951,116	321,381	3,059,237
Cordillera Administrative Region (CAR)	4,178	35,517	4,090	33,246	4,140	30,647	4,320	40,665	4,604	38,881
I. Ilocos	9,859	56,159	9,890	58,169	9,990	58,098	10,579	66,642	10,930	65,492
II. Cagayan Valley	8,058	32,830	8,250	33,622	8,540	29,486	12,580	28,305	13,026	30,289
III. Central Luzon	2,637	39,676	2,700	40,442	2,640	34,096	2,314	27,951	2,400	27,491
IV. Southern Tagalog	46,232	152,783	44,020	164,667	42,890	153,439	43,885	158,640	45,587	157,249
V. Bicol	10,910	49,216	9,730	48,542	9,520	47,278	12,003	49,775	12,638	50,312
VI. Western Visayas	35,615	251,887	39,760	270,752	40,330	254,696	37,984	215,283	39,882	230,621
VII. Central Visayas	11,859	105,914	11,530	106,885	11,610	86,265	12,564	87,413	12,922	81,061
VIII. Eastern Visayas	32,972	154,575	32,120	153,811	33,900	137,964	26,933	120,198	26,902	141,512
IX. Western Mindanao	16,514	103,671	16,610	96,685	16,290	90,260	18,679	94,866	19,494	97,849
X. Northern Mindanao	42,192	404,128	40,350	397,816	40,280	396,891	48,095	398,343	49,870	416,383
XI. Southern Mindanao	49,233	1,242,919	52,340	1,330,270	55,950	1,201,199	54,855	1,248,825	55,470	1,281,780
XII. Central Mindanao	24,371	438,043	24,200	297,039	24,120	256,023	12,687	276,393	13,023	287,417
Autonomous Region in Muslim Mindanao (ARMM)	-	-	-	156,378	-	136,905	13,835	137,816	14,634	152,899

Source: Bureau of Agricultural Statistics.

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Table 9.9 Pineapple: Area and Quantity of Production by Region: Calendar Year 1988-1992
(Area in hectares, quantity in metric tons)

Region	1988		1989		1990		1991		1992	
	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity
Philippines	60,542	1,181,165	60,973	1,178,750	59,619	1,155,750	57,745	1,117,156	60,588	1,135,199
Cordillera Administrative Region (CAR)	110	915	107	905	99	844	94	896	119	1,037
I. Ilocos	110	847	116	699	82	543	69	492	71	469
II. Cagayan Valley	170	1,231	173	1,150	140	1,123	160	1,060	131	1,042
III. Central Luzon	2	15	4	22	15	95	16	108	26	167
IV. Southern Tagalog	3,970	43,653	4,010	32,239	4,125	38,724	5,168	57,586	6,240	61,341
V. Bicol	2,100	30,680	2,310	31,002	2,717	41,360	2,700	41,235	2,847	41,739
VI. Western Visayas	420	4,323	431	3,719	286	3,370	383	4,020	621	4,006
VII. Central Visayas	170	957	166	1,007	184	1,087	466	2,216	468	2,220
VIII. Eastern Visayas	300	3,649	290	3,380	344	3,969	378	4,440	433	5,263
IX. Western Mindanao	110	658	103	561	86	482	71	403	275	1,161
X. Northern Mindanao	35,120	572,452	35,042	610,075	34,581	610,167	34,482	614,663	35,457	624,636
XI. Southern Mindanao	17,920	521,505	18,180	493,686	16,911	453,362	13,702	389,493	13,843	391,588
XII. Central Mindanao	40	280	20	229	39	531	37	410	34	397
Autonomous Region in Muslim Mindanao (ARMM)	-	-	21	78	10	93	20	135	23	134

Source: Bureau of Agricultural Statistics.

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Table 9.10 Coffee: Area and Quantity of Production by Region: Calendar Year 1988-1992
(Area in hectares, quantity in metric tons)

Region	1988		1989		1990		1991		1992	
	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity
Philippines	142,460	141,892	143,206	155,900	143,160	134,074	143,139	133,337	141,695	127,632
Cordillera Administrative Region (CAR)	6,580	9,993	6,615	12,871	6,610	8,613	6,734	8,876	6,647	7,485
I. Ilocos	110	67	101	72	106	74	93	58	87	47
II. Cagayan Valley	1,210	843	1,220	894	1,215	671	1,194	660	1,200	678
III. Central Luzon	700	382	772	428	720	426	652	341	660	349
IV. Southern Tagalog	22,320	24,480	22,416	26,853	22,452	27,132	21,240	24,464	21,339	28,204
V. Bicol	3,340	1,100	3,353	1,233	3,368	1,244	3,467	1,272	3,363	1,195
VI. Western Visayas	8,570	6,953	8,612	7,301	8,599	5,417	8,645	5,446	8,500	5,243
VII. Central Visayas	1,260	257	1,267	261	1,250	203	1,070	119	1,060	115
VIII. Eastern Visayas	710	402	712	408	718	410	641	358	610	308
IX. Western Mindanao	7,240	13,471	4,362	4,824	4,362	4,363	4,660	4,720	4,635	4,603
X. Northern Mindanao	37,870	31,856	38,043	34,935	38,040	30,191	38,060	30,499	37,685	27,477
XI. Southern Mindanao	39,230	44,369	39,424	46,179	39,422	41,092	39,160	40,354	38,680	36,478
XII. Central Mindanao	13,320	7,719	7,588	5,008	7,584	3,473	7,341	4,013	7,254	3,841
Autonomous Region in Muslim Mindanao (ARMM)	-	-	8,722	14,633	8,714	10,764	10,182	12,159	9,975	11,608

Source: Bureau of Agricultural Statistics.

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Table 9.11 Mango (All varieties): Area and Quantity of Production by Region: Calendar Year 1988-1992
(Area in hectares, quantity in metric tons)

Region	1988		1989		1990		1991		1992	
	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity
Philippines	55,730	361,138	56,459	370,100	56,758	337,563	56,910	306,978	57,170	330,131
Cordillera Administrative Region (CAR)	340	1,318	341	1,359	356	1,246	382	1,223	387	1,257
I. Ilocos	11,980	74,918	11,895	75,360	12,070	58,809	11,993	54,966	12,031	58,197
II. Cagayan Valley	2,860	5,400	2,864	5,495	2,903	4,961	2,893	4,892	2,899	5,207
III. Central Luzon	11,350	70,247	11,656	74,364	11,721	74,999	11,899	64,258	11,908	69,270
IV. Southern Tagalog	6,160	26,344	6,470	26,999	6,453	22,090	6,556	24,420	6,691	26,365
V. Bicol	190	368	191	372	195	328	238	331	243	376
VI. Western Visayas	9,880	98,264	10,000	100,342	9,998	97,497	9,971	80,865	9,989	88,727
VII. Central Visayas	4,700	32,108	4,701	32,618	4,701	27,373	4,705	24,060	4,703	24,700
VIII. Eastern Visayas	90	329	92	335	92	328	96	342	96	325
IX. Western Mindanao	2,500	21,493	1,404	8,053	1,409	7,415	1,359	12,417	1,384	12,412
X. Northern Mindanao	1,540	10,131	1,529	10,271	1,528	9,795	1,519	8,781	1,524	9,490
XI. Southern Mindanao	3,230	17,079	3,250	17,675	3,271	17,880	3,243	19,519	3,257	20,415
XII. Central Mindanao	910	3,139	392	1,184	388	1,158	391	2,026	390	3,903
Autonomous Region in Muslim Mindanao (ARMM)	-	-	1,672	15,673	1,672	13,683	1,663	8,877	1,668	9,488

Source: Bureau of Agricultural Statistics.

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Table 9.12 Tobacco: Area and Quantity of Production by Region: Calendar Year 1988-1992
(Area in hectares, quantity in metric tons)

Region	1988		1989		1990		1991		1992	
	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity
Philippines	68,430	76,352	63,260	79,860	64,560	81,722	67,936	85,182	95,046	117,899
Cordillera Administrative Region (CAR)	3,260	567	3,270	924	1,390	1,018	1,378	897	3,586	1,670
I. Ilocos	37,130	53,965	35,350	56,873	47,800	66,619	46,005	64,957	64,005	94,804
II. Cagayan Valley	16,230	10,987	12,870	11,492	5,130	6,331	4,861	4,102	12,876	10,052
III. Central Luzon	2,340	3,880	2,230	3,952	960	1,048	8,474	10,196	4,234	3,444
IV. Southern Tagalog	1,640	1,676	1,190	1,298	1,810	1,485	1,774	1,669	4,552	4,332
V. Bicol	20	11	20	11	20	11	18	15	28	16
VI. Western Visayas	580	534	680	607	920	624	797	454	341	237
VII. Central Visayas	1,400	648	1,450	631	1,170	740	1,025	579	1,128	586
VIII. Eastern Visayas	100	37	100	38	70	41	71	43	86	43
IX. Western Mindanao	160	37	150	33	50	28	43	12	56	12
X. Northern Mindanao	1,010	406	1,300	490	1,320	514	1,316	506	1,337	846
XI. Southern Mindanao	70	29	90	36	40	26	56	31	79	35
XII. Central Mindanao	4,490	3,575	4,560	3,475	3,880	3,237	41	22	40	22
Autonomous Region in Muslim Mindanao (ARMM)	-	-	-	-	-	-	2,077	1,700	2,298	1,799

Source: Bureau of Agricultural Statistics.

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Table 9.13 Abaca: Area and Quantity of Production by Region: Calendar Year 1988-1992
(Area in hectares, quantity in metric tons)

Region	1988		1989		1990		1991		1992	
	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity	Area	Quantity
Philippines	108,320	84,104	107,703	89,189	106,697	80,450	107,412	85,173	107,057	84,314
Cordillera Administrative Region (CAR)	-	-	-	-	-	-	-	-	-	-
I. Ilocos	-	-	-	-	-	-	-	-	-	-
II. Cagayan Valley	-	-	-	-	-	-	-	-	-	-
III. Central Luzon	-	-	-	-	-	-	-	-	-	-
IV. Southern Tagalog	1,810	161	1,800	168	1,172	109	1,165	105	1,145	73
V. Bicol	39,590	24,348	41,257	30,253	40,695	25,030	42,174	31,482	42,220	32,402
VI. Western Visayas	1,270	996	1,197	982	920	669	887	565	895	576
VII. Central Visayas	1,430	268	1,391	223	1,116	180	900	134	875	118
VIII. Eastern Visayas	44,000	24,912	41,584	22,155	43,024	27,477	42,067	23,794	42,000	22,890
IX. Western Mindanao	4,800	12,281	257	475	263	458	273	457	273	437
X. Northern Mindanao	7,380	9,526	7,972	10,774	7,957	8,680	8,258	10,257	8,162	10,049
XI. Southern Mindanao	4,030	6,311	4,108	7,317	3,725	5,042	3,530	4,276	3,480	4,152
XII. Central Mindanao	4,010	5,301	1,517	2,395	1,305	2,469	1,190	2,351	1,100	2,108
Autonomous Region in Muslim Mindanao (ARMM)	-	-	6,620	14,446	6,520	10,336	6,968	11,753	6,907	11,509

Source: Bureau of Agricultural Statistics.

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Table 9.14 Number of Livestock and Poultry: 1960-1992

Year	Livestock				Poultry	
	Carabao	Cattle	Hog	Goat	Chicken	Duck
1960	3,696,300	1,110,500	6,572,600	617,100	52,335,100	2,230,700
1961	3,452,000	1,054,700	6,191,400	532,300	49,984,400	1,784,100
1962	3,471,800	1,094,400	6,725,700	628,300	51,353,600	1,934,100
1963	3,323,100	1,197,200	6,233,700	483,500	48,624,000	1,594,300
1964	3,190,700	1,382,900	6,616,400	557,500	51,648,200	1,602,300
1965	3,345,600	1,559,900	6,938,500	605,500	56,929,400	1,478,100
1966	3,633,000	1,582,500	6,914,100	616,400	68,121,700	2,033,500
1967	3,926,100	1,574,800	5,496,700	599,000	66,489,300	2,328,000
1968	4,173,400	1,643,800	6,090,200	623,500	68,402,600	2,401,900
1969	4,368,700	1,628,900	6,349,700	698,300	62,528,100	2,279,100
1970	4,431,500	1,678,700	6,455,600	771,600	56,998,800	2,132,100
1971	4,555,700	1,795,400	7,050,300	924,400	56,512,300	2,352,000
1972	4,711,100	1,932,900	7,742,300	1,082,600	50,103,200	2,599,800
1973	4,937,000	2,099,100	8,627,100	1,248,000	49,964,600	2,906,000
1976	2,724,680	1,736,620	6,489,200	784,630	45,670,740	4,104,430
1977	2,897,390	1,723,360	5,696,430	1,103,670	45,288,600	4,227,670
1978	2,958,720	1,820,210	6,909,900	1,289,850	58,892,420	5,365,200
1979	2,803,260	1,833,210	7,444,700	1,374,420	49,320,380	5,337,910
1980	2,870,270	1,882,860	7,933,630	1,671,260	52,761,170	4,724,760
1981	2,849,940	1,939,950	7,758,120	1,696,000	57,723,850	4,782,740
1982	2,908,450	1,941,650	7,794,610	1,783,180	59,718,310	4,710,700
1983	2,946,150	1,937,520	7,979,600	1,859,390	62,253,480	5,267,460
1984	3,021,650	1,848,950	7,612,650	2,362,010	59,160,830	5,761,160
1985	2,982,840	1,786,390	7,303,980	2,190,750	52,098,700	5,221,160
1986	2,984,450	1,814,460	7,274,830	2,176,930	53,006,580	5,207,860
1987	2,865,260	1,746,850	7,038,030	2,015,510	53,248,210	5,252,320
1988	2,890,030	1,700,010	7,580,520	2,120,110	60,321,480	5,833,270
1989	2,841,850	1,681,650	7,908,500	2,212,250	65,921,250	6,500,510
1990	2,764,950	1,629,230	7,989,990	2,192,630	69,539,150	7,236,270
1991	2,646,841	1,676,866	8,079,341	2,122,018	65,480,090	8,267,690
1992	2,479,749	1,658,766	8,021,897	2,239,457	63,127,185	8,348,291

Note: 1974 and 1975 data not available.

Source: Bureau of Agricultural Statistics.

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Table 9.15 Number, Area and Average Size of Farms by Region and Province: 1971, 1975 and 1980
(Area and average farm size in hectares)

Region/province	Number of farms			Area of farms			Average farm size		
	1971	1975	1980	1971	1975	1980	1971	1975	1980
Philippines	2,354,469	3,353,858	3,420,323	8,493,735	8,532,545	9,725,155	3.61	2.54	2.84
National Capital Region (NCR)	2,787	6,887	12,841	6,243	28,117	47,946	2.24	4.08	3.73
I. Ilocos	215,113	319,553	297,243	379,744	394,051	423,975	1.77	1.23	1.43
Abra	13,405	19,761	20,578	22,616	20,831	28,292	1.69	1.05	1.37
Benguet	12,315	20,631	19,414	36,094	34,979	40,916	2.93	1.70	2.11
Ilocos Norte	31,047	40,837	41,953	42,281	40,278	48,546	1.36	0.99	1.16
Ilocos Sur	27,671	45,321	43,035	41,205	50,972	46,034	1.49	1.12	1.07
La Union	27,285	41,562	38,575	40,389	45,771	46,640	1.48	1.10	1.21
Mt. Province	14,085	16,949	10,990	23,834	17,127	27,852	1.69	1.01	2.53
Pangasinan	89,305	134,492	122,698	173,325	184,092	185,695	1.94	1.37	1.51
II. Cagayan Valley	172,058	240,154	252,242	581,347	506,345	636,868	3.38	2.11	2.52
Batanes	1,447	2,026	1,939	5,439	5,740	4,606	3.76	2.83	2.38
Cagayan	53,389	76,738	74,602	202,731	161,644	163,135	3.80	2.11	2.19
Ifugao	10,310	15,316	16,975	26,525	23,778	48,804	2.57	1.55	2.88
Isabela	69,704	87,250	94,659	235,356	198,181	240,479	3.38	2.27	2.54
Kalinga-Apayao	16,921	23,351	25,983	52,382	51,881	81,501	3.10	2.22	3.14
Nueva Vizcaya	15,404	25,141	27,653	43,398	42,619	70,349	2.82	1.70	2.54
Quirino	4,883	10,332	10,431	15,516	22,501	27,994	3.18	2.18	2.68
III. Central Luzon	168,162	225,167	235,422	538,946	491,017	495,521	3.20	2.18	2.10
Bataan	8,176	9,475	8,873	33,431	18,179	23,940	4.09	1.92	2.70

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Table 9.15 Number, Area and Average Size of Farms by Region and Province: 1971, 1975 and 1980 (continued)
(Area and average farm size in hectares)

Region/province	Number of farms			Area of farms			Average farm size		
	1971	1975	1980	1971	1975	1980	1971	1975	1980
Bulácan	27,948	34,904	39,394	63,960	66,983	73,465	2.29	1.92	1.86
Nueva Ecija	60,097	83,235	86,722	208,488	193,829	188,168	3.47	2.33	2.17
Pampanga	23,841	31,140	32,555	90,116	75,724	79,900	3.78	2.43	2.45
Tarlac	35,596	48,351	51,852	109,302	110,644	100,821	3.07	2.29	1.94
Zambales	12,504	18,062	16,026	33,649	25,657	29,227	2.69	1.42	1.82
IV. Southern Tagalog	268,240	394,666	399,208	1,068,455	1,147,099	1,251,203	3.98	2.91	3.13
Aurora	6,283	8,297	10,069	25,975	18,129	31,229	4.13	2.19	3.10
Batangas	58,140	73,692	85,357	137,846	132,117	140,369	2.37	1.79	1.64
Cavite	21,359	28,160	29,228	53,986	61,032	51,809	2.53	2.17	1.77
Laguna	23,391	29,816	32,556	90,646	75,110	85,809	3.88	2.52	2.64
Marinduque	12,205	18,734	16,395	43,518	46,272	44,555	3.57	2.47	2.72
Occidental Mindoro	13,972	19,850	19,511	80,868	56,282	77,713	5.79	2.84	3.98
Oriental Mindoro	28,422	39,916	39,767	134,902	110,228	141,996	4.75	2.76	3.57
Palawan	24,384	37,336	38,884	151,394	150,552	237,851	6.21	4.03	6.12
Quezon	60,018	104,910	91,002	287,458	427,295	346,430	4.79	4.07	3.81
Rizal	13,567	23,981	12,628	45,398	51,910	29,800	3.35	2.16	2.36
Romblon	6,499	9,974	23,811	16,464	18,172	63,642	2.53	1.82	2.67
V. Bicol	223,023	330,518	311,214	921,276	942,696	1,036,607	4.13	2.85	3.33
Albay	45,740	66,780	67,700	131,085	144,291	162,650	2.87	2.16	2.40
Camarines Norte	15,007	21,115	19,779	101,816	110,034	111,319	6.78	5.21	5.63
Camarines Sur	74,166	104,671	96,166	292,796	297,903	295,937	3.95	2.85	3.08
Catanduanes	16,239	22,741	20,693	54,471	46,561	50,509	3.35	2.05	2.44
Masbate	43,224	67,917	63,159	234,387	219,509	274,768	5.42	3.23	4.35
Sorsogon	28,647	47,294	43,717	106,723	124,399	141,424	3.73	2.63	3.23

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Table 9.15 Number, Area and Average Size of Farms by Region and Province: 1971, 1975 and 1980 (continued)
(Area and average farm size in hectares)

Region/province	Number of farms			Area of farms			Average farm size		
	1971	1975	1980	1971	1975	1980	1971	1975	1980
VI. Western Visayas	190,704	279,138	279,123	781,954	621,743	765,886	4.10	2.23	2.74
Aklan	19,080	33,761	31,027	53,530	52,958	52,555	2.81	1.57	1.69
Antique	26,611	37,834	40,573	53,695	50,792	73,717	2.02	1.34	1.82
Capiz	28,914	42,404	41,126	101,615	88,344	89,498	3.51	2.08	2.18
Iloilo	75,464	104,207	106,414	248,366	215,171	254,197	3.29	2.06	2.39
Negros Occidental	40,635	60,932	59,983	324,748	214,477	295,919	7.99	3.52	4.93
VII. Central Visayas	221,742	322,700	341,884	479,134	554,406	582,862	2.16	1.72	1.70
Bohol	61,107	91,655	100,462	142,070	143,564	159,270	2.32	1.57	1.59
Cebu	102,427	143,950	149,486	148,813	205,019	177,861	1.45	1.42	1.19
Negros Oriental	51,555	76,373	81,912	179,480	190,920	236,134	3.48	2.50	2.88
Siquijor	6,653	10,722	10,024	8,772	14,903	9,597	1.32	1.39	0.96
VIII. Eastern Visayas	200,147	295,600	271,283	674,136	743,609	744,141	3.37	2.52	2.74
Leyte	89,236	131,545	123,733	257,068	300,553	306,862	2.88	2.28	2.48
Southern Leyte	23,326	34,371	36,689	59,372	68,943	70,171	2.55	2.01	1.91
Eastern Samar	23,707	35,246	29,428	103,792	100,254	92,886	4.38	2.84	3.16
Northern Samar	26,798	44,397	35,010	141,824	153,480	155,345	5.29	3.46	4.44
Western Samar	37,080	50,041	46,423	112,080	120,379	118,877	3.02	2.41	2.56
IX. Western Mindanao	152,455	205,696	214,920	631,905	734,132	800,512	4.14	3.57	3.72
Basilan	7,732	7,894	12,006	52,373	42,620	60,459	6.77	5.40	5.04
Sulu	13,061	23,491	25,389	49,524	64,132	95,384	3.79	2.73	3.76
Tawi-tawi	7,848	11,484	7,627	29,512	45,128	31,600	3.76	3.93	4.14
Zamboanga del Norte	42,617	56,973	60,837	184,051	214,718	239,333	4.32	3.77	3.93
Zamboanga del Sur	81,197	105,854	109,061	316,446	367,534	373,736	3.90	3.47	3.43

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Table 9.15 Number, Area and Average Size of Farms by Region and Province: 1971, 1975 and 1980 (concluded)
(Area and average farm size in hectares)

Region/province	Number of farms			Area of farms			Average farm size		
	1971	1975	1980	1971	1975	1980	1971	1975	1980
X. Northern Mindanao	167,264	253,066	263,829	726,709	772,984	965,635	4.34	3.05	3.66
Agusan del Norte	16,324	26,894	27,200	57,625	88,895	88,699	3.53	3.31	3.26
Agusan del Sur	19,401	28,040	29,169	111,558	98,958	143,127	5.75	3.53	4.91
Bukidnon	49,152	67,692	74,893	261,687	244,253	343,784	5.32	3.61	4.59
Camiguin	3,291	6,846	6,811	9,404	10,571	12,541	2.86	1.54	1.84
Misamis Occidental	24,011	37,931	35,474	75,187	95,780	96,384	3.13	2.53	2.72
Misamis Oriental	33,196	50,401	51,963	129,208	139,384	173,331	3.89	2.77	3.34
Surigao del Norte	21,889	35,262	38,319	82,041	95,144	107,769	3.75	2.70	2.81
XI. Southern Mindanao	179,154	266,004	286,808	898,110	944,024	1,138,617	5.01	3.55	3.97
Surigao del Sur	21,734	33,258	37,302	108,526	108,214	144,341	4.99	3.25	3.87
Davao del Norte	39,986	62,245	74,006	217,700	239,198	285,909	5.44	3.84	3.86
Davao Oriental	22,044	34,025	34,370	131,534	155,584	168,180	5.97	4.57	4.89
Davao del Sur	51,172	78,117	79,335	202,179	257,074	292,638	3.95	3.29	3.69
South Cotabato	44,218	58,359	61,795	238,171	183,954	247,549	5.39	3.15	4.01
XII. Central Mindanao	193,620	214,709	254,306	805,777	652,324	835,382	4.16	3.04	3.28
Lanao del Norte	30,889	32,885	39,260	96,044	104,453	132,602	3.11	3.18	3.98
Lanao del Sur	42,415	56,242	50,701	141,856	152,254	151,892	3.34	2.71	3.00
Maguindanao	48,481	43,319	56,317	214,892	134,699	174,789	4.43	3.11	3.10
North Cotabato	54,235	59,447	72,906	265,143	170,711	255,149	4.89	2.87	3.50
Sultan Kudarat	17,600	22,816	35,122	87,843	90,207	120,950	4.99	3.95	3.44

Source: National Statistics Office. 1981 Census of Agriculture, Special Report No. 1.

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Table 9.16 Area of Farms by Land Use and Region: 1971 and 1980
(Area in hundred hectares)

Region	1980					1971				
	Total farm area	Arable land	Land under permanent crops	Land under permanent meadows and pastures	All other lands	Total farm area	Arable land	Land under permanent crops	Land under permanent meadows and pastures	All other lands
Philippines	97,252	52,037	34,890	5300	5,024	84,937	46,443	25,322	6,910	6,263
National Capital Region (NCR)	479	313	130	12	25	62	43	5	2	12
I. Ilocos	4,240	3,199	211	503	327	3,797	2,937	217	359	284
II. Cagayan Valley	6,369	4,687	374	955	352	5,813	4,102	251	942	519
III. Central Luzon	4,955	4,557	130	169	99	5,389	4,690	116	417	167
IV. Southern Tagalog	12,512	4,798	5,880	1,053	781	10,685	4,622	4,228	918	917
V. Bicol	10,366	3,292	5,941	681	453	9,213	3,570	4,243	853	547
VI. Western Visayas	7,659	5,528	1,277	384	470	7,820	5,656	1,003	534	627
VII. Central Visayas	5,829	3,745	1,644	204	236	4,791	2,887	1,295	356	254
VIII. Eastern Visayas	7,441	2,570	4,439	133	298	6,741	2,639	3,423	237	441
IX. Western Mindanao	8,005	3,670	3,787	248	299	6,319	2,908	2,794	294	324
X. Northern Mindanao	9,656	5,080	3,546	340	690	7,267	3,498	2,492	626	651
XI. Southern Mindanao	11,386	4,978	5,429	404	574	8,981	3,848	3,489	684	961
XII. Central Mindanao	8,354	5,618	2,101	214	420	8,058	5,043	1,768	688	560

Source: National Statistics Office. 1981 Census of Agriculture, Special Report No. 2.

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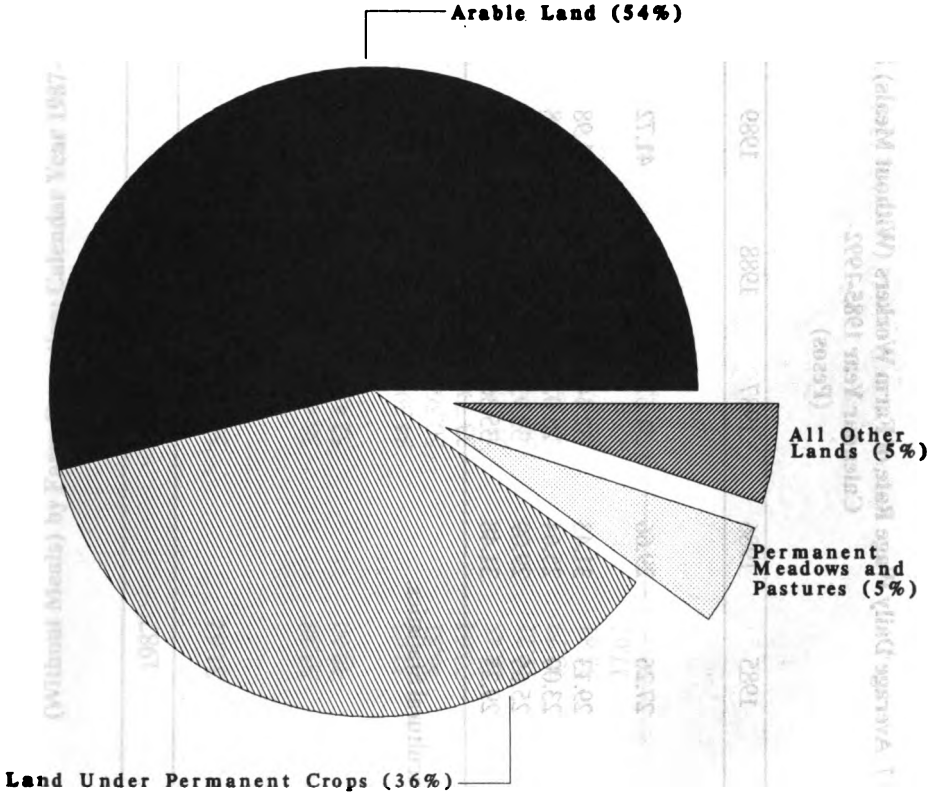
Figure 9.2 Area of Philippine Farms By Land Use: 1980



Total Area of Farms = 9,725,155 hectares

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Table 9.17 Average Daily Wage Rate of Farm Workers (Without Meals) by Selected Crops: Calendar Year 1985-1992
(Pesos)

Crop	1985	1986	1987	1988	1989	1990	1991	1992
All crops	27.26	29.66	31.62	35.96	41.72	50.53	57.74	65.16
Palay	29.13	31.43	32.44	36.31	41.98	51.50	59.45	66.76
Corn	23.00	25.64	28.01	32.46	37.98	46.93	52.59	59.83
Sugarcane	25.65	29.09	33.93	36.22	42.20	49.88	56.87	64.28
Coconut	29.25	31.48	35.36	41.04	47.49	53.97	61.74	69.79

Source: Bureau of Agricultural Statistics.

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Table 9.18 All Crops: Average Daily Wage Rate of Farm Workers (Without Meals) by Farm Operation: Calendar Year 1987-1991 (Pesos)

Farm operation	1987	1988	1989	1990	1991
All operations	31.62	39.36	41.72	-	-
Plowing					
Man	33.38	36.40	43.61	50.88	56.74
Man and animal	48.60	52.48	58.78	61.17	76.14
Harrowing					
Man	32.93	34.39	42.15	50.08	56.81
Man and animal	46.81	50.56	56.92	65.10	76.01
Planting/transplanting	30.64	33.79	41.55	49.38	56.50
Weeding	28.48	31.03	39.63	49.43	55.97
Care of crops[1]	29.21	32.92	40.67	48.82	57.63
Harvesting	33.77	37.24	44.22	52.59	59.54
Splitting/ shelling	35.81	40.19	46.46	52.51	60.06
Others[2]	37.62	43.42	47.16	53.80	61.98

[1] Includes fertilizing and spraying.
[2] Refer to drying and hauling.

Source: Bureau of Agricultural Statistics.

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Table 9.19 All Crops: Average Daily Wage Rate of Farm Workers (Without Meals) by Region: Calendar Year 1988-1992 (Pesos)

Region	1987	1988	1989	1990	1991	1992
Philippines	32.43	35.96	41.72	50.53	57.74	65.16
Cordillera Administrative Region (CAR)	-	-	-	50.77	59.86	66.50
I. Ilocos	36.03	38.46	43.36	53.36	62.71	69.82
II. Cagayan Valley	29.72	28.43	40.50	48.72	57.82	67.31
III. Central Luzon	37.51	41.29	48.28	57.34	66.29	74.22
IV. Southern Tagalog	40.60	46.56	53.88	62.35	69.94	78.80
V. Bicol	30.26	36.19	28.43	47.23	52.75	58.71
VI. Western Visayas	29.99	33.97	39.02	45.55	51.23	57.09
VII. Central Visayas	27.32	29.51	35.18	40.14	46.85	53.07
VIII. Eastern Visayas	28.75	34.77	39.90	46.10	52.12	57.54
IX. Western Mindanao	33.60	37.03	43.12	50.00	57.20	62.41
X. Northern Mindanao	32.82	35.30	41.08	49.62	56.48	64.71
XI. Southern Mindanao	29.51	34.02	38.95	47.73	53.16	59.67
XII. Central Mindanao	31.31	34.80	40.44	48.75	56.29	62.91

Source: Bureau of Agricultural Statistics.

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Table 9.20 Palay: Daily Average Wage Rate of Farm Workers (Without Meal) by Region: Calendar Year 1986-1992 (Pesos)

	Region	1986	1987	1988	1989	1990	1991	1992
	Philippines	31.43	32.44	36.31	41.98	51.50	59.45	66.76
	Cordillera Administrative Region (CAR)	-	-	-	-	52.06	61.45	67.31
I.	Ilocos	34.68	35.64	40.05	44.95	54.18	63.70	70.70
II.	Cagayan Valley	29.27	30.72	35.23	40.80	49.09	59.27	69.13
III.	Southern Tagalog	37.46	38.15	41.27	48.39	63.95	72.29	82.11
IV	Central LUzon	37.94	40.48	48.05	55.29	57.58	66.63	74.62
V.	Bicol	30.43	33.49	38.29	43.29	49.13	54.12	60.21
VI	Western Visayas	28.47	30.33	34.78	39.53	46.83	52.31	59.20
VII.	Central Visayas	23.50	27.40	30.59	35.00	43.00	50.08	57.83
VIII.	Eastern Visayas	24.61	25.92	31.54	36.19	46.11	50.02	57.06
IX.	Western Mindanao	29.30	33.51	35.84	41.17	48.95	56.41	63.22
X.	Northern Mindanao	28.15	30.78	34.51	39.84	47.63	56.02	66.37
XI.	Southern Mindanao	28.73	29.02	34.52	39.96	50.84	56.26	63.91
XII.	Central Mindanao	28.77	29.61	34.22	39.82	46.58	55.54	61.90

Source: Bureau of Agricultural Statistics.

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Table 9.21 Corn: Average Daily Wage Rate of Farm Workers (Without Meals) by Region: Calendar Year 1986-1992 (Pesos)

Region	1986	1987	1988	1989	1990	1991	1992
Philippines	25.64	28.01	32.46	37.98	46.93	52.29	59.83
Cordillera Administrative Region (CAR)	-	-	-	-	46.63	54.76	63.91
I. Ilocos	26.83	28.86	32.91	38.13	47.42	56.12	63.79
II. Cagayan Valley	26.50	28.74	34.29	39.83	47.91	54.64	63.32
III. Central Luzon	29.57	31.78	38.38	42.92	50.91	58.29	65.41
IV. Southern Tagalog	29.22	34.83	38.54	44.99	54.38	59.92	66.75
V. Bicol	25.06	25.59	30.61	36.58	40.52	47.58	53.57
VI. Western Visayas	22.40	24.57	29.61	36.11	39.84	45.34	50.48
VII. Central Visayas	21.40	27.24	29.17	34.22	38.12	44.32	49.96
VIII. Eastern Visayas	24.08	27.25	29.87	34.33	37.33	42.95	51.10
IX. Western Mindanao	21.47	24.91	29.92	35.74	45.67	52.08	57.00
X. Northern Mindanao	24.02	26.62	31.06	36.48	47.41	53.49	60.52
XI. Southern Mindanao	24.71	31.00	33.57	38.01	45.64	50.65	55.83
XII. Central Mindanao	27.58	29.76	34.18	39.61	50.00	56.35	62.47

Source: Bureau of Agricultural Statistics.

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Table 9.22 Agricultural Production Loans Granted by Institution: 1989 and 1990 (Million pesos)

Institution	1990[p]	1989
Total	38,115.8	31,209.7
Government Banks	102.1[a]	211.7
Philippine National Bank (PNB)	-	-
Development Bank of the Phils. (DBP)	-	-
Land Bank of the Philippines (LBP)	-	-
Specialized Government Banks	102.1[a]	211.7
Private Banks	38,013.7	30,998.0
Private Commercial Banks (PCBs)	31,583.6	23,192.8
Savings and Mortgage Banks (SMBs)	846.1[b]	355.9
Private Development Banks (PDBs)	1,337.5	1,482.0
Rural Banks (RBs)	3,603.6[b]	5,444.3
Stock Savings and Loan Associations (SSLAs)	642.9	523.0

[p] Preliminary.
[a] As of July 1990.
[b] As of September 1990.

Source: Central Bank of the Philippines, Department of Economic Research and Supervisory Reports Office.

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Table 9.23 Agricultural Loans Granted by Commodity: 1989 and 1990 (Million pesos)

Commodity	1990	1989
Total	12,267.0	19,581.9
Food commodities	7,262.6	12,345.6
Cereals	1,328.5	1,849.2
Rice	988.3	1,560.4
Corn	276.1	245.8
Sorghum	19.3	7.9
Soybean and feedgrains	44.5	35.1
Fruits, vegetables and root crops	141.4	168.3
Livestock and poultry	2,641.3	5,669.8
Fisheries	3,151.3	4,658.2
Export and commercial crops	5,004.4	7,236.3
Abaca and other fibers	273.5	315.4
Coconut	1,245.5	2,342.9
Coffee and cacao	226.6	184.8
Cotton	136.6	179.6
Rubber	75.3	78.9
Sugarcane	2,859.2	3,832.2
Tobacco	187.5	302.5

Source: Central Bank of the Philippines, Department of Economic Research and Supervisory Reports Office.

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Table 9.24 Summary of Agricultural Loans Granted by the Rural Banking System: 1960-1990

Year	Number	Percent increase/ (decrease)	Amount of loan (million pesos)	Percent increase/ (decrease)
1960	103,124	-	50.8	-
1961	143,726	39.4	74.0	45.7
1962	180,070	25.3	101.4	37.0
1963	237,297	31.8	143.0	41.0
1964	603,156	154.2	201.3	40.8
1965	304,723	(49.5)	215.4	7.0
1966	315,595	3.6	247.4	14.8
1967	366,911	16.3	334.9	35.4
1968	384,934	4.9	378.1	12.9
1969	385,721	0.2	416.8	10.2
1970	400,706	3.9	496.6	19.1
1971	434,652	8.5	609.7	22.8
1972	489,193	12.5	708.6	16.2
1973	701,634	43.4	976.9	37.9
1974	972,388	38.6	1,669.5	70.9
1975	966,218	(0.6)	2,177.5	30.4
1976	679,946	(29.6)	1,658.7	(23.8)
1977	688,579	1.3	1,799.1	8.5
1978	790,614	14.8	2,384.8	32.6
1979	859,020	8.6	2,950.4	23.7
1980	824,593	(4.0)	3,257.3	10.4
1981	942,671	14.3	3,729.9	14.51
1982	828,993	(12.1)	4,306.7	15.46
1983	775,102	(6.5)	4,610.3	7.05
1984	551,399	(28.9)	3,361.8	(27.08)
1985	407,200	(26.2)	2,778.9	(17.34)
1986	360,979	(11.4)	2,948.1	6.13
1987	358,155	(0.8)	3,456.4	17.24
1988	358,817	0.18	3,854.9	11.53
1989	436,500	21,6	5,444.3	41.2
1990	405,570	(7.1)	49,380	(9.3)

Source: Central Bank of the Philippines, Department of Rural Banks.

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Table 9.25 Palay Crop Insurance and Claims: 1992
(Area in hectares, value in million pesos)

	Region	Insurance			Claims		
		Total farmers insured	Area coverage	Amount of cover	Total claimants	Area affected	Indemnity
	Philippines	224,703	355,232	2,216.870	60,506	101,618	143.002
I.	Ilocos	16,277	19,272	105.917	5,799	8,883	8.106
II.	Cagayan Valley	37,957	56,473	307.455	5,579	10,561	14.389
III.	Central Luzon	62,590	121,095	772.235	21,454	40,618	48.043
IV.	Southern Tagalog	16,769	30,351	182.273	1,790	3,612	3.564
V.	Bicol	6,865	9,064	60.982	584	933	1.515
VI.	Western Visayas	29,532	38,774	259.292	7,406	9,844	18.588
VII.	Central Visayas	4,861	5,080	31.043	2,446	2,634	4.582
VIII.	Eastern Visayas	6,893	10,092	69.631	3,019	4,760	9.439
IX.	Western Mindanao	5,960	8,952	53.185	2,338	3,997	5.827
X.	Northern Mindanao	9,927	14,218	99.420	2,956	4,705	9.330
XI.	Southern Mindanao	17,541	27,676	184.717	4,632	7,278	13.766
XII.	Central Mindanao	9,531	14,185	90.720	2,453	3,793	5.853

Source: Philippine Crop Insurance Corporation.

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Table 9.26 Corn Crop Insurance and Claims: 1992
(Area in hectares, value in million pesos)

	Region	Insurance			Claims		
		Total farmers insured	Area coverage	Amount of cover	Total claimants	Area affected	Indemnity
	Philippines	28,584	42,176	262.594	9,662	15,841	29.503
I.	Ilocos	825	1,389	9.133	58	136	0.144
II.	Cagayan Valley	10,975	13,888	80.879	4,106	6,170	12.123
III.	Central Luzon	301	420	2.818	33	77	0.084
IV.	Southern Tagalog	336	673	4.485	92	141	0.222
V.	Bicol	1,428	2,358	16.607	315	538	1.026
VI.	Western Visayas	797	1,039	6.546	320	430	1.033
VII.	Central Visayas	250	196	0.910	204	196	0.288
VIII.	Eastern Visayas	345	353	2.447	134	205	0.263
IX.	Western Mindanao	433	615	2.497	202	269	0.242
X.	Northern Mindanao	4,323	8,030	53.553	1,085	2,451	4.766
XI.	Southern Mindanao	2,701	4,816	29.138	1,347	2,651	5.416
XII.	Central Mindanao	5,870	8,399	53.581	1,766	2,577	3.896

Source: Philippine Crop Insurance Corporation.

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Table 9.27 Quantity and Value of Fish Produced by Source of Production: 1965-1992
(Quantity in thousand kilograms, value in thousand pesos)

Year	Total		Commercial fishing vessels		Aquaculture		Municipal fisheries and sustenance fishing			
							Marine[1]		Inland	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1965	667,202	806,509	300,074	372,092	63,198	106,172	303,930	328,245	-	-
1966	705,278	825,988	314,899	366,143	63,654	129,855	326,725	329,990	-	-
1967	746,063	963,141	330,922	423,734	63,912	135,493	351,229	403,914	-	-
1968	937,684	1,361,938	406,794	548,358	86,711	182,441	444,179	631,139	-	-
1969	940,792	1,457,373	368,727	556,778	94,573	191,038	477,492	709,557	-	-
1970	988,884	1,725,266	381,877	614,822	96,461	252,727	510,546	857,717	-	-
1971	1,023,095	2,331,062	382,276	879,235	97,915	328,016	542,904	1,123,811	-	-
1972	1,122,410	2,827,509	424,754	1,106,069	98,923	332,379	598,733	1,389,061	-	-
1973	1,204,837	3,295,341	465,442	1,261,599	99,600	434,255	639,795	1,599,487	-	-
1974	1,268,368	5,569,714	470,675	2,389,531	113,195	784,440	684,498	2,395,743	-	-
1975	1,336,803	5,919,127	498,617	2,548,987	106,461	809,103	731,725	2,561,037	-	-
1976	1,393,483	7,297,935	508,197	2,697,760	159,292	1,192,199	618,694	3,315,579	107,300	92,397
1977	1,508,855	8,809,203	518,165	3,543,212	163,590	1,250,933	710,840	3,821,675	116,260	193,383
1978	1,580,404	9,477,276	505,840	3,465,214	216,655	1,201,591	686,890	4,474,356	171,019	336,115
1979	1,581,303	10,536,747	500,747	3,512,246	241,198	1,660,209	635,538	4,872,344	203,820	491,948
1980	1,672,254	11,644,350	488,478	3,784,734	289,166	1,841,873	647,284	5,410,385	247,326	607,358
1981	1,772,897	13,953,798	494,768	4,124,641	339,501	2,865,520	709,989	6,263,374	228,639	700,263
1982	1,896,983	15,063,966	526,273	4,355,152	392,348	3,393,317	708,016	6,487,795	270,346	827,702
1983	2,110,230	18,981,459	519,316	4,642,692	445,073	4,799,170	770,988	7,463,081	374,853	2,076,516
1984	2,080,439	25,649,933	513,335	6,521,173	477,887	7,265,913	789,975	10,291,202	299,242	1,571,645

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Table 9.27 Quantity and Value of Fish Produced by Source of Production: 1965-1992 (concluded)
(Quantity in thousand kilograms, value in thousand pesos)

Year	Total		Commercial fishing vessels		Aquaculture		Municipal fisheries and sustenance fishing			
							Marine[1]		Inland	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1985	2,052,111	31,297,268	511,987	7,857,178	494,742	8,724,361	785,132	12,795,450	260,250	1,920,279
1986	2,089,484	37,331,483	546,230	9,247,861	470,893	10,832,201	807,275	14,611,055	265,086	2,640,366
1987	2,213,040	37,349,479	591,192	9,820,717	560,970	11,421,223	816,247	14,216,432	244,631	1,891,107
1988	2,269,744	42,118,213	599,995	10,272,025	599,554	15,213,085	838,366	14,693,413	231,829	1,939,690
1989	2,317,109	45,093,712	637,338	11,033,427	629,345	15,672,622	882,369	16,181,769	222,257	2,205,894
1990	2,503,546	52,177,157	700,564	12,410,552	671,116	20,466,521	895,040	16,735,825	236,826	2,564,259
1991	2,598,981	60,034,000	759,815	15,245,000	692,401	22,656,000	913,524	19,614,000	233,241	2,519,000
1992	2,625,607	65,443,000	804,866	16,801,000	736,381	25,986,000	854,687	19,444,000	229,673	3,212,000

[1] Includes inland fishing from 1965 to 1975.

Source: Bureau of Fisheries and Aquatic Resources; Fisheries Statistics Section,Bureau of Agricultural Statistics.

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Table 9.28 Aquaculture Production by Type of Culture: 1988-1990 (Quantity in thousand kilograms, value in thousand pesos)

Item	1988		1989		1990	
	Quantity	Value	Quantity	Value	Quantity	Value
Total	599,554	15,213,085	629,345	15,672,622	671,116	20,466,521
Marine	284,352	719,306	297,923	846,076	322,176	1,116,402
Oysters	12,445	74,670	12,819	89,219	13,485	126,212
Mussels	15,502	139,518	16,403	152,279	17,515	194,113
Seaweeds	256,405	505,118	268,701	604,578	291,176	796,077
Freshwater	42,074	990,422	43,604	1,133,733	45,310	1,254,800
Fishpens	23,814	573,857	24,102	654,425	24,379	684,596
Bangus (Milkfish)	11,942	306,073	11,699	344,301	19,004	553,149
Tilapia	9,470	216,958	9,246	232,998	3,948	101,804
Carpa	2,402	50,826	3,157	77,126	1,427	29,643
Fishcages	18,260	416,565	19,502	479,308	20,931	570,204
Tilapia	17,249	395,174	18,449	455,692	18,220	515,270
Carpa	1,011	21,391	1,053	23,616	2,711	54,934
Fishpond	273,128	13,503,357	287,818	13,692,813	303,630	18,095,319
Brackishwater	240,206	12,754,934	253,580	12,837,617	267,814	16,762,373
Bangus (Milkfish)	175,935	4,702,741	181,197	4,988,353	191,878	6,566,424
Sugpo (Prawns)	41,548	7,437,508	43,539	6,966,240	47,591	9,278,889
Others[1]	22,723	614,685	28,844	883,024	28,345	917,060
Freshwater	32,922	748,423	34,238	855,196	35,816	1,332,946
Tilapia	30,149	690,714	30,900	779,916	35,169	1,316,502
Carpa	2,438	51,588	3,010	68,780	642	16,233
Others[2]	335	6,121	328	6,500	5	211

[1] Include tilapia, white shrimps, mud crabs and endeavor prawns.
[2] Include mudfish, catfish and gourami.

Source: Bureau of Fisheries and Aquatic Resources; Fisheries Statistics Section, Bureau of Agricultural Statistics.

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Table 9.29 Area and Production of Fishponds in Operation by Region and Province: 1988
(Area in hectares, production in metric tons)

Region/province	Total		Brackishwater		Freshwater	
	Area	Production	Area	Production	Area	Production
Philippines	224,527.55	273,128	210,680.81	240,206	13,846.74	32,922
National Capital Region (NCR)	703.18	631	703.18	631	-	-
Cordillera Administrative Region (CAR)	15,685.73	24,390	15,450.7	24,086	235.03	304
Abra	17.54	208	-	-	117.54	208
Benguet	7.08	12	-	-	7.08	12
Ifugao	16.44	24	-	-	16.44	24
Kalinga-Apayao	89.47	53	-	-	89.47	53
Mountain Province	15,455.2	24,093	15,450.7	24,086	4.50	7
I. Ilocos	2,549.34	3,312	1,207.72	1,421	1,341.62	1,891
Ilocos Norte	92.13	141	36.43	36	55.70	105
Ilocos Sur	475.18	596	379.30	497	95.88	99
La Union	1,024.84	1,130	791.99	888	232.85	242
Pangasinan	957.19	1,445	-	-	957.19	1,445
II. Cagayan Valley	2,344.14	2,058	1,469.28	854	874.86	1,204
Cagayan	1,814.11	1,364	1,469.28	854	344.83	510
Isabela	301.59	462	-	-	301.59	462
Nueva Vizcaya	152.34	186	-	-	152.34	186
Quirino	76.10	46	-	-	76.10	46
III. Central Luzon	62,578.61	97,256	53,464.61	69,945	9,114.00	27,311
Bataan	3,323.00	4,394	3,298.00	4,319	25.00	75
Bulacan	22,584.49	35,715	21,973.49	33,882	611.00	1,833
Nueva Ecija	1,167.00	3,501	-	-	1,167.00	3,501
Pampanga	33,439.35	49,985	26,922.35	30,435	6,517.00	19,550
Tarlac	755.00	2,265	-	-	755.00	2,265
Zambales	1,309.77	1,396	1,270.77	1,309	39.00	87
IV. Southern Tagalog	23,659.28	18,693	23,281.18	18,183	378.10	510
Aurora	8.53	4	2.20	2	6.33	2
Batangas	860.26	485	834.21	475	26.05	10
Cavite	696.22	261	650.60	242	45.62	19
Laguna	55.36	272	-	-	55.36	272
Marinduque	247.97	144	247.97	144	-	-
Mindoro Occidental	6,307.65	7,379	6,193.65	7,332	114.00	47
Mindoro Oriental	2,366.41	1,618	2,342.54	1,608	23.87	10
Palawan	2,109.81	938	2,097.81	934	12.00	4
Quezon	10,719.57	7,391	10,665.03	7,368	54.54	23

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Table 9.29 Area and Production of Fishponds in Operation by Region and Province: 1988 (continued)
(Area in hectares, production in metric tons)

Region/province	Total		Brackishwater		Freshwater	
	Area	Production	Area	Production	Area	Production
Rizal	40.33	123	-	-	40.33	123
Romblon	247.17	78	247.17	78	-	-
V. Bicol	11,244.28	5,833	11,028.14	5,675	217.14	158
Albay	397.00	142	353.00	132	45.00	10
Camarines Norte	1,220.00	447	1,200.00	433	20.00	14
Camarines Sur	3,465.27	2,344	3,326.38	2,219	138.89	125
Catanduanes	339.72	225	338.72	224	1.00	1
Masbate	4,684.29	1,976	4,680.04	1,973	4.25	3
Sorsogon	1,138.00	699	1,130.00	694	8.00	5
VI. Western Visayas	59,627.92	80,954	59,074.22	80,456	553.70	498
Aklan	7,664.91	10,187	7,660.80	10,183	4.11	4
Antique	424.44	417	410.74	391	13.70	26
Capiz	18,425.25	28,213	18,422.10	28,210	3.15	3
Iloilo	15,606.37	22,298	15,525.34	22,210	81.03	88
Negros Occidental	17,506.95	19,839	17,055.24	19,462	451.71	377
VII. Central Visayas	7,110.25	6,652	7,110.25	6,652	-	-
Bohol	3,372.79	3,211	3,372.79	3,211	-	-
Cebu	2,187.87	2,001	2,187.87	2,001	-	-
Negros Oriental	1,525.59	1,424	1,525.59	1,424	-	-
Siquijor	24.00	16	24.00	16	-	-
VIII. Eastern Visayas	7,233.81	2,836	5,976.92	2,721	256.89	115
Eastern Samar	231.81	64	230.81	63	1.00	1
Leyte	2,934.54	800	1,715.13	722	219.41	88
Northern Samar	1,232.99	462	1,220.02	450	12.97	12
Southern Leyte	111.14	116	106.03	113	5.11	3
Western Samar	2,723.33	1,384	2,704.93	1,373	18.40	11
IX. Western Mindanao	16,538.28	14,908	16,401.28	14,742	137.00	166
Basilan	1,540.35	1,241	1,540.35	1,241	-	-
Zamboanga del Norte	1,399.24	973	1,374.24	919	25.00	54
Zamboanga del Sur	13,598.69	12,694	13,486.69	12,582	112.00	112
X. Northern Mindanao	4,711.10	3,360	4,326.31	2,921	384.79	440
Agusan del Norte	1,835.31	1,170	1,785.39	1,130	49.96	40
Agusan del Sur	139.27	153	-	-	139.23	153
Bukidnon	176.62	230	-	-	176.62	230
Misamis Occidental	956.26	785	943.07	774	13.19	11
Misamis Oriental	561.25	427	555.46	421	5.79	6
Surigao del Norte	1,042.39	596	1,042.39	596	-	-

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Table 9.29 Area and Production of Fishponds in Operation by Region and Province: 1988 (concluded)
(Area in hectares, production in metric tons)

Region/province	Total		Brackishwater		Freshwater	
	Area	Production	Area	Production	Area	Production
XI. Southern Mindanao	7,481.54	8,262	7,247.54	8,046	234.00	216
Davao del Norte	1,804.40	1,836	1,706.40	1,777	98.00	59
Davao Oriental	1,863.72	2,528	1,861.32	2,526	2.40	2
Davao del Sur	1,808.38	1,871	1,777.82	1,816	30.56	55
South Cotabato	560.54	818	461.50	719	99.04	99
Surigao del Sur	1,444.50	1,209	1,440.50	1,208	4.00	1
XII. Central Mindanao	4,059.09	3,982	3,939.48	3,873	119.61	109
Lanao del Norte	2,070.00	2,152	2,070.00	2,152	-	-
Lanao del Sur	51.64	53	-	-	51.64	53
Maguindanao	1,218.96	1,081	1,203.83	1,074	15.13	7
North Cotabato	42.00	40	-	-	42.00	40
Sultan Kudarat	676.49	656	665.65	647	10.84	9

Note: Details may not add up to totals due to rounding.

Source: Fisheries Statistics Section, Bureau of Agricultural Statistics.

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Table 9.30 Number of Fishponds and Fishpond Operators, Area and Quantity of Harvest by Region: 1970 and 1980
(Area in hectares, quantity in metric tons)

Region	1980				1970			
	Number of operators reporting	Number of fishpond	Area operated	Quantity of harvest	Number of operators reporting	Number of fishpond	Area operated	Quantity of harvest
Philippines	19,896	20,635	142,145	106,017.22	8,392	8,541	86,299	39,250.89
National Capital Region (NCR)	205	208	1,150	1,584.98	2	3	964	89.00
I. Ilocos	4,808	5,069	8,802	6,865.76	2,949	2,971	5,999	4,218.88
II. Cagayan Valley	1,524	1,527	1,444	436.11	62	60	79	98.87
III. Central Luzon	3,098	3,247	38,249	41,531.99	636	641	9,506	4,891.83
IV. Southern Tagalog	1,873	1,922	11,710	4,468.69	1,404	1,425	11,969	4,211.52
V. Bicol	1,446	1,453	8,115	2,244.09	321	325	4,946	1,047.51
VI. Western Visayas	3,082	3,264	35,175	31,450.93	1,798	1,859	32,160	17,510.00
VII. Central Visayas	744	776	6,361	3,318.32	420	427	3,070	1,453.00
VIII. Eastern Visayas	273	279	4,249	3,155.88	101	105	2,455	603.28
IX. Western Mindanao	1,016	1,041	12,811	4,541.21	206	216	4,103	1,392.00
X. Northern Mindanao	833	836	3,921	1,290.74	139	146	3,083	925.00
XI. Southern Mindanao	719	731	6,392	3,849.04	251	258	4,093	1,493.00
XII. Central Mindanao	275	282	3,768	1,280.47	103	105	3,872	1,317.00

Note: Details may not add up to totals due to rounding.

Source: National Statistics Office. Census of Fisheries, 1971 and 1981.

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Table 9.31 Number and Area of Fishponds by Size, by Type of Ownership and by Type of Water by Region: 1980
(Area in hectares)

Region	Number of operators reporting[1]	Total Number of fishpond units	Area operated	Brackishwater fishponds: Privately owned		Brackishwater fishponds: Government-owned		Brackishwater fishponds: Leased from others	
				Number	Area	Number	Area	Number	Area
Philippines	19,896	20,635	142,145.1	9,842	79,452.4	2,823	36,166.7	2,456	19,727.8
National Capital Region (NCR)	205	208	1,149.6	115	618.5	1	100.0	86	419.0
I. Ilocos	4,808	5,069	8,801.9	3,198	5,977.4	43	243.6	914	1,957.6
II. Cagayan Valley	1,524	1,527	1,444.1	171	577.4	4	32.5	2	96.0
III. Central Luzon	3,098	3,247	38,248.8	1,440	25,690.1	120	1,355.3	537	7,431.3
IV. Southern Tagalog	1,873	1,922	11,709.7	1,068	5,905.5	270	4,611.3	179	911.6
V. Bicol	1,446	1,453	8,114.9	338	2,790.4	326	4,549.8	52	467.1
VI. Western Visayas	3,082	3,264	35,174.9	2,126	24,682.0	513	4,715.7	512	5,414.0
VII. Central Visayas	744	776	6,361.3	301	1,930.3	416	3,990.8	55	311.2
VIII. Eastern Visayas	273	279	4,248.9	191	2,152.5	60	1,645.1	19	438.0
IX. Western Mindanao	1,016	1,041	12,810.6	325	2,926.3	640	8,903.9	50	842.9
X. Northern Mindanao	833	836	3,920.8	114	987.6	247	2,660.0	7	43.0
XI. Southern Mindanao	719	731	6,391.9	376	3,497.2	146	2,593.1	25	161.6
XII. Central Mindanao	275	282	3,767.7	79	1,717.2	37	765.6	18	1,234.8

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Table 9.31 Number and Area of Fishponds by Size, by Type of Ownership and by Type of Water by Region: 1980 (concluded)
(Area in hectares)

Region	Freshwater fishponds					
	Privately owned		Government-owned		Leased from others	
	Number	Area	Number	Area	Number	Area
Philippines	5,227	5,936.9	104	469.5	183	391.7
National Capital Region (NCR)	4	12.0	-	-	2	0.2
I. Ilocos	798	495.0	17	29.6	99	98.8
II. Cagayan Valley	1,326	694.6	10	30.5	14	13.2
III. Central Luzon	1,112	3,654.8	14	38.7	24	78.5
IV. Southern Tagalog	389	248.8	14	18.3	2	14.2
V. Bicol	706	128.2	12	141.9	19	37.6
VI. Western Visayas	89	259.7	6	39.1	18	64.5
VII. Central Visayas	1	0.1	3	129.0	-	-
VIII. Eastern Visayas	9	13.3	-	-	-	-
IX. Western Mindanao	19	28.1	6	29.5	1	80.0
X. Northern Mindanao	447	218.2	21	12.0	-	-
XI. Southern Mindanao	180	135.1	-	-	4	4.8
XII. Central Mindanao	147	49.2	1	1.0	-	-

Note: Details may not add up to totals due to rounding.

[1] Total number of operators reporting may be less than or equal to the total number of fishpond units due to operators having more than one fishpond unit.

Source: National Statistics Office. Census of Fisheries, 1981.

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Table 9.32 Number of Persons Employed in Fishpond Operations by Type of Worker and by Region: 1980

Region	Total number of persons employed	Operators' household members	Nonoperators' household members		
			Manager/ supervisor	Fishing workers	Others
Philippines	124,741	43,757	2,467	65,155	13,362
National Capital Region (NCR)	1,247	465	19	679	84
I. Ilocos	25,910	9,760	230	14,987	933
II. Cagayan Valley	5,269	4,158	4	352	755
III. Central Luzon	26,411	5,716	956	15,615	4,124
IV. Southern Tagalog	8,777	4,075	142	2,787	1,773
V. Bicol	8,309	2,972	188	4,448	701
VI. Western Visayas	24,525	7,264	553	14,420	2,288
VII. Central Visayas	4,205	1,822	38	1,843	502
VIII. Eastern Visayas	2,176	531	130	1,344	171
IX. Western Visayas	7,025	2,823	112	3,287	803
X. Northern Mindanao	4,147	1,900	6	1,833	408
XI. Southern Mindanao	4,931	1,486	72	2,641	732
XII. Central Mindanao	1,809	785	17	919	88

Source: National Statistics Office. Census of Fisheries, 1981.

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Table 9.33 Marine Fishery Production by Statistical Fishing Area: 1987 and 1990 (Thousand kilograms)

Statistical fishing area	1990 Total	1990 Commercial	1990 Municipal	1987 Total	1987 Commercial	1987 Municipal
Total	1,595,616	700,564	895,040[a]	1,407,439	591,192	816,247
Babuyan Channel	-	4,023	-	12,884	7,266	5,618
Batangas Coast	-	734	-	24,338	3,765	20,573
Bohol Sea	-	11,179	-	65,851	10,514	55,337
Camotes Sea	-	11,118	-	18,228	6,110	12,118
Casiguran Sound	-	-	-	5,006	-	5,006
Cuyo Pass	-	14,492	-	49,423	22,841	26,582
Davao Gulf	-	6,211	-	18,990	1,755	17,235
Guimaras Strait	-	937	-	69,117	6,588	62,529
Lagonoy Gulf	-	4	-	14,406	283	14,123
Lamon Bay	-	15,261	-	72,743	31,800	40,943
Leyte Gulf	-	11,860	-	39,036	1,385	37,651
Lingayen Gulf	-	4,072	-	24,015	4,894	19,121
Manila Bay	-	25,066	-	50,118	17,729	32,389
Moro Gulf	-	95,927	-	142,893	65,447	77,446
Ragay Gulf	-	3,393	-	24,963	11,771	13,192
Samar Sea	-	21,472	-	48,720	4,137	44,583
Sibuyan Sea	-	16,402	-	42,722	12,575	30,147
Sulu Sea ,East	-	10,374	-	141,485	44,574	96,911
Sulu Sea, South	-	95,989	-	93,430	36,605	56,825
Sulu Sea, West	-	15,389	-	182,610	151,568	31,042
Northeastern Mindanao Waters	-	-	-	24,697	-	24,697
Southeastern Mindanao Waters	-	-	-	3,368	-	3,368
Tayabas Bay	-	11,721	-	35,675	11,172	24,503
Visayan Sea	-	183,896	-	191,003	135,137	55,866
West Palawan Sea	-	138,903	-	11,485	3,276	8,209
Palanan Bay	-	-	-	233	-	233
International Water	-	2,142	-	-	-	-

Note: Data for 1988 and 1989 are not available.

[a] No breakdown available.

Source: Bureau of Fisheries and Aquatic Resources; Fisheries Statistics Section, Bureau of Agricultural Statistics.

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Table 9.34 Quantity of Marine Fish Landed by Commercial Fisbing Vessels by Region and Province: 1984-1992 (Metric tons)

Region/province	1984	1985	1986	1987	1988	1989	1990	1991	1992
Philippines	513,335	511,987	546,230	591,192	599,995	637,138	700,564	759,815	804,866
National Capital Region (NCR)	134,273	136,836	167,205	187,183	183,272	195,814	208,494	234,256	223,489
I. Ilocos	2,140	3,151	3,624	3,407	3,300	3,592	4,028	5,247	3,610
La Union	1,088	2,045	2,637	2,433	2,431	2,622	2,714	3,700	2,808
Pangasinan	1,052	1,106	987	974	869	970	1,314	1,547	802
II. Cagayan Valley	1,963	3,468	7,946	7,266	7,677	6,142	4,022	5,570	5,536
Cagayan	1,963	3,468	7,946	7,266	7,677	6,142	4,022	5,570	5,536
III. Central Luzon	7,941	8,280	7,975	9,077	9,930	9,717	10,321	8,270	6,031
Bataan	2,009	1,616	1,547	1,971	3,123	2,818	4,800	3,122	2,965
Bulacan	1,833	1,986	1,953	1,994	1,586	1,652	641	555	408
Zambales	4,099	4,678	4,475	5,112	5,221	5,247	4,880	4,593	2,658
IV. Southern Tagalog	52,608	56,600	55,643	52,787	53,615	61,330	46,510	68,806	68,228
Batangas	3,024	4,448	3,887	3,765	3,877	4,404	3,415	2,154	2,983
Cavite	3,304	3,540	4,174	4,591	4,326	5,139	3,352	5,419	3,009
Marinduque	291	1,289	1,502	616	298	328	5,100	8,317	-
Occidental Mindoro	2,211	2,536	2,595	2,073	2,163	2,600	2,029	4,776	2,287
Oriental Mindoro	3,297	1,365	1,363	631	704	807	1,198	771	1,001
Palawan	20,393	22,455	21,615	23,068	23,852	27,047	16,957	17,555	12,817
Quezon	20,088	20,967	20,507	18,043	18,391	20,999	14,459	29,814	46,131
Romblon	-	-	-	-	4	6	-	-	-

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Table 9.34 Quantity of Marine Fish Landed by Commercial Fishing Vessels by Region and Province: 1984-1992 (continued)
(Metric tons)

Region/province	1984	1985	1986	1987	1988	1989	1990	1991	1992
V. Bicol	35,658	39,973	41,027	40,162	40,422	44,978	20,088	17,489	18,651
Albay	3,900	4,471	3,730	3,817	3,638	4,151	1,748	1,295	660
Camarines Norte	7,528	8,536	8,902	9,194	8,893	10,080	2,621	2,350	1,095
Camarines Sur	20,607	23,170	24,470	23,356	24,253	26,528	12,514	6,444	5,855
Masbate	3,600	3,658	3,780	3,658	3,638	4,066	3,205	7,400	7,802
Sorsogon	23	138	145	137	-	153	-	-	3,239
VI. Western Visayas	119,844	104,342	111,672	119,249	124,715	128,725	131,228	98,125	150,081
Aklan	493	499	474	488	1,261	1,287	7,342	307	283
Antique	3,291	3,243	3,407	3,899	7,943	4,248	14,780	5,817	2,176
Capiz	5,891	7,745	6,541	8,871	8,105	12,358	8,516	3,743	9,655
Iloilo	39,900	43,918	41,965	45,864	49,533	46,470	65,953	27,986	90,276
Negros Occidental	70,269	48,937	59,285	60,127	57,873	64,362	34,637	60,272	47,691
VII. Central Visayas	42,005	28,897	21,738	32,113	30,452	35,342	70,448	107,900	71,433
Bohol	5,264	3,076	2,661	2,024	8,522	8,096	12,658	11,596	11,901
Cebu	33,961	22,403	14,616	24,080	19,819	24,651	47,796	89,936	53,929
Negros Oriental	2,780	3,418	4,461	6,009	2,111	2,595	9,994	6,368	5,603
VIII. Eastern Visayas	9,717	11,083	11,089	14,629	14,926	13,958	35,760	37,312	39,265
Leyte	6,151	6,243	6,399	10,161	10,416	9,626	21,070	21,205	28,809
Southern Leyte	1,341	2,427	2,139	2,524	2,587	2,626	9,483	10,341	6,272
Eastern Samar	130	320	333	188	-	-	2,190	1,923	401
Northern Samar	96	153	125	-	-	-	-	-	275
Western Samar	1,999	1,940	2,093	1,756	1,923	1,706	3,017	3,843	3,508

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Table 9.34 Quantity of Marine Fish Landed by Commercial Fishing Vessels by Region and Province: 1984-1992 (concluded)
(Metric tons)

Region/province	1984	1985	1986	1987	1988	1989	1990	1991	1992
IX. Western Mindanao	65,766	70,185	72,808	79,752	82,310	84,717	108,716	109,635	151,748
Basilan	9,358	8,668	9,188	10,106	9,702	10,844	7,482	1,867	2,892
Tawi-tawi	396	420	427	640	666	678	4,206	937	-
Sulu	350	900	720	1,440	1,497	1,525	5,137	975	8,639
Zamboanga del Norte	1,968	3,589	4,342	6,702	8,508	8,641	13,150	2,066	2,630
Zamboanga del Sur	53,694	56,608	58,131	60,864	61,937	63,029	78,741	103,790	137,585
X. Northern Mindanao	5,731	6,030	6,210	6,397	6,293	6,725	4,414	5,692	10,011
Agusan del Norte	229	252	-	-	-	-	375	582	40
Misamis Occidental	1,662	1,867	1,640	1,519	1,428	1,547	575	688	1,731
Misamis Oriental	3,265	3,641	4,267	4,527	4,479	4,775	2,945	3,773	4,203
Surigao del Norte	575	270	298	334	362	403	519	649	4,037
Camiguin	-	-	5	17	24	-	-	-	-
XI. Southern Mindanao	34,982	42,799	38,944	38,819	42,663	45,604	56,135	60,571	51,758
Davao del Norte	11	46	23	3	-	-	-	-	-
Davao del Sur	4,399	2,714	1,938	1,742	2,492	2,617	17,631	4,534	7,635
Davao Oriental	388	177	166	10	-	-	-	-	2,308
South Cotabato	30,049	39,794	36,737	36,789	40,171	42,531	34,51	56,008	41,503
Surigao del Sur	135	68	80	275	-	456	3,994	29	312
XII. Central Mindanao	707	343	349	351	420	494	400	942	5,025
Lanao del Norte	9	66	44	39	13	24	-	-	609
Lanao del Sur	112	73	95	64	79	94	183	298	2,799
Maguindanao	518	174	177	243	284	328	217	644	649
Sultan Kudarat	68	30	33	5	44	48	-	-	968

Source: Bureau of Fisheries and Aquatic Resources; Fisheries Statistics Section, Bureau of Agricultural Statistics.

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Table 9.35 Production of Commercial Fishing Vessels by Species: 1982-1990
(Metric tons)

Species	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total	526,273	519,316	513,335	511,987	546,230	591,192	599,995	637,138	700,564
Shads, milkfish	80	149	73	88	16	7	2	68	94
Flounders, halibuts, and others	384	582	1,654	1,332	780	484	839	460	129
Perches, breams, snappers, eels, and others	91,181	92,554	96,334	93,879	86,173	81,042	80,284	78,539	72,966
Jacks, scads, mullets, garfish, and others	181,542	160,138	148,478	138,942	188,300	193,035	191,680	214,100	260,070
Herrings, sardines, anchovies, and others	92,703	92,455	86,818	82,237	68,952	98,296	106,089	116,468	120,955
Spanish mackerels, tunas, billfishes	107,502	110,389	121,483	138,981	134,212	147,873	141,835	160,822	164,583
Mackerels, hairtails	28,389	38,313	33,695	37,311	38,173	40,697	42,150	41,503	58,967
Sharks, rays	737	482	352	631	964	1,738	1,625	1,746	677
Miscellaneous marine fishes	5,500	5,829	4,122	2,409	6,708	8,287	13,892	7,607	6,988
Crabs	2,577	2,425	4,430	3,274	2,661	1,333	1,523	686	683
Lobsters	57	133	31	10	-	-	7	2	10
Shrimps, prawns	5,474	4,071	4,854	3,451	8,207	5,528	7,430	5,282	4,990
Squids, cuttlefishes, octopuses	9,943	11,441	10,527	8,808	10,586	12,460	12,255	9,642	9,091
Miscellaneous marine crustacea	143	242	478	627	468	389	270	213	181
Abalones, winkles, conches	-	2	-	-	-	-	-	-	-
Scallops	19	101	6	7	30	23	61	-	5
Clams, cockles and shells	42	10	-	-	-	-	53	-	-
Sea horses	-	-	-	-	-	-	-	-	175

Source: Bureau of Fisheries and Aquatic Resources; Fisheries Statistics Section, Bureau of Agricultural Statistics.

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Table 9.36 Production of Commercial Fishing Vessels by Gear: 1982-1992
(Thousand kilograms)

Kind of gear	1982	1983	1984	1985	1986	1987	1990	1991	1992
Total	526,273	519,316	51,333	511,987	546,230	591,192	700,564	759,815	804,866
Bagnet	114,624	84,958	93,990	102,879	91,053	92,413	45,107	53,506	53,396
Beach seine	801	669	486	2,260	3,657	7,241	296	1,106	2,087
Gill net	291	376	11	299	151	393	6,476	7,560	4,479
Hook and line (handline)	4,681	5,642	2,612	3,924	2,416	1,940	18,448	34,690	24,894
Long line	992	995	905	326	66	1,160	1,250	1,019	125
Drive-in net (Muro-ami)	10,367	8,694	9,748	10,284	10,002	11,491	-	8	47
Trawl	151,837	152,106	151,051	129,327	136,604	147,317	111,142	90,173	90,547
Push net	2,432	1,669	2,129	2,529	1,950	2,056	1,370	1,480	1,467
Purse seine	198,178	212,979	193,054	183,414	224,730	239,663	419,917	453,807	467,438
Ring net	40,862	50,283	58,360	75,406	72,958	66,175	73,555	90,012	109,418
Round haul seine	1,113	785	783	943	1,188	1,215	3,272	5,676	3,617
Drift filter net	-	160	204	396	1,455	128	1,888	2,245	1,477
Others	95	-	-	-	-	-	17,843	18,533	45,874

Note: No data available for 1988 and 1989.

Source: Bureau of Fisheries and Aquatic Resources; Fisheries Statistics Section, Bureau of Agricultural Statistics.

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Table 9.37 Number of Commercial Fishing Vessels by Gear: 1981-1988

Kind of gear	1981	1982	1983	1984	1985	1986	1987	1988
Total	2,349	2,563	2,634	2,666	2,484	2,283	2,516	2,191
Bagnet	552	603	578	652	602	565	618	512
Beach seine	58	59	59	55	70	60	37	19
Gill net	6	9	3	7	5	2	3	2
Hook and line (handline)	109	66	94	120	105	91	77	70
Long line	70	61	62	62	55	41	62	27
Drive-in net (Muro-ami)	45	39	43	37	37	34	29	2
Purse seine	450	516	404	318	306	280	296	286
Push net	47	78	105	92	68	54	50	41
Trawl	739	829	932	884	763	702	769	707
Round haul seine	26	34	39	37	26	25	28	21
Ring net	247	269	310	394	418	404	524	493
Whale harpoon spear	-	-	1	1	1	1	-	11
Drift filter net	-	-	4	7	27	23	22	-
Shell diving	-	-	-	-	1	1	-	-
Pole and line	-	-	-	-	-	-	1	-

Source: Bureau of Fisheries and Aquatic Resources; Fisheries Statistics Section, Bureau of Agricultural Statistics.

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Table 9.38 Quantum and Value Indices of Fish Production: 1972-1990 (1978 = 100)

Year	Production (Metric tons)	Index	Value (P1,000)	Index
1972	1,122,410	71.0	2,897,509	30.6
1973	1,204,837	76.2	3,295,341	34.8
1974	1,268,368	80.3	5,569,714	58.8
1975	1,336,803	84.6	5,919,127	62.5
1976	1,393,483	88.2	7,297,936	77.0
1977	1,508,855	95.5	8,809,203	92.9
1978	1,580,404	100.0	9,477,276	100.0
1979	1,581,303	100.1	10,536,747	111.2
1980	1,672,254	105.8	11,644,350	122.9
1981	1,772,897	112.2	13,953,798	147.2
1982	1,896,983	120.0	15,063,966	158.9
1983	2,110,230	133.5	18,981,459	200.3
1984	2,080,439	131.6	25,649,933	270.6
1985	2,052,111	129.8	31,297,268	330.2
1986	2,089,484	132.2	37,331,483	393.9
1987	2,213,040	140.0	37,349,479	394.1
1988	2,269,744	143.6	42,118,213	444.4
1989	2,371,109	150.0	45,093,712	475.8
1990	2,503,546	158.4	52,177,157	550.6

Source: Bureau of Fisheries and Aquatic Resources; Fisheries Statistics Section.

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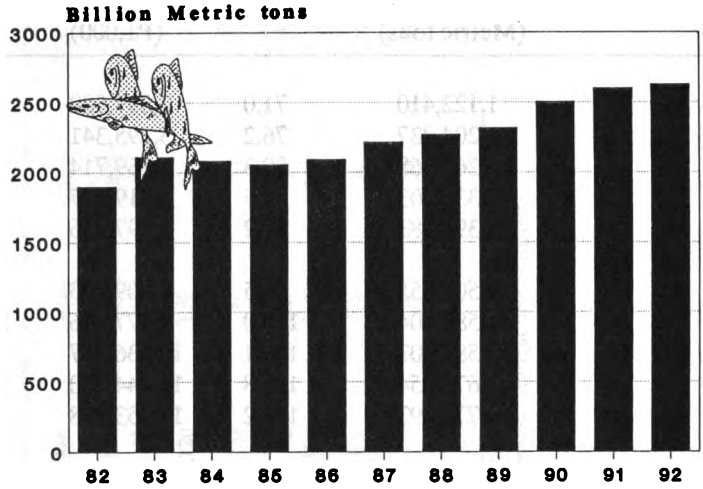
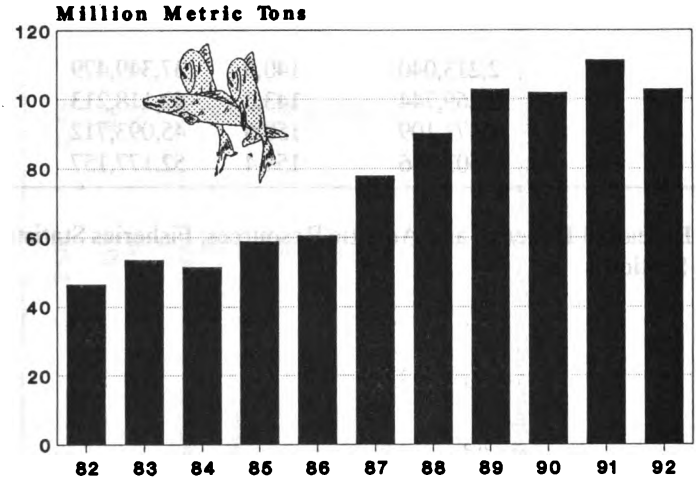
Figure 9.3 Fish Production and Exports: 1982-1992



Production



Export

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Table 9.39 Exports and Imports of Fish, Crustacean/Mollusk and Preparations: 1967-1992
(Quantity in metric tons, F.O.B. value in thousand dollars)

Year	Exports		Imports	
	Quantity	Value	Quantity	Value
1967	1,590.3	758.0	57,322.8	19,501.3
1968	1,419.7	987.5	67,285.7	22,927.8
1969	1,793.4	1,272.8	58,612.1	18,233.2
1970	2,429.0	2,551.0	53,131.3	16,783.4
1971	5,907.7	6,668.3	58,749.2	20,631.8
1972	9,712.5	11,544.2	52,599.4	19,713.0
1973	14,400.0	19,820.1	39,881.9	19,698.4
1974	16,555.0	18,366.5	47,114.1	31,605.5
1975	13,014.8	16,571.8	58,203.0	33,400.3
1976	13,517.2	26,798.5	45,383.9	30,423.8
1977	23,851.2	41,709.0	26,423.0	22,301.0
1978	38,053.5	62,793.2	29,821.6	23,774.2
1979	50,494.6	94,421.1	22,513.9	19,718.9
1980	70,238.4	138,074.8	28,780.6	26,460.2
1981	63,687.2	143,328.6	30,351.6	29,545.7
1982	46,503.6	119,166.9	42,393.3	38,086.7
1983	53,449.7	131,694.6	8,942.5	6,803.3
1984	51,511.7	115,422.2	1,281.0	1,021.8
1985	58,815.9	148,282.8	5,631.9	1,387.6
1986	60,642.6	196,498.2	32,909.2	8,725.1
1987	77,778.6	454,832.5	67,462.4	15,646.7
1988	90,124.1	406,700.7	116,790.6	35,393.5
1989	102,743.9	408,764.4	140,738.5	36,520.8
1990	101,883.3	395,287.0	135,950.2	47,932.0
1991	111,401.6	466,208.6	149,936.5	62,193.1
1992	102,755.8	392,170.6	123,515.3	61,117.2

Source: National Statistics Office, Trade Division.

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Table 9.40 Exports of Shrimps and Prawns by Country of Destination: 1990-1992
(Quantity in kilograms, F.O.B. value in dollars)

Product/country of destination	1990 Quantity	1990 Value	1991 Quantity	1991 Value	1992 Quantity	1992 Value
Total	25,273,627	222,578,085	27,461,634	272,965,634	23,622,425	211,488,444
Fresh, chilled or frozen	24,145,948	218,729,504	26,606,910	269,459,328	23,002,694	207,919,024
United States	3,797,483	33,318,884	5,659,703	52,246,815	3,799,638	35,169,836
Sweden	18,409	188,639	17,100	215,422	24,879	292,567
United Kingdom and Northern Ireland	29,565	229,582	11,030	63,639	-	-
France	181,789	1,689,154	292,178	2,530,536	90,652	778,766
Italy	41,233	369,012	18,725	180,617	12,358	111,280
Hong Kong	49,906	232,593	183,880	867,152	317,643	1,742,891
Japan	18,647,665	170,506,743	21,880,225	200,461,239	17,320,236	157,890,527
Okinawa	54,025	434,161	30,218	240,423	22,188	223,202
Australia	206,178	1,777,884	212,998	1,943,731	145,504	1,402,025
Guam	433,599	3,375,716	309,612	2,442,437	202,189	1,652,076
Trust Territory, Pacific Islands	39,653	335,274	128,390	869,024	110,466	834,935
Hawaii	241,330	2,284,220	260,806	1,994,434	205,778	1,283,524
Other countries	405,113	3,987,642	2,397,955	5,403,859	751,163	6,537,845
Salted, dried or simply cooked	862,292	3,408,126	664,661	3,076,044	597,943	3,300,259
Canada	295	870	162	750	32	265
United States	8,974	31,879	3,958	10,500	14,581	97,756
United Kingdom and Northern Ireland	11	78	-	-	-	-
Bahrain	172	736	-	-	-	-
Hong Kong	-	-	1,012	7,125	4,692	30,720
Taiwan	5,820	4,348	654	1,440	-	-

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Table 9.40 Exports of Shrimps and Prawns by Country of Destination: 1990-1992 (concluded)
(Quantity in kilograms, F.O.B. value in dollars)

Product/country of destination	1990 Quantity	1990 Value	1991 Quantity	1991 Value	1992 Quantity	1992 Value
Japan	843,804	3,356,822	657,846	3,048,686	576,939	3,165,306
Australia	136	612	-	-	25	309
Guam	515	967	517	2,718	-	-
Trust Territory, Pacific Islands	4	31	-	-	-	-
Hawaii	2,078	9,491	169	615	1,582	5,397
Netherlands	23	104	-	-	-	-
Other countries	460	2,188	343	4,210	92	506
Prepared or preserved	197,118	440,455	190,063	430,262	21,788	229,161
Canada	7,280	18,683	2,994	7,948	91	237
United States	75,873	178,408	91,745	237,813	16,093	205,294
Netherlands	1,877	4,065	1,061	2,813	-	-
Germany, Fed. Republic of	1,039	2,755	1,061	2,686	-	-
Kuwait	1,020	2,705	-	-	-	-
Saudi Arabia	72,128	133,417	61,912	108,065	-	-
Oman (Trucial and Muscat)	816	1,487	140	372	-	-
Arabia Pen. States, n.e.c.	5,428	12,053	5,100	12,451	-	-
Qatar	899	2,113	326	664	-	-
Hong Kong	164	391	50	135	157	1,785
Australia	12,114	28,851	11,441	32,386	1,632	6,050
New Zealand and Western Samoa	557	1,478	-	-	-	-
Guam	1,516	3,424	1,136	2,926	-	-
Trust Territory, Pacific Islands	205	525	278	741	-	-
Hawaii	1,012	2,530	730	1,854	-	-
Other countries	15,190	47,570	12,089	19,408	3,815	15,975

Source: National Statistics Office, Trade Division.

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Chapter 10
Forestry

10.1 Forestry

Forests have a number of important functions, namely, sources of water, energy, fuel, food, wood and other raw materials for industrial and domestic consumption; protection against soil erosion, floods, droughts and pollution; and habitats for a wide variety of birds, animals and plants. Economically, forest-based industries provide employment to over 200,000 workers involved in logging and wood processing activities and generate millions of dollars in export earnings.

Forests constitute one of the Philippines' greatest resources. The country's tropical climate, adequate rainfall and fertile soil have favored the growth of several species of hardwood which are known for their natural beauty and durability among other desirable qualities. Considered among the finest in the world is the dipterocarp, the family of trees producing the main bulk of the country's timber including the world-famous Philippine mahogany.

The country's forests, however, are now fast diminishing due to the indiscriminate activities of illegal loggers, *kaingineros* and firewood gatherers. As of 1992, the forest cover was down to 5.9 million hectares which represented only 19.7 percent of the entire Philippine land area. A *forest area* is an area of one hectare or more which is at least 10 percent stocked with forest trees (including seedlings and saplings), wild palm, bamboo or brush. Narrow strips of land bearing forest must be at least 60 meters wide and one hectare in size to qualify as forest. Industrial tree plantations and tree farms one hectare or more in size are also included. Old growth or virgin forests had likewise declined to 0.8 million hectares because Philippine forests continue to be denuded at a rate of about 119,000 hectares per year, based on the report of the National Forest Resources Inventory. This denudation is caused by a number of factors such as the following: kaingin, illegal logging, fuelwood gathering and charcoal-making; encroachment of migrants into ecologically-sensitive forest areas due to population pressures and lack of opportunities in the lowlands; insufficient law enforcement; and lack of tenurial security, inadequate infrastructure support and extension services to upland dwellers.

To save the remaining forests, the government intensified its reforestation program and imposed the log export ban. In addition, programs for the protection and development of forest resources are continually being implemented.

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10.1.1 Forest Land

Forest lands refer to lands of the public domain which have not been declared as alienable and disposable and include public forest, permanent forests or forest reserves, forest reservations, timberlands, grazing lands, and game refuge and bird sanctuaries. *Alienable and disposable lands* refer to the land of the public domain which have been the subject of the present system of classification and declared as not needed for forest purposes by the government. (Land classification is discussed further under Section 10.1.4 - Forest Administration.)

Of the country's total land area of 30 million hectares, forest lands comprised 15.9 million hectares (52.94 percent) and the remaining 14.1 million hectares (47.06 percent) were alienable and disposable lands. Unclassified forest lands totalled 0.9 million hectares or 5.55 percent of total forest lands. (See Table 10.1.)

By region, Southern Tagalog (Region IV) had the largest forest land area with 2.5 million hectares in 1992. This is equivalent to 16.0 percent of the country's total forest land area. On the other hand, Ilocos (Region I) had the least hectarage accounting for only 3.0 percent of the entire forest land area. (See Table 10.1a for details.) Meanwhile, Cagayan Valley (Region II) had the most extensive forest cover in the Philippines, measuring 1.51 million hectares, which is 25.55 percent of the country's remaining forest area. (See Table 10.2.)

10.1.2 Forest Resources

Forest resources are divided into four major types. These are as follows: timber, recreation, wildlife and water, and range resources.

Timber Resources. Timber or standing trees are the principal product of the forest. It is supplied by the dipterocarp, molave and pine forest. Timber that comes from these types is made into lumber or veneer, or manufactured into plywood, wallboard, pulp and paper, furniture and other finished products. Timber products from mangrove, beach and midmountain and mossy forests are useful as light building construction materials, furniture, firewood and charcoal.

The following discussions describe the broad types of forest in the Philippines based on the composition of stands:

Dipterocarp species thrive best in wet valley bottoms and in hilly or mountainous regions, except in high altitude areas like the Mountain Province. This type of forest is the biggest source of lumber supply, accounting for about 95 percent of the total volume of standing trees from commercial forests. The dominant trees in this type are internationally known as Philippine mahogany, the trade name of commercial woods which are light red to reddish in color. Included in this type are *lauan*, *tanguile*, *mayàpis*, *yakal*, *apitong* and *guijo*.

Molave (also called *mulawin*) forests, composed primarily of molave stands, are found in regions of distinct dry limestone ridges. Important species

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of this type are narra, *tindalo*, ipil, *akle* and *banuyao*. They are highly valued for their natural beauty and durability.

Pine (also called *saleng*) forests are found in mountain regions of high altitude such as Northern Luzon. In lower areas where they appear, pines mix with hardwood trees. Pine stands are scattered and open, usually of the Benguet pine species. They provide turpentine for paint manufacture as well as long fibers which are good for making strong cement bags.

Mangrove (also called *bakawan*) forests are the principal sources of firewood, tanbark, cutch, dyewood and charcoal. Among the most important species are *bakawan*, *busain*, *pototan*, *langarai* and *tangal*. This type of forest is found in tidal flats at the mouths of streams and in the shores of sheltered bays. Beach forests are the types which are found in dry sandy beaches, where *pandan* is also abundant. Principal species are *talisay*, *dapdap*, *agoho* and *tawalis*.

Mossy types are important as "protection forests." They occur on the tips of rough mountain regions, areas characterized by steep surfaces rising to peak with sides cut into smaller ridges by deep canyons. Trees of this type are dwarfed and the stems and branches are usually covered with moss. The principal species are *lokinai* and *igem*.

Submarginal forests are tropical rainforests dominated by *leguminosae* and lesser known species that grow in shallow and excessively drained limestone soils.

In 1992, Philippine forests covered 5.9 million hectares, 3.9 million hectares of which were dipterocarp, 1.1 million hectares were mossy forests, 0.5 million hectares were submarginal forests, 0.2 million hectares were pine and 0.1 million hectares were mangrove forests. (See Table 10.2 for more details.)

A commercial forest is a forest of commercial tree species in which the volume of trees, with 15 centimeters and over in diameter at breast height and merchantable height of at least 5 meters, is 40 cubic meters or more per hectare.

The volume of standing timber from commercial forest stood at 460.2 million cubic meters. Of the total, 435.7 million cubic meters were dipterocarp and 24.5 million cubic meters were pine. Table 10.3 presents the volume of standing timber in commercial forest by type and region for 1991 and 1992.

Minor Forest Products Resources. Aside from timber, there is an abundance of various kinds of minor forest products of much economic value. Although most of these products are used locally, many are also exported. These include rattan, resin, Manila elemi, bamboo and many others.

Recreation, Wildlife and Water Resources. National parks, wildlife and such national features of the public forest as waterfalls, caves, volcanoes, hot springs and other scenic attractions provide recreation. Besides their recreational uses, these forest resources are continually being preserved and protected for cultural, educational and scientific purposes.

The DENR has played a remarkable role in the preservation and conservation of all resources within protected areas to maintain ecological diversity

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while sustaining wildlife population. In line with this, the Department approved several guidelines and policies for implementation. Among these were: restoration of open and denuded areas within national parks; setting of a national quota for certain wildlife species that may be collected from the wild under a wildlife permit for commercial purposes; continued imposition of the reduction and gradual phaseout of exports from the wild; and establishment of a Wildlife Rescue Center.

In October 1990, the Integrated Protected Areas System (IPAS) was designed through the joint efforts of the DENR and World Bank. It aims to protect and develop 10 priority national parks on the basis of their geographic distribution, altitudinal representation and biodiversity. The government is also working on the protection and conservation of endangered species such as the Philippine eagle, the *tamaraw*, the flying lemur, the green turtle and the mouse deer, among others. Several illegally traded wildlife and byproducts were confiscated while pet shops engaged in illegal sale or trade of Philippine wildlife species and its byproducts were raided.

To instill public awareness on the protection and conservation of these resources, DENR conducted various lectures, meetings, symposia and other public fora. Printed materials such as posters, brochures, pamphlets, books, news articles and advertisements regarding Philippine wildlife, biological diversity and awareness campaigns were prepared and published.

Watershed areas provide the country's domestic and industrial water requirements. They support hydroelectric plants and irrigation system. Watershed reservations may be established and proclaimed within any part of the public forest with the aim of protecting or improving the conditions of water yield and reducing sedimentation.

In 1992, there were 61 national parks located in 55,470 hectares of forest lands and a total of 11 game refuge and bird sanctuaries with an area of 962,151 hectares. On the other hand, watershed reservations numbered 93 occupying 1,292,042 hectares. (See Table 10.4 for regional distribution of national parks, watershed reservations and game refuge and bird sanctuaries.)

Range Resources. Rangelands are open and cogonal forest lands which are suitable for grazing and pasturing. For development and management of these areas, leases and permits are being granted to private individuals and corporations.

A *lease* is a privilege granted by the State to a person to occupy and possess in consideration of specified rental, any forest land of the public domain in order to undertake any authorized activity therein. On the other hand, a *permit* is a short-term privilege or authority granted by the State to a person to utilize any limited forest resources or undertake a limited activity within any forest land without any right of occupation and possession therein.

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10.1.3 Forest Resources Utilization

The country's extensive forests provide raw materials to several large and growing forest-based industries like sawmills, veneer and plywood industries, and pulp and paper manufacture, which in turn provide raw materials to a wide range of secondary industries into more highly manufactured goods such as sash, furniture, paper products and others. The following discussion is concerned with various aspects of these forest-based industries:

Timber Licenses and Allowable Cut. Timber utilization is closely monitored by the government to ensure that it complies with forestry laws, rules and regulations. This is done through the issuance of appropriate licenses. Before holders of such licenses can commence any activity in their concession areas, they have to submit first a forest management or operation plans.

In 1992, only 71 licenses were issued, lower by 12.34 percent from last year's 81 licenses. This number covered a total area of 2.31 million hectares, 20.77 percent less than the 2.92 million hectares posted in 1991. An allowable cut of 1.94 million cubic meters remained in operation, a 59.60 percent reduction from the 4.79 cubic meters allowed in the previous year. The decrease may be attributed to changes in policies governing the issuance of timber licenses. (See Table 10.5)

The types of existing timber licenses are presented in Table 10.6. Of the existing timber licenses, 60 or 84.51 percent were timber license agreements (TLA) which covered 2.3 million hectares with an allowable cut of 1.71 million cubic meters.

Among regions, Cagayan Valley operated the largest number of timber licenses in 1992 numbering 18.

Wood Processing Plants. During the past two years existing trees were continuously diminishing. Active sawmills for 1992 totalled 124 with an aggregate daily capacity of six thousand cubic meters. (See Table 10.7.)

Of the total active sawmills, 35 or 28.23 percent were operated with timber concession and 89 or 71.77 percent without timber concession. By region, Metro Manila Area or NCR had the most number of sawmills (27 sawmills) while Bicol, Western Visayas, Eastern Visayas and Central Mindanao had no active sawmills reported for 1992.

The Wood Industry. The wood industry covers all wood-based activities such as logging, sawmilling, plywood and veneer manufacture, lumber and lumber products, pulp and paper making, rattan, bamboo and wooden furniture and fixtures, wooden toys, woodcraft, and match making. In the Philippines, the industry has concentrated mainly on the production of logs, lumber, veneer and plywood while the other activities are now under varying stages of development.

From 1960 to 1973, the wood industry was recognized as the Philippines' top foreign exchange earner. However, in 1974, a worldwide recession forced a slump in the construction sector which caused a decline in Philippine wood

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exports thereby losing its position as the top dollar earner of the country. The export of wood further decreased in subsequent years with the implementation of the log export ban on January 1, 1976 through P.D. 705. To offset its negative effect, particularly the loss in export revenues and reduction in employment, P.D. 865 was issued temporarily allowing the limited and selective exportation of logs.

One of the government's objectives in imposing the restriction on log exportation was to support the country's wood-based industries. In line with this aim, the log importation program was also initiated in 1987. This would allow primary wood processors to import logs and veneer, provided a certain percentage is re-exported as finished products. However, no application to import logs and veneer under the scheme has been received so far.

In 1989, the Lumber Export Ban was implemented through Administrative Order 19. This ban was issued in order to encourage more downstream processing of our wood resources, and create more jobs in the process. Production of processed wood and other wood-based products during the period 1960-1992 is shown in Table 10.8.

In 1992, the bulk of the country's wood-based products came from the production of lumber (647,000 cubic meters or 60.86 percent). This was followed by plywood (331,000 cubic meters or 31.14 percent) while veneer ranked third (80,000 cubic meters or 7.53 percent). Other wood-based products consist of paper and paperboard, fiberboard, particleboard and blockboard. However, in 1991 and 1992, there were no reported production of paper and paperboard, fiberboard and particle board. Production in 1991 and 1992 came only from the manufacture of blockboard estimated at 6,000 metric tons and 5,000 metric tons, respectively. (See Table 10.8.)

Production and Exportation of Major Forest Products. The country's four major forest products are classified as logs, lumber, veneer and plywood.

Log production showed a steady declining trend from 1979 to 1992 except for 1987 which recorded an increase of 20.78 percent as compared with the previous year's level. Reduction in log production and exportation is due to the log export ban and the decrease in the number of timber licenses issued. (See Table 10.9 for more details.)

As shown in Table 10.10, production of lumber had a moderate growth between 1963 to 1978. However, from 1979 to 1992, except in 1987, production continuously declined. The lowest production was realized in 1992 at 647,186 cubic meters. In effect, lumber exports also went down from 58,017 cubic meters in 1991 to 56,432 cubic meters in 1992 with values of $16.63 million and $14.54 million, respectively. The decline in lumber exportation can be attributed to the lumber export ban which took effect in 1989.

In 1992, the volume of exported plywood reached 71,280 cubic meters worth $27.83 million. Compared to the figures in 1991 there was a decrease of 36.49 percent in volume of exports and 33.37 percent in value. (See Table 10.11 for details on plywood production.)

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Table 10.12 presents the quantity of veneer produced and the quantity and value of exports from 1963 to 1992. In 1984, veneer production dropped drastically from 445,036 cubic meters in 1983 to 97,555 cubic meters, a 78.08 percent decrease (the biggest decline since 1961). It continuously decreased in the succeeding years reaching 48,867 cubic meters in 1990. However, in 1991 and 1992, it reported increases of 11.39 percent and 46.58 percent, respectively. Veneer exports was valued at $7.52 million in 1992 from $9.46 million in 1991. Table 10.13 shows the value of exports of major forest products (logs, lumber, plywood and veneer sheets and core stock) by country of destination from 1985 to 1992.

The highest export earnings from the four major forest products was recorded in 1988 ($268.48 million). In 1992, it was recorded at $49.89 million, a decrease of 26.63 percent from the $67.99 million posted in 1991. A large portion (33.62 percent) of the country's export receipts in 1992 came from the United Kingdom of Great Britain ($16.77 million), Belgium ($6.67 million) and the United States of America ($5.78 million).

Minor Forest Products. Minor forest products include resins, gums, seed oils, essential oils, wild food plants and natural dyes. Mangroves, palms and bamboos are likewise considered minor forest products. Presented in Tables 10.14 and 10.14a are the production and exportation of selected minor forest products from 1985 to 1992. In this case, minor forest products specifically refer to *almaciga*, resin, *anahaw* leaves, bamboo and *boho*, *buri*, *hingiw*, honey, *nipa* shingles, *nito*, orchid or fern, split and unsplit rattan, *salago* bark, tanbark and *elemi*.

In 1992, export earnings from *almaciga*, *elemi*, bamboo, *buri raffia* and unsplit rattan amounted to $730,000, a 20.07 percent increase from 1991 level of $608,000.

In 1992, the highest fees collected by the government came from the harvest of unsplit rattan, P13.78 million, followed by almaciga resin with P554,702. (See Table 10.15 for more details.)

10.1.4 Forest Administration

The Department of Environment and Natural Resources (DENR) is the primary government agency responsible for the conservation, management, development and proper use of the country's forests. It was reorganized in July 1987 as directed in Executive Order 192. It carries out its forest-related operations with the assistance of its staff bureaus and agencies which include the Forest Management Bureau (FMB), Protected Areas and Wildlife Bureau (PAWB), and National Mapping and Resources Information Authority (NAMRIA). The major forest activities being undertaken by the DENR are land classification, reforestation, forest protection, watershed management, timber management, and parks and wildlife management.

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Land Classification. This involves the classification of the remaining unclassified lands into either alienable and disposable lands or forest lands and their subclassification into their most suitable and appropriate uses. The existing policy on land use stipulates that at least 50 percent of the country's land area must be maintained as forest lands, making available the remaining 50 percent for agricultural, industrial, residential and other uses. To attain this objective, all lands with an 18 degree slope and higher are classified as forest lands regardless of whether the lands have forest cover or not. Areas with less than an 18 degree slope can be classified as alienable or disposable provided they meet other criteria set by law. Moreover, where the public interest so requires, areas previously classified as alienable or disposable may be reverted to the category of forest lands.

In 1992, a study on alternative strategy in the disposition of public alienable and disposable lands was conducted to hasten land distribution, especially those covered by the Comprehensive Agrarian Reform Program (CARP) Law. Furthermore, the proposed Land Code of the Philippines was drafted to update the Public Land Act. This was submitted to Congress under House Bill 3963.

The accomplishment in land disposition reached a total of 46,374 patents issued. Land surveys continued to be conducted. Cadastral surveys accomplished a total of 120,975 lots covering an aggregate area of 85,135 hectares. A total of 101,982 lots of private agricultural and government-owned lands covered by CARP were surveyed.

Reforestation. The DENR's major thrust is reforestation. To achieve this goal, the government put up several programs such as the National Forestation Program (NFP), Integrated Social Forestry Program (ISFP), Community Forestry Program (CFP), Forest Land Management Agreement (FLMA) and others. From 1965 until the middle part of the seventies, reforestation was slow, averaging only 6,775 hectares a year. The government was the only sector undertaking the effort. Since 1976, however, the private sector took part in the task. This resulted to an annual average of 68,860 hectares.

In 1991, reforested area totalled 93,039 hectares, a decrease of 51.46 percent from the 1990 level of 191,663 hectares. Of the total, 79.11 percent was accomplished by the government sector and 20.89 percent by the private sector (timber licenses, lease holders for industrial tree plantations, tree farms and agro-forest farms, civic organizations, nongovernment organizations, and others.) In 1992, total reforested area was placed at 40,593 hectares, or 56.37 percent lower than in the previous year. The government sector accomplished 59.87 percent (24,304 hectares), while the remaining 40.13 percent (16,289 hectares) was completed by the private sector. (Refer to Table 10.16 for area reforested by government and private sectors from 1965-1992.)

Forest Protection and Law Enforcement. The government continued to intensify its campaign against forest destruction. Several programs were launched aimed at minimizing forest degradation and restoring the denuded forest cover.

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Forest protection and regulatory measures were actively implemented. *Oplan Sagip Gubat* was implemented in an effort to save and protect the remaining old growth forests of the Philippines and preserve biodiversity. Its execution anchored on DENR Administrative Order No. 24 Series of 1991 which imposes total logging ban on all old growth forests and took effect on January 1, 1992. Two strategies have been employed in the implementation of *Oplan Sagip Gubat.* These are: identification and mapping of old growth forests and massive public information and education. In 1992, a total of 72 maps was produced, reflecting the preliminary boundaries of old growth forests which will be used as basis for setting targets for onground delineation of boundaries and establishment of buffer zones.

Reforestration activities were continued in denuded, barren and open lands. A total of 40,593 hectares was reforested against the target of 31,257 hectares. It was this year that the Second Forestry Sector Loan was approved after the signing of the Memorandum of Understanding by the Philippine government and the Asian Development Bank (ADB). With this second loan, DENR envisions the development of an additional 53,000 hectares for community forestry; 30,000 hectares of mangroves; 110,000 hectares of reforestration in integrated site development; and 34,000 hectares for critical watershed rehabilitation.

Timber Management. The selective logging system was employed by the DENR in managing the country's forest. However, there are provinces where logging is totally banned. Under the selective logging system, only the mature, overmature and defective trees are cut while healthy residuals of smaller trees are left as part of the growing stock. Three phases are involved, namely, tree marking, residual inventory and timber stand improvement. For 1992, tree marking was done in 14,183 hectares; residual inventory in 12,167 hectares; and timber stand improvement was made on 12,854 hectares.

10.1.5 Forestry Programs

The Integrated Social Forestry Program (ISFP). The ISFP was launched in July 1982 through Letter of Instruction 1260. It aims to address the problems on deforestation, poverty and landlessness particularly among the rural farmers. Qualified participant-beneficiaries of this program include kaingineros and other forest land occupants and landless farmers, tillers and rural workers dependent on public forest land for their livelihood.

A total of 125,352 hectares of farmlots was parcellarized in 1992. Also, 34,865 Certificates of Stewardship Contracts (CSCs) were awarded during the year, bringing the total CSCs issued to 204,419. The development of new agro-forestry plantation covered 31,792 hectares. In cooperation with the Land Bank of the Philippines and other lending institutions, credit and financial assistance was extended to forest-based livelihood activities of ISF participants.

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Thirty-six (36) income-generating projects benefitting 1,313 participants were provided credit assistance amounting to P11.02 million.

Community Forestry Program (CFP). The CFP was launched through an administrative order as a collaborative effort of rural communities and non-government organizations to formulate solutions to existing forestry problems. Participants in this program shall be awarded 25-year Community Forest Management Agreements (CFMA). Assistance granted were in the form of the establishment, harnessing and mobilization of community organizations; on-the-job training on forest management planning and conservation; livelihood opportunities in forest resources rehabilitation; and development of other livelihood opportunities that do not necessarily depend on extraction and use of forest products. Community organizing, perimeter survey and establishment of 2,684 hectares of new plantation were the major activities conducted in 1992 and 17 project sites were made operational.

10.1.6 Forest Research

Forest research is mainly a joint effort of the Ecosystem Research and Development Bureau (ERDB), Forest Products Research and Development Institute (FPRDI), Department of Science and Technology (DOST) and College of Forestry of the University of the Philippines at Los Baños (UPLBCF). These researches are being done with the coordination and support extended by the Philippine Council for Agriculture Resources Research and Development (PCARRD) which was renamed into the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCAFNRRD) as a result of the reorganization of its mother agency, the DOST.

The Ecosystem Research and Development Bureau. The ERDB was formerly the Forest Research Institute (FORI) until it assumed its new name through Executive Order 192 signed in July 1987. As a staff bureau of the DENR, the ERDB is assigned the responsibility of conducting forest ecosystem research to provide a scientifically sound basis for the management of the country's environment and forest resources. It directly supervises the management and administration of FORI research offices, laboratories and forest experiment stations located at UP Los Baños. For the DENR, the ERDB is one agency providing them with technologies upon which to base and revise forest policies.

For the year 1992, the ERDB maintained a total of 387 ongoing research and development studies which were focused on the five major ecosystems, namely, (a) forest, (b) grassland, (c) upland farms, (d) coastal zone and freshwater, and (e) urban. Research activities on forest ecosystem gave priority to wildlife breeding and forest resources management, establishment and management of breeding grounds and sanctuaries for endangered animal species,

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hydrology of dipterocarp forests, regeneration of dipterocarp species in newly abandoned kaingin and production of several rattan species.

Research and development efforts on the Upland Farms Ecosystem was directed on sustainable development of upland areas in the country to maximize upland productivity while enhancing ecological stability and improving the socioeconomic condition of forest occupants dependent on forest lands for livelihood. Implemented for the purpose are livelihood projects for the upland farmers through agro-forestry, agri-livestock, fuelwood plantation and aquasilviculture.

Ongoing studies for grassland ecosystem were centered on the protection, production and propagation of bamboo (Bamboo Research and Development Project or BRDP); testing of new techniques on seagrass transplantation (Seagrass Habitat Restoration Project or SHRP); and development of new technology on the germination of *buri* seeds specifically for the establishment of *buri* plantations in selected pilot regions in the country.

Studies for coastal zone and freshwater ecosystem placed greater emphasis on the rehabilitation of coastal areas and the ecosystem's populace, its socioeconomic, political and cultural aspects.

For urban ecosystem, studies were focused on pollution due to industrial plant emission, traffic congestion and solid waste disposal. Research studies under this ecosystem include assessment of appropriate and alternative waste reduction technology, zoning of heat island effects, ecological assessment and mapping, socioeconomic implication of waste pollution along Pasig River and growth of macrophytes along Pasig River.

The Forest Products Research and Development Institute. The FPRDI, a line agency of the DOST, aims to efficiently accelerate, expand and promote the full development of forest product industries through its program on industrial integration productivity.

The following are the objectives of the Institute: acquire knowledge and development technologies that will improve the quality, increase the utility and value of wood and other forest products, and prolong their serviceability for various end users; improve the efficiency and productivity through dissemination of relevant and appropriate technologies in order to upgrade their skill; provide technological information and assistance and consultancy services on forest products utilization to all parties; and serve as the research and development arm of government agencies and corporations, private industrial enterprises and the general public on forest products utilization.

The FPRDI is also responsible for conducting thorough studies through basic and applied research not only of commercially known tree species but also of secondary or less known species.

The Department of Science and Technology. The DOST is the central scientific and technological organization of the government. It was formerly known as the

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National Science and Technology Authority (NSTA) until it was reorganized in January 1987 by virtue of Executive Order 128.

Research activities of the DOST on forestry include intensive studies on wood such as the underexploited species for furniture, feedstock for pulp and paper, fire-retardant substances, and wood preservatives. It also seeks the effective conservation and management of environment and resources with emphasis on land use, planning and diversification. In 1991, a list of species to be used for windows and window frames, wood carvings, toys and shoelaces was drawn. The development of an alternative material for packaging using less used bamboo and selected forest vines interlaced into transport containers for fruits and vegetables. Another notable development for the year was the prophylactic treatment of freshly cut bamboo species before transporting from the forest plantation.

10.2 Environmental Management

Environmental protection and conservation and maintaining a balanced ecosystem while maximizing the utilization of natural resources have always been the country's concern. Problems that have continuously bothered the government are as follows: prioritization of economic objectives over environmental protection in the mining industry; deforestation and soil erosion due to rampant illegal logging; threatened depletion of the coastal resources due to overexploitation and pollution, illegal and destructive fishing, and destruction of mangrove and coral reef areas; rapid dwindling of endangered wildlife species due to abuses, poor implementation of laws and mismanagement; and improper allocation and utilization of land within a meaningful land use framework.

Through the DENR, the government is actively involved in the protection and management of the environment. Several projects and policies were implemented by the department in coordination with the Environmental Management Bureau (EMB), which is under its administrative jurisdiction.

In September, 1992, United Nations Conference on Environment and Development (UNCED) known as the Earth Summit, was held in Rio de Janeiro, Brazil. The DENR played a major role in the preparation of the Philippine Report on Environment and Development presented in the Earth Summit.

Various legislations were proposed to address the country's rapid environmental degradation. The Revised Philippine Environment Code provides for the inclusion of the Philippine Strategy for Sustainable Development (PSSD) which serves as the framework to guide economic development and environmental quality enhancement.

For the year 1992, the following programs and projects were accomplished:

Environmental Impact Assessment. DENR Administrative Order No. 21 was formulated and implemented which provides for the amendment of P.D. 1586

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or the Environmental Impact Assessment System. Such amendment includes the decentralization of the EIA process, institutionalization of community participation, involvement of LGUs and NGOs and implementation of the Multipartite Monitoring System. Over 500 Project Description (PD) or environmental Impact Statements (EIS) documents were reviewed and evaluated in 1992.

Air Quality Monitoring. Significant activities were conducted such as the formulation of the Air Quality Management Master Plan; finalization of the implementing rules and regulations of P.D. 984 or the Pollution Control Law; and drafting of the Manual on Emission Inventory. A study on the characterization of Metro Manila's air pollution problems, in quantitative terms, was also conducted in order to draw immediate and long-term measures.

Water Quality Monitoring. Efforts on water quality management concentrated on the review of related policies and the application of selected management strategies. These include drafting of guidelines for delineation of mixing zone, guidelines for the use of submarine outfall to discharge municipal wastewater and onsite sampling and categorization of surveyed rivers.

Hazardous and Toxic Wastes Management. The implementing rules and regulations for R.A. 6969, otherwise known as the Hazardous Waste Act, was approved in July 1992. Additional guidelines and policies were also drafted to supplement the rules and regulations. Massive information dissemination activities were undertaken in order to prepare both the industry and government in implementing the Act.

Technical Support to Pollution Adjudication Board (PAB). One hundred forty-seven (147) cases were filed against the "Dirty Dozen" (or the 12 most polluting projects or firms in the regions) were acted upon. In 1992, PAB issued 99 cease and desist orders.

Rivers Revival Program. The DENR continued to pursue the goals and objectives of the Rivers Revival Program as a move to avert the rapid deterioration of the country's surface waters, particularly in Metro Manila. The project Navotas-Malabon-Tullahan-Tenejeros River Rehabilitation was undertaken by DENR with LLDA. From 1989-1992, the project was able to accomplish a cumulative industrial pollution load reduction of 22,930 kilogram BOD per day or 98.61 percent of the targetted industrial load reduction of 23,254 kilogram BOD per day.

Antismoke Belching Campaign. In 1992, a total of 15,897 vehicles were apprehended throughout the country. The most number of vehicles apprehended was in the National Capital Region (NCR) with 12,255.

Ecological Profiling. One of the priority efforts for the environment sector is the preparation of regional ecological profiles. These profiles serve to

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strengthen our environmental management efforts because they provide an overview of the present regional environmental state. In 1992, a total of 13 ecological profiles were updated.

Information, Education and Communication (IEC). In 1992, the National Environmental Educational Action Plan (NEAP) was completed with the assistance of the Asian Development Bank (ADB). The NEAP aims to provide directions for environmental planners in educating the citizenry and transforming it into an action-oriented society with a genuine concern in sustaining the ecological integrity and productivity of the environment.

Research and Development. A total of 18 project proposals on the conservation and protection of environmental resources was packaged in 1992. In addition, various foreign-assisted projects were completed during the year, namely, Network for Industrial Environmental Management (NIEM), Leachate Pollution from Open Dumping Sites in Metro Manila, Industrial Restructuring Program - Environmental Management Project (Phase I), Vehicular Emissions Control Planning in Metro Manila, Industrial Efficiency and Pollution Control and Environmental Management Strategy, and Manila Bay Monitoring Program (Phase II).

Sources:

10.1-10.1.6 Department of Environment and Natural Resources; Forest Management Bureau; Protected Areas and Wildlife Bureau; Department of Science and Technology.

10.2 Department of Environment and Natural Resources; Environmental Management Bureau.

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Table 10.1 Status of Land Classification: 1964-1992
(Thousand hectares)

Year	Total	Certified A and D	Total	Forest land Classified	Forest land Unclassified
Fiscal year					
1964-65	30,000	12,365	17,635	7,727	9,908
1965-66	30,000	12,422	17,578	7,927	9,651
1966-67	30,000	12,446	17,554	8,065	9,489
1967-68	30,000	12,474	17,526	8,079	9,447
1968-69	30,000	12,499	17,501	8,193	9,308
1969-70	30,000	12,572	17,428	8,543	8,885
1970-71	30,000	12,651	17,349	8,795	8,554
1971-72	30,000	12,748	17,252	8,851	8,401
1972-73	30,000	12,808	17,192	8,935	8,257
1973-74	30,000	12,917	17,083	9,064	8,019
1974-75	30,000	12,970	17,030	9,136	7,894
Calendar year					
1976	30,000	12,975	17,025	9,266	7,759
1977	30,000	12,991	17,009	9,270	7,739
1978	30,000	13,071	16,929	9,301	7,628
1979	30,000	13,093	16,907	9,329	7,578
1980	30,000	13,269	16,731	9,705	7,026
1981	30,000	13,327	16,673	10,826	5,847
1982	30,000	13,371	16,629	11,076	5,553
1983	30,000	14,468	15,532	10,472	5,060
1984	30,000	14,515	15,485	13,658	1,827
1985	30,000	14.660	15,340	14,020	1,320
1986	30,000	13,852	16,148	14,961	1,187
1987	30,000	14,108	15,892	15,011	881
1988	30,000	14,118	15,882	15,001	881
1989	30,000	14,118	15,882	15,001	881
1990	30,000	14,118	15,892	15,011	881
1991	30,000	14,118	15,892	15,011	881
1992	30,000	14,117	15,883	15,002	881

A and D - Alienable and disposable.

Source: Forest Management Bureau.

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Table 10.1a Status of Land Classification by Region: 1991 and 1992 (Hectares)

Region	Total area	Certified A and D	Total	Forest lands						
				Unclassified	Classified					
					Established forest reserve	Established timber land	National parks GRBS/WA	Military and naval reservation	Civil reservation	Fishponds
1992										
Philippines	30,000,000	14,117,244	15,882,756	881,157	3,272,912	10,015,866	1,340,997	130,330	165,946	75,548
Cordillera Administrative Region (CAR)	1,829,368	340,656	1,488,712	21,135	804,795	655,321	6,907	554	-	-
I. Ilocos	1,284,019	810,062	473,957	33,155	226,846	199,140	12,999	288	923	606
II. Cagayan Valley	2,683,758	960,064	1,723,694	146,305	209,288	1,331,281	26,388	412	8,931	1,089
III. Central Tagalog	1,823,082	1,051,908	771,174	26,874	166,104	422,729	32,780	117,019	804	4,864
IV. Southern Tagalog	4,756,016	2,209,496	2,546,520	175,048	455,395	831,455	1,029,501	3,835	45,278	6,008
V. Bicol	1,763,249	1,222,060	541,189	29,873	69,939	412,996	25,276	-	63	3,042
VI. Western Visayas	2,022,311	1,408,782	613,529	1,606	135,344	428,939	23,505	-	235	23,900
VII. Central Visayas	1,495,142	959,223	535,919	69,555	49,407	397,450	15,054	4	114	4,335
VIII. Eastern Visayas	2,143,169	1,023,715	1,119,454	38,925	51,508	1,018,238	4,108	176	862	5,637
IX. Western Mindanao	1,599,734	762,252	837,482	26,871	424,924	370,288	2,607	46	2,611	10,135
X. Northern Mindanao	2,832,774	1,066,931	1,765,843	50,732	314,816	1,326,965	55,734	-	6,209	11,387
XI. Southern Mindanao	3,169,275	1,212,440	1,956,835	116,774	217,841	1,546,706	53,643	-	19,127	2,744
XII. Central Mindanao	1,437,274	546,828	890,446	49,631	122,346	608,674	20,552	7,996	80,789	458
Autonomous Region in Muslim Mindanao (ARMM)	1,160,829	542,827	618,002	94,673	24,359	465,684	31,943	-	-	1,343

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Table 10.1a Status of Land Classification by Region: 1991 and 1992 (concluded)
(Hectares)

Region	Total area	Certified A and D	Forest lands: Total	Unclassified	Classified: Established forest reserve	Established timber land	National parks GRBS/WA	Military and naval reservation	Civil reservation	Fishponds
1991										
Philippines	30,000,000	14,117,729	15,882,271	881,157	3,272,912	10,015,381	1,340,997	130,330	165,946	75,548
Cordillera Administrative Region (CAR)	1,829,368	340,656	1,488,712	21,135	804,795	655,321	6,907	554	-	-
I. Ilocos	1,284,019	810,062	473,957	33,155	226,846	199,140	12,999	288	923	606
II. Cagayan Valley	2,683,758	960,132	1,723,626	146,305	209,288	1,331,213	26,388	412	8,931	1,089
III. Central Luzon	1,823,082	1,051,908	771,174	26,874	166,104	422,729	32,780	117,019	804	4,864
IV. Southern Tagalog	4,756,016	2,209,496	2,546,520	175,048	455,395	831,455	1,029,501	3,835	45,278	6,008
V. Bicol	1,763,249	1,222,060	541,189	29,873	69,939	412,996	25,276	-	63	3,042
VI. Western Visayas	2,022,311	1,408,782	613,529	1,606	135,344	428,939	23,505	-	235	23,900
VII. Central Visayas	1,495,142	959,223	535,919	69,555	49,407	397,450	15,054	4	114	4,335
VIII. Eastern Visayas	2,143,169	1,023,715	1,119,454	38,925	51,508	1,018,238	4,108	176	862	5,637
IX Western Mindanao	1,599,734	762,252	837,482	26,871	424,924	370,288	2,607	46	2,611	10,135
X. Northern Mindanao	2,832,774	1,067,348	1,765,426	50,732	314,816	1,326,548	55,734	-	6,209	11,387
XI. Southern Mindanao	3,169,275	1,212,440	1,956,835	116,774	217,841	1,546,706	53,643	-	19,127	2,744
XII. Central Mindanao	1,437,274	546,828	890,446	49,631	122,346	608,674	20,552	7,996	80,789	458
Autonomous Region in Muslim Mindanao	1,160,829	542,827	618,002	94,673	24,359	465,684	31,943	-	-	1,343

GRBS/WA - Game refuge and bird sanctuaries/wilderness areas.

Source: Forest Management Bureau.

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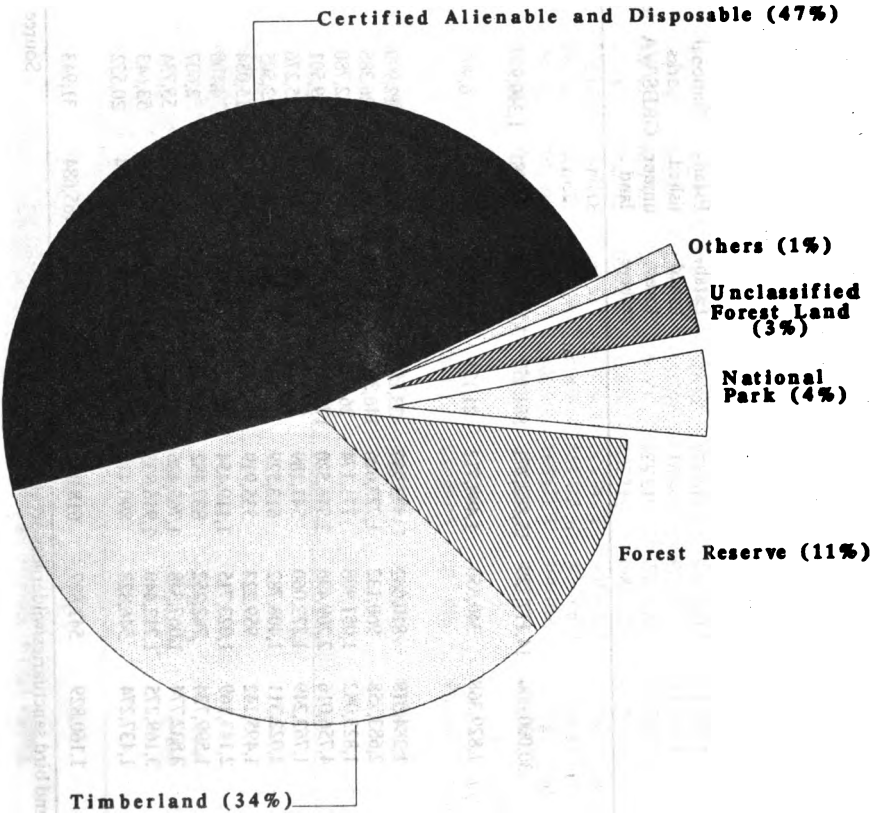
Figure 10.1 Status of Philippine Land Classification: 1992



Total land area = 30,000,000 hectares

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Table 10.2 Land Use in the Philippines by Region: 1991 and 1992
(Thousand hectares)

Category	Philippines	Region I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1992													
Total	30,000.00	2,156.85	3,640.30	1,823.08	4,756.02	1,763.25	2,022.31	1,495.14	2,143.17	1,868.51	2,832.77	3,169.28	2,329.32
Forest	5,900.20	416.40	1,507.70	215.30	1,069.20	55.70	77.00	28.90	314.80	211.20	871.10	795.50	337.40
Dipterocarp	3,936.80	140.50	996.20	154.10	600.60	46.30	46.30	8.10	304.40	150.50	630.80	651.10	207.90
Old growth	804.90	48.10	368.90	19.30	113.80	9.60	0.80	-	34.60	9.50	97.10	89.20	14.00
Residual	3,131.90	92.40	627.30	134.80	486.80	36.70	45.50	8.10	269.80	141.00	533.70	561.90	193.90
Pine	233.90	179.50	52.40	1.20	0.80	-	-	-	-	-	-	-	-
Closed	127.00	92.60	33.90	0.50	-	-	-	-	-	-	-	-	-
Open	106.90	86.90	18.50	0.70	0.80	-	-	-	-	-	-	-	-
Submarginal forest	511.70	16.90	165.90	18.50	291.00	1.50	0.10	9.90	4.50	3.40	-	-	-
Mossy forest	1,091.50	79.40	289.40	41.40	146.10	7.20	27.20	8.10	5.20	-	219.70	138.50	129.30
Mangrove	126.30	0.10	3.80	0.10	30.70	0.70	3.40	2.80	0.70	57.30	20.60	5.90	0.20
Others	24,099.80	1,740.45	2,132.60	1,607.78	3,686.81	1,707.55	1,945.31	1,466.24	1,828.37	1,657.31	1,961.67	2,373.78	1,991.92
Brushland	2,388.70	426.10	245.90	68.70	576.60	52.90	72.10	5.80	131.80	97.80	215.10	357.80	138.10
Other land uses and inland waters	21,711.10	1,314.35	1,886.70	1,539.08	3,110.21	1,654.65	1,873.21	1,460.44	1,696.57	1,559.51	1,746.57	2,015.98	1,853.82

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Table 10.2 Land Use in the Philippines by Region: 1991 and 1992 (concluded)
(Thousand hectares)

Category	Philippines	Region I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1991													
Total	30,000.00	2,156.85	3,640.30	1,823.08	4,756.02	1,763.25	2,022.31	1,495.14	2,143.17	1,868.51	2,832.77	3,169.28	2,329.32
Forest	6,015.40	421.10	1,521.40	221.20	1,088.30	59.10	81.40	31.00	326.30	222.00	886.10	808.60	348.90
Dipterocarp	4,029.20	143.80	1,008.80	159.60	609.70	49.10	48.70	9.00	315.40	159.50	644.00	663.20	218.40
Old growth	804.90	48.10	368.90	19.30	113.80	9.60	0.80	-	34.60	9.50	97.10	89.20	14.00
Residual	3,224.30	95.70	639.90	140.30	495.90	39.50	47.90	9.00	280.80	150.00	546.90	574.00	204.40
Pine	235.10	180.40	52.60	1.30	0.80	-	-	-	-	-	-	-	-
Closed	127.70	93.10	34.00	0.60	-	-	-	-	-	-	-	-	-
Open	107.40	87.30	18.60	0.70	0.80	-	-	-	-	-	-	-	-
Submarginal forest	519.50	17.00	166.20	18.60	297.30	1.60	0.10	10.50	4.70	3.50	-	-	-
Mossy forest	1,102.40	79.80	290.00	41.60	149.20	7.70	29.00	8.60	5.50	-	221.30	139.40	130.30
Mangrove	129.20	0.10	3.80	0.10	31.30	0.70	3.60	2.90	0.70	59.00	20.80	6.00	0.20
Others	23,984.60	1,735.74	2,118.90	1,601.88	3,667.71	1,704.15	1,940.91	1,464.14	1,816.87	1,646.51	1,946.67	2,360.66	1,980.42
Brushland	2,421.80	427.40	250.40	68.90	580.00	54.30	74.00	6.10	134.60	99.70	219.90	365.90	140.60
Other land uses and inland waters	21,562.80	1,308.35	1,868.50	1,532.98	3,087.72	1,649.85	1,866.91	1,458.04	1,682.27	1,546.81	1,726.77	1,994.76	1,839.8

Source: Forest Management Bureau.

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Table 10.3 Volume of Standing Timber in Commercial Forest by Region: 1991 and 1992
(Thousand cubic meters)

Category	Philippines	Region I	II	III	IV	V	VI	VII	VIII	IX[a]	X	XI	XII[a]
1992													
Total	460,195	29,802	113,636	23,253	72,892	4,819	5,783	985	40,255	27,058	52,997	51,021	37,694
Dipterocarp, residual	435,695	10,847	108,278	23,132	72,826	4,819	5,783	985	40,255	27,058	52,997	51,021	37,694
Common hardwoods	220,322	2,596	63,050	6,295	26,336	2,877	2,493	637	21,962	13,903	32,823	24,780	22,570
Construction and furniture woods	143,066	5,812	30,612	13,224	33,979	1,211	2,075	198	12,357	9,518	10,247	14,778	9,055
Softwoods	7,716	37	376	54	730	59	132	11	189	197	3,309	2,079	543
Others	64,591	2,402	14,240	3,559	11,781	672	1,083	139	5,747	3,440	6,618	9,384	5,526
Pine	24,500	18,955	5,358	121	66	-	-	-	-	-	-	-	-
Common hardwoods	101	74	27	-	-	-	-	-	-	-	-	-	-
Construction and furniture woods	32	27	5	-	-	-	-	-	-	-	-	-	-
Softwoods	24,317	18,818	5,312	121	66	-	-	-	-	-	-	-	-
Others	50	36	14	-	-	-	-	-	-	-	-	-	-

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Table 10.3 Volume of Standing Timber in Commercial Forest by Region: 1989 - 1992 (continued)
(Thousand cubic meters)

Category	Philippines	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1991													
Total	672,579	41,061	214,583	30,211	98,640	7,499	6,234	1,095	49,764	31,578	75,592	72,867	43,455
Dipterocarp	647,953	22,010	209,207	30,078	98,574	7,499	6,234	1,095	49,764	31,578	75,592	72,867	43,455
Old growth	198,792	10,775	98,754	6,003	24,387	2,312	146	-	7,868	2,793	21,285	20,748	3,721
Common hardwoods	113,805	5,195	61,938	2,577	7,181	1,640	77	-	5,007	1,492	13,303	13,077	2,318
Construction and furniture woods	60,870	4,305	26,118	2,974	12,791	449	39	-	1,913	952	5,758	4,,710	861
Softwoods	2,775	154	627	-	432	13	12	-	66	57	602	731	81
Others	21,342	1,121	10,071	452	3,983	210	18	-	882	292	1,622	2,230	461
Residual	449,161	11,235	110,453	24,075	74,187	5,187	6,088	1,095	41,896	28,785	54,307	52,119	39,734
Common hardwoods	227,201	2,689	64,316	6,552	26,828	3,097	2,625	708	22,857	14,790	33,634	25,313	23,792
Construction and furniture woods	147,460	6,020	31,227	13,763	34,614	1,304	2,184	221	12,861	10,125	10,500	15,096	9,545
Softwoods	7,930	38	384	56	744	63	139	12	197	210	3,391	2,124	572
Others	66,570	2,488	14,526	3,704	12,001	723	1,140	154	5,981	3,660	6,782	9,586	5,825

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Table 10.3 Volume of Standing Timber in Commercial Forest by Region: 1991 and 1992 (concluded)
(Thousand cubic meters)

Category	Philippines	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Pine	24,626	19,051	5,376	133	66	-	-	-	-	-	-	-	-
Common hardwoods	101	74	27	-	-	-	-	-	-	-	-	-	-
Construction and furniture woods	32	27	5	-	-	-	-	-	-	-	-	-	-
Softwoods	24,443	18,914	5,330	133	66	-	-	-	-	-	-	-	-
Others	50	36	14	-	-	-	-	-	-	-	-	-	-

[a] Includes ARMM.

Source: Forest Management Bureau.

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Table 10.4 Number and Area of National Parks, Watershed Reservations and Game Refuge and Bird Sanctuaries by Region: 1991 and 1992 (Area in hectares)

Region	National parks		Watershed reservations		Game refuge and bird sanctuaries	
	Number	Area	Number	Area	Number	Area
1992						
Philippines	61	455,470	93	1,292,042	11	962,151
National Capital Region(NCR)	1	24	-	-	-	-
Cordillera Administrative Region (CAR)	4	18,457	5	158,561	-	-
I. Ilocos	5	12,999	9	4,826	-	-
II. Cagayan Valley	2	1,011	4	101,591	1	4,554
III. Central Luzon	8	37,101	8	221,611	1	12
IV. Southern Tagalog	9	146,082	26	75,168	5	906,823
V. Bicol	6	24,812	6	33,631	-	-
VI. Western Visayas	2	25,412	8	125,627	1	52
VII. Central Visayas	4	21,670	4	44,397	1	480
VIII. Eastern Visayas	5	4,039	5	24,916	-	-
IX. Western Mindanao	3	3,323	3	11,280	-	-
X. Northern Mindanao	3	84,616	7	147,059	-	-
XI. Southern Mindanao	2	74,194	4	103,475	-	-
XII. Central Mindanao	7	1,730	2	54,714	2	50,230
Autonomous Region in Muslim Mindanao (ARMM)	-	2	185,186	-	-	
1991						
Philippines	61	455,470	77	1,033,428	8	958,687
National Capital Region(NCR)	1	24	-	-	-	-
Cordillera Administrative Region (CAR)	4	18,457	-	-	-	-
I. Ilocos	5	12,999	13	163,367	-	-
II. Cagayan Valley	2	1,011	4	101,591	1	4,554
III. Central Luzon	8	37,101	7	211,611	-	-
IV. Southern Tagalog	9	146,082	20	45,426	4	903,423
V. Bicol	6	24,812	5	32,821	-	-
VI. Western Visayas	2	25,412	8	125,627	-	-
VII. Central Visayas	4	21,670	2	26,233	1	480
VIII. Eastern Visayas	5	4,039	2	10,224	-	-
IX. Western Mindanao	3	3,323	3	11,280	-	-
X. Northern Mindanao	3	84,616	7	147,059	-	-
XI. Southern Mindanao	2	74,194	4	103,475	-	-
XII. Central Mindanao	7	1,730	2	54,714	2	50,230

Sources: Forest Management Bureau; Protected Areas and Wildlife Bureau.

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Table 10.5 Number, Area and Annual Allowable Cut of Timber Licenses: 1969-1992

Year	Number	Area (1,000 hectares)	Annual allowable cut (1,000 m^3)
Fiscal year			
1969-70	412	9,357	15,491
1970-71	461	10,598	16,068
1971-72	343	9,368	16,440
1972-73	338	8,453	16,810
1973-74	422	10,291	20,913
1974-75	408	9,627	20,363
1975-76	471	10,137	21,885
Calendar year			
1977	376	10,211	21,071
1978	315	8,769	18,672
1979	284	8,310	17,453
1980	261	7,939	16,817
1981	250	7,744	14,958
1982	217	7,539	14,001
1983	133	5,779	9,796
1984	157	6,347	9,765
1985	165	6,594	9,773
1986	159	5,849	8,516
1987	154	5,579	8,491
1988	120	4,737	8,118
1989	113	4,634	6,604
1990	96	3,760	5,048
1991	81	2,917	4,792
1992	71	2,311	1,936

Source: Forest Management Bureau.

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Table 10.6 Number, Area and Allowable Cut of Existing Timber Licenses by Type: 1991 and 1992

Type	Number	Area (1,000 hectares)	Allowable cut (1,000 m^3)
1992			
Total	71	2,311	1,936
Timber license agreement	60	2,259	1,707
Softwood timber license	-	-	-
Pulpwood timber license	1	50	52
Provisional timber license	-	-	-
Private land timber license	1	2	10
Special timber license	-	-	-
Others (TPSA)	9	n.a.	167
1991			
Total	81	2,917	4,792
Timber license agreement	69	2,625	4,601
Softwood timber license	-	-	-
Pulpwood timber license	1	50	157
Provisional timber license	8	240	24
Private land timber license	1	2	10
Special timber license	-	-	-
Others (TPSA)	2	-	n.a.

Source: Forest Management Bureau.

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Table 10.6a Number, Area and Allowable Cut of Existing Timber Licenses by Type and Region: 1991 and 1992
(Area in thousand hectares, allowable cut in thousand cubic meters)

Region	Number	Total Area	Allowable cut	Timber license agreement Number	Area	Allowable cut	Softwood timber licenses Number	Area	Allowable cut
1992									
Philippines	71	2,311	1,936	60	2,260	1,707	1	49	52
Cordillera Administrative Region (CAR)	1	69	25	1	69	25	-	-	-
I. Ilocos	-	-	-	-	-	-	-	-	-
II. Cagayan Valley	18	570	239	18	570	239	-	-	-
III. Central Luzon	-	-	-	-	-	-	-	-	-
IV. Southern Tagalog	8	335	131	7	333	121	-	-	-
V. Bicol	-	-	-	-	-	-	-	-	-
VI. Western Visayas	-	-	-	-	-	-	-	-	-
VII. Central Visayas	-	-	-	-	-	-	-	-	-
VIII. Eastern Visayas	-	-	-	-	-	-	-	-	-
IX. Western Mindanao	6	134	68	5	134	68	-	-	-
X. Northern Mindanao	13	542	524	12	543	524	-	-	-
XI. Southern Mindanao	12	508	503	11	458	451	1	49	52
XII. Central Mindanao	1	14	22	1	14	22	-	-	-
Automous Region in Muslim Mindanao (ARMM)	12	139	424	5	139	257	-	-	-

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Table 10.6a Number, Area and Allowable Cut of Existing Timber Licenses by Type and Region: 1991 and 1992 (continued)
(Area in thousand hectares, allowable cut in thousand cubic meters)

Region	Private land timber licenses			Timber production sharing agreement		
	Number	Area	Allowable cut	Number	Area	Allowable cut
1992						
Philippines	1	2	10	9	n.a.	167
Cordillera Administrative Region (CAR)	-	-	-	-	-	-
I. Ilocos	-	-	-	-	-	-
II. Cagayan Valley	-	-	-	-	-	-
III. Central Luzon	-	-	-	-	-	-
IV Southern Tagalog	1	2	10	-	-	-
V. Bicol	-	-	-		-	-
VI. Western Visayas	-	-	-	-	-	-
VII. Central Visayas	-	-	-	-	-	-
VIII. Eastern Visayas	-	-	-	-	-	-
IX. Western Mindanao	-	-	-	1	-	-
X. Northern Mindanao	-	-	-	1	-	-
XI. Southern Mindanao	-	-	-	-	-	-
XII. Central Mindanao	-	-	-	-	-	-
Autonomous Region in Muslim Mindanao (ARMM)	-	-	-	7	-	167

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Table 10.6a Number, Area and Allowable Cut of Existing Timber Licenses by Type and Region: 1991 and 1992 (continued)
(Area in thousand hectares, allowable cut in thousand cubic meters)

Region	Number	Total Area	Allowable cut	Timber license agreement Number	Area	Allowable cut	Pulpwood timber licenses Number	Area	Allowable cut
1991									
Philippines	81	2,917	4,792	69	2,625	4,601	1	50	157
Cordillera Administrative Region (CAR)	1	69	25	1	69	25	-	-	-
I. Ilocos	-	-	-	-	-	-	-	-	-
II. Cagayan Valley	20	636	846	20	636	846	-	-	-
III. Central Luzon	1	2	10	-	-	-	-	-	-
IV. Southern Tagalog	9	384	523	9	384	523	-	-	-
V. Bicol	-	-	-	-	-	-	-	-	-
VI. Western Visayas	-	-	-	-	-	-	-	-	-
VII. Central Visayas	-	-	-	-	-	-	-	-	-
VIII. Eastern Visayas	1	27	80	1	27	80	-	-	-
IX. Western Mindanao	8	196	260	6	154	255	-	-	-
X. Northern Mindanao	14	673	1,297	13	661	1,294	-	-	-
XI. Southern Mindanao	20	771	1,476	15	578	1,306	1	50	157
XII. Central Mindanao	7	159	275	4	116	272	-	-	-

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Table 10.6a Number, Area and Allowable Cut of Existing Timber Licenses by Type and Region: 1991 and 1992 (concluded)
(Area in thousand hectares, allowable cut in thousand cubic meters)

Region	Provisional timber licenses			Timber producers sharing			Private land timber licenses		
	Number	Area	Allowable cut	Number	Area	Allowable cut	Number	Area	Allowable cut
1991									
Philippines	8	240	24	2	n.a.	n.a.	1	2	10
Cordillera Administrative Region (CAR)	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
I. Ilocos	-	-	-	-	-	-	-	-	-
II. Cagayan Valley	-	-	-	-	-	-	-	-	-
III. Central Luzon	-	-	-	-	-	-	-	-	-
IV. Southern Tagalog	-	-	-	-	-	-	-	-	-
V. Bicol	-	-	-	-	-	-	-	-	-
VI. Western Visayas	-	-	-	-	-	-	-	-	-
VII. Central Visayas	-	-	-	-	-	-	-	-	-
VIII. Eastern Visayas	-	-	-	-	-	-	-	-	-
IX. Western Mindanao	2	42	5	-	-	-	-	-	-
X. Northern Mindanao	1	12	3	-	-	-	-	-	-
XI. Southern Mindanao	4	143	13	-	-	-	-	-	-
XII. Central Mindanao	1	43	3	2	n.a.	n.a.	-	-	-

Source: Forest Management Bureau.

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Table 10.7 Number, Daily Rated Capacity and Annual Log Requirement of Active Sawmills: 1969-1992

Year	Number	Daily rated capacity (1,000 m^3)	Annual log requirement (1,000 m^3)
Fiscal year			
1969-70	352	5	n.a.
1970-71	349	17	n.a.
1971-72	355	17	1,150
1972-73	370	16	7,994
1973-74	355	16	8,835
1974-75	408	7	n.a.
Calendar year			
1976	325	8	2,673
1977	341	8	8,163
1978	357	18	7,888
1979	227	11	4,674
1980	209	11	4,715
1981	182	10	4,267
1982	190	10	4,410
1983	195	10	4,493
1984	189	10	4,160
1985	174	8	3,374
1986	169	9	3,330
1987	180	9	3,186
1988	190	9	3,274
1989	171	8	2,976
1990	152	7	2,446
1991	150	7	2,408
1992	124	6	1,969

Source: Forest Management Bureau.

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Table 10.7a Number, Daily Rated Capacity and Annual Log Requirement of Active Sawmills by Region: 1991 and 1992 (Cubic meters)

Region	Number of sawmills	Total daily rated capacity	Annual log re-- quirement	With timber concession			Without timber concession		
				Number of sawmills	Daily rated capacity	Annual log re- quirement	Number of sawmills	Daily rated capacity	Annual log re- quirement
1992									
Philippines	124	5,463	1,940,279	35	2,094	781,670	89	3,369	1,158,609
National Capital Region (NCR)	27	1,132	377,338	-	-	-	27	1,132	377,338
Cordillera Administrative Region (CAR)	2	87	29,000	2	87	29,000	-	-	-
I. Ilocos	2	84	28,000	-	-	-	2	84	28,000
II. Cagayan Valley	19	825	275,002	8	433	144,335	11	392	130,667
III. Central Luzon	18	755	251,669	-	-	-	18	755	251,669
IV. Southern Tagalog	22	756	252,003	7	319	106,335	15	437	145,668
V. Bicol	-	-	-	-	-	-	-	-	-
VI. Western Visayas	-	-	-	-	-	-	-	-	-
VII. Central Visayas	2	35	11,667	-	-	-	2	35	11,667
VIII. Eastern Visayas	-	-	-	-	-	-	-	-	-
IX. Western Mindanao	3	118	47,200	2	94	37,600	1	24	9,600
X. Northern Mindanao	11	641	256,400	7	496	198,400	4	145	58,000
XI. Southern Mindanao	16	1,030	412,000	9	665	266,000	7	365	146,000
XII. Central Mindanao	-	-	-	-	-	-	-	-	-
Autonomous Region in Muslim Mindanao (ARMM)	2	-	-	-	-	-	2	-	-

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Table 10.7a Number, Daily Rated Capacity and Annual Log Requirement of Active Sawmills by Region: 1991 and 1992 (concluded)
(Cubic meters)

Region	Number of sawmills	Total daily rated capacity	Annual log requirement	With timber concession: Number of sawmills	With timber concession: Daily rated capacity	With timber concession: Annual log requirement	Without timber concession: Number of sawmills	Without timber concession: Daily rated capacity	Without timber concession: Annual log requirement
1991									
Philippines	150	6,700	2,407,470	51	2,925	1,088,735	99	3,775	1,318,735
National Capital Region (NCR)	26	1,131	377,000	-	-	-	26	1,131	377,000
Cordillera Administrative Region (CAR)	2	87	29,000	2	87	29,000	-	-	-
I. Ilocos	2	84	28,000	-	-	-	2	84	28,000
II. Cagayan Valley	21	912	304,003	12	574	191,335	9	338	112,668
III. Central Luzon	20	832	277,333	-	-	-	20	832	277,333
IV. Southern Tagalog	22	733	244,333	7	319	106,333	15	414	138,000
V. Bicol	-	-	-	-	-	-	-	-	-
VI. Western Visayas	-	-	-	-	-	-	-	-	-
VII. Central Visayas	3	70	23,334	-	-	-	3	70	23,334
VIII. Eastern Visayas	1	59	19,667	1	59	19,667	-	-	-
IX. Western Mindanao	5	260	104,000	4	213	85,200	1	47	18,800
X. Northern Mindanao	23	1,200	480,000	11	727	290,800	12	473	189,200
XI. Southern Mindanao	22	1,108	431,200	12	781	300,400	10	327	130,800
XII. Central Mindanao	3	224	89,600	2	165	66,000	1	59	23,600

Source: Forest Management Bureau.

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Table 10.8 Production of Processed Wood and Other Wood-Based Products: 1960-1992

Year	Processed wood (thousand cubic meters)			Other wood-based products (thousand metric tons)			
	Lumber	Ply-wood	Veneer	Paper and paper-board	Fiber-board	Particle-board	Block-board
Fiscal year							
1960-65	5,568	1,207	805	-	-	-	-
1965-70	5,473	1,684	1,108	-	-	-	-
1970-71	860	653	242	-	-	-	-
1971-72	1,411	642	234	-	-	-	-
1972-73	1,060	732	211	24	-	-	-
1973-74	1,114	705	172	137	65	6	11
1974-75	2,274	466	207	131	62	-	11
Calendar year							
1979	1,626	503	634	326	69	1	12
1980	1,529	553	660	324	-	-	3
1981	1,219	457	[r]264	247	-	-	6
1982	1,200	422	[r]159	223	-	-	[a]12
1983	1,222	459	[r]146	213	-	[a]8	[a]10
1984	1,234	438	84	251	-	[a]3	[a]12
1985	1,062	350	77	155	-	2	7
1986	977	424	73	183	-	4	21
1987	1,023	517	75	65	-	-	15
1988	1,033	415	85	244	36	-	20
1989	975	344	61	239	n.a.	n.a.	9
1990	841	397	49	175	n.a.	n.a.	17
1991	726	321	[b]54	n.a.	n.a.	n.a.	6
1992	647	[b]331	80	n.a.	n.a.	n.a.	5

[a] In thousand cubic meters.
[b] Excluding data for ARMM.

Source: Forest Management Bureau.

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Table 10.9 Log Production, Quantity and Value of Exports: 1963-1992

Year	Production (m^3)	Volume (m^3)	Exports Percent to total production	Exports Value ($1,000)
Fiscal year				
1963-64	6,536,115	4,542,505	69.5	110,098
1964-65	6,175,142	3,486,646	56.5	81,941
1965-66	8,047,148	5,534,375	68.8	121,635
1966-67	7,843,283	6,648,531	84.8	156,139
1967-68	11,113,650	7,510,956	67.6	170,874
1968-69	11,583,713	8,649,021	74.7	231,794
1969-70	11,004,564	8,616,078	78.3	225,828
1970-71	10,679,519	8,443,526	79.1	223,617
1971-72	8,416,099	7,018,218	83.4	173,253
1972-73	10,445,620	6,949,312	66.5	201,985
1973-74	10,189,898	5,434,217	53.3	240,343
1974-75	7,331,898	4,579,225	62.5	198,332
1975-76	8,440,691	3,050,262	36.1	122,330
Calendar year				
1979	6,577,864	1,247,973	19.0	144,407
1980	6,352,300	714,541	11.2	91,921
1981	5,399,523	706,399	13.1	76,098
1982	4,514,319	752,408	16.7	78,477
1983	4,430,194	786,037	17.7	73,680
1984	3,872,570	846,022	21.8	87,789
1985	3,567,720	454,336	15.2	39,231
1986	3,433,774	412,792	12.0	26,571
1987	4,147,460	205,905	5.0	347
1988	3,809,196	173,503	4.6	710
1989	3,168,043	109,955	3.5	324
1990	2,502,625	50,953	2.0	88
1991	1,921,595	2,359	0.1	142
1992	1,438,237	a	-	b

a Included in fuelwood b Less than one thousand

Sources: Forest Management Bureau; National Statistics Office, Trade Division.

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Table 10.10 Lumber Production, Quantity and Value of Exports: 1963-1992

Year	Production (m^3)	Volume (m^3)	Exports Percent to total production	Exports Value ($1,000)
Fiscal year				
1963-64	1,179,108	92,142	7.8	4,933
1964-65	1,253,332	81,972	6.5	4,331
1965-66	886,512	79,512	9.0	4,571
1966-67	759,952	103,415	13.6	6,297
1967-68	1,021,040	102,474	10.0	6,085
1968-69	1,464,566	167,492	11.4	10,101
1969-70	1,340,613	199,802	14.9	12,384
1970-71	860,441	201,542	23.4	11,693
1971-72	1,410,769	152,250	10.8	9,195
1972-73	1,059,915	179,323	16.9	10,950
1973-74	1,113,959	274,844	24.7	21,868
1974-75	1,562,705	308,064	19.7	28,577
1975-76	1,441,667	346,903	24.1	42,691
Calendar year				
1979	1,626,115	915,022	56.3	198,345
1980	1,529,100	741,793	48.5	181,286
1981	1,218,906	546,530	44.8	125,766
1982	1,199,974	590,674	49.2	123,696
1983	1,222,495	727,927	59.5	149,087
1984	1,234,086	539,843	43.7	106,560
1985	1,061,680	512,287	48.2	90,421
1986	976,742	494,639	50.6	103,141
1987	1,232,652	645,259	52.4	154,203
1988	1,033,313	628,942	60.9	156,473
1989	975,015	438,146	44.9	136,170
1990	840,973	76,938	9.1	19,424
1991	725,913	58,017	8.0	16,634
1992	647,186	56,432	8.7	14,542

Sources: Forest Management Bureau; National Statistics Office, Trade Division.

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Table 10.11 Plywood Production, Quantity and Value of Exports: 1963-1992

Year	Production (m^3)	Volume (m^3)	Exports Percent to total production	Exports Value ($1,000)
Fiscal year				
1963-64	277,423	237,004	85.4	19,405
1964-65	352,482	190,791	54.1	16,395
1965-66	318,423	121,645	38.2	10,840
1966-67	307,930	172,875	56.1	14,642
1967-68	410,070	253,662	61.9	18,793
1968-69	308,081	194,994	63.2	13,622
1969-70	338,098	142,601	42.2	15,036
1970-71	652,732	589,725	90.3	38,913
1971-72	642,219	563,739	87.8	36,365
1972-73	731,918	692,240	94.6	54,344
1973-74	704,709	352,727	50.1	47,281
1974-75	274,031	143,785	52.5	18,810
1975-76	422,548	211,086	50.0	29,501
Calendar year				
1979	502,674	323,860	64.4	85,203
1980	552,870	322,103	58.3	103,843
1981	457,037	370,496	81.1	110,741
1982	421,866	241,802	57.3	67,435
1983	459,105	295,325	64.3	76,678
1984	573,540	249,874	43.6	57,514
1985	350,142	241,086	68.8	51,753
1986	424,312	240,877	56.8	57,204
1987	517,042	243,461	47.1	68,062
1988	415,253	242,786	58.5	78,778
1989	343,517	116,309	33.9	38,482
1990	396,946	175,914	44.3	60,226
1991	320,528	112,235	35.0	41,761
1992	330,580	71,280	21.6	27,826

Source: Forest Management Bureau.

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Table 10.12 Veneer Production, Quantity and Value of Exports: 1963-1992

Year	Production (m^3)	Volume (m^3)	Exports Percent to total production	Exports Value ($1,000)
Fiscal year				
1963-64	179,855	131,624	73.2	8,084
1964-65	218,986	156,357	71.4	9,497
1965-66	231,791	111,808	48.2	5,901
1966-67	245,145	133,176	54.3	7,528
1967-68	355,744	164,689	46.3	8,037
1968-69	185,031	159,639	86.2	10,521
1969-70	90,058	85,174	94.6	7,332
1970-71	241,998	127,350	52.6	5,975
1971-72	234,021	126,608	54.1	5,418
1972-73	211,515	106,684	50.4	6,180
1973-74	172,294	178,249	103.5	3,065
1974-75	108,959	90,464	83.0	7,246
1975-76	271,810	106,668	39.2	12,131
Calendar year				
1979	633,940	186,086	29.4	34,590
1980	659,873	164,240	24.9	35,684
1981	552,771	138,303	25.0	31,336
1982	428,453	98,009	22.9	20,247
1983	445,036	122,505	27.5	27,820
1984	97,555	71,370	73.2	14,069
1985	76,575	68,754	89.8	11,646
1986	72,689	49,787	68.5	9,379
1987	74,925	64,277	85.8	14,806
1988	85,194	78,521	92.2	20,999
1989	61,138	64,401	105.3	17,433
1990	48,867	47,117	96.4	13,080
1991	54,433	32,875	60.4	9,457
1992	79,787	21,636	27.1	7,525

Source: Forest Management Bureau; National Statistics Office, Trade Division.

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Table 10.13 Value of Exports of Major Forest Products by Country of Destination: 1985-1990
(F.O.B. value in thousand dollars)

Country	1985	1986	1987	1988	1989	1990	1991	1992
Total[1]	193,780	196,860	246,102	268,475	200,859	93,946	67,994	49,886
Japan	64,598	43,710	51,199	52,383	51,942	13,357	4,624	1,614
United States of America	34,047	30,760	46,992	33,987	24,794	10,355	6,509	5,781
France	12,451	9,603	11,939	11,959	13,001	539	16	110
Taiwan	4,844	4,551	8,585	9,804	5,458	3,300	2,267	3,010
Republic of Korea	5,045	488	57	236	255	1	10	33
Hong Kong	5,843	9,158	25,227	28,278	4,557	8,926	147	1,206
Denmark	634	1,287	983	1,313	109	159	2,237	1,082
Australia	6,320	4,780	5,402	7,214	6,576	1,467	786	875
United Kingdom of Great Britain	36,235	62,682	59,805	89,858	57,746	31,778	22,160	16,771
Italy	-	-	3,216	14	-	-	-	-
Okinawa	-	17	2	43	3	-	16	0
Guam	600	563	618	1,188	1,863	749	1,196	1,130
Netherlands	3,042	3,050	3,568	5,521	3,862	6,678	9,565	4,918
Federal Republic of Germany	2,979	2,507	2,106	549	471	652	996	-
Yugoslavia	-	-	-	-	-	-	-	-
Belgium	2,576	5,115	3,508	5,413	1,359	8,106	8,133	6,670
Singapore	344	345	477	131	500	218	885	183
Canada	707	568	936	1,332	2,306	1,556	416	590
Hawaii	122	169	223	388	3,702	431	284	190
Israel	-	-	-	-	-	-	-	-
People's Republic of China	4,564	3,108	-	-	3	-	-	-
Saudi Arabia	2,332	3,372	7,208	5,202	7,927	2,068	3,069	1,810
Spain	4,830	7,603	14,102	8,979	10,872	2,104	4,161	3,346
Switzerland	348	227	52	198	705	10	166	0
Other countries	1,319	2,876	3,107	4,485	2,848	1,492	351	567

[1] Major forest products include logs, lumber, plywood, and veneer sheets and corestock.
Sources: National Statistics Office, Trade Division; Forest Management Bureau.

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Table 10.14 Production of Selected Minor Forest Products: 1987-1990
(Thousands)

Product	Unit of measure	1987	1988	1989	1990	1991	1992
Almaciga resin	Kilo	485	700	472	943	780	634
Anahaw leaves	Piece	2	-	-	2	41	33
Bamboo and boho	Piece	402	133	204	984	892	704
Buri	Kilo	5	41	88	58	16	-
Hingiw	Kilo	8	-	35	-	-	-
Honey	Kilo	a	-	a	-	a	-
Nipa shingles	Kilo	[b]3,579	2,504	5,298	8,023	14,719	12,634
Nito	Kilo	-	-	a	-	-	-
Orchid or fern	Piece	1	19	-	-	-	-
Split rattan	Kilo	98	54	30	10	568	30
Unsplit rattan	Linear meter	33,902	34,215	33,254	19,266	25,732	22,693
Salago bark	Kilo	2	8	2	6	-	-
Tanbark	Kilo	33	-	-	30	-	-
Elemi	Kilo	-	-	-	-	8	-

a Less than a thousand.
b By piece.

Source: Forest Management Bureau.

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Table 10.14a Exports of Selected Minor Forest Products: 1985-1990
(Quantity in thousand kilos, F.O.B. value in thousand dollars)

Product	1985		1986		1987		1988		1989		1990	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Total	771	447	945	523	1,086	735	648	427	680	647	916	1,294
Almaciga	600	296	690	342	557	334	407	222	345	185	288	211
Elemi	154	104	253	176	487	383	191	175	298	394	611	1,064
Bamboo	17	37	2	5	42	18	41	19	23	33	16	15
Unsplit rattan	a	10	a	a	a	a	-	-	-	-	-	-
Buri raffia	-	-	-	-	-	-	4	10	14	33	1	3
Split rattan	-	-	-	-	-	-	a	a	a	2	-	-
Pole rattan	-	-	-	-	-	-	5	1	a	a	a	1

a Less than a thousand.

Source: Forest Management Bureau.

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Table 10.15 Forest Charges on Selected Minor Forest Products by Region: 1991 and 1992
(Pesos)

Region	Almaciga resin	Boho bamboo	Diliman gogo vines	Anahaw leaves	Palma brava	Nipa shingles	Split rattan	Unsplit rattan	Bamboo stumps
1992									
Philippines	554,702	95,893	11,776	11,058	19,467	140,764	32,926	13,778,668	2,140
Cordillera Administrative Region (CAR)	-	-	-	-	-	-	-	36,977	-
I. Ilocos	-	46,188	-	-	-	-	-	-	2,140
II. Cagayan Valley	-	-	-	3,098	19,467	89,417	6,800	578,368	-
III. Central Luzon	-	40,680	-	-	-	-	-	631,535	-
IV. Southern Tagalog[1]	504,202	6,605	11,126	-	-	3,145	21,526	1,160,383	-
V. Bicol	-	2,170	650	7,960	-	36,827	-	3,026	-
VI. Western Visayas	-	-	-	-	-	-	-	-	-
VII. Central Visayas	-	-	-	-	-	-	-	-	-
VIII. Eastern Visayas	50,500	-	-	-	-	-	-	481,210	-
IX. Western Mindanao	-	-	-	-	-	2,965	-	458,036	-
X. Northern Mindanao	-	-	-	-	-	6,625	3,600	1,516,114	-
XI. Southern Mindanao	-	250	-	-	-	1,785	1,000	8,539,233	-
XII. Central Mindanao	-	-	-	-	-	-	-	373,786	-

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Table 10.15 Forest Charges on Selected Minor Forest Products by Region: 1991 and 1992 (concluded)
(Pesos)

Region	Almaciga resin	Boho bamboo	Diliman gogo vines	Anahaw leaves	Palma brava	Nipa shingles	Split rattan	Unsplit rattan	Bamboo stumps
1991									
Philippines	135,285	53,301	8,014	4,223	3,115	111,477	13,509	1,847,387	1,032
Cordillera Administrative Region (CAR)	-	11,835	-	-	-	-	-	18,671	-
I. Ilocos	-	2,250	-	-	-	a	a	243	-
II. Cagayan Valley	-	-	-	3,283	-	56,833	327	438,063	-
III. Central Luzon	625	34,200	-	-	-	-	-	116,189	-
IV. Southern Tagalog[1]	133,160	3,222	7,995	-	3,115	573	7,926	375,206	1,032
V. Bicol	-	1,749	19	940	-	45,396	-	2,492	-
VI. Western Visayas	-	-	-	-	-	-	-	-	-
VII. Central Visayas	-	-	-	-	-	-	-	-	-
VIII. Eastern Visayas	1,500	-	-	-	-	-	a	25,884	-
IX. Western Mindanao	-	-	-	-	-	207	300	53,933	-
X. Northern Mindanao	-	-	-	-	-	6,566	4,956	191,491	-
XI. Southern Mindanao	-	45	-	-	-	1,902	-	560,790	-
XII. Central Mindanao	-	-	-	-	-	-	-	64,425	-

[1] Including National Capital Region (NCR).
a Data not available.

Source: Forest Management Bureau.

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Table 10.16 Area Reforested by Government and Private Sectors: 1965-1992
(Hectares)

Year	Total area	Government sector			Private sector		
		Total	DENR	Other government agencies	Total	Timber licenses	Others
Fiscal year							
1965-66	7,396	7,396	7,396	-	-	-	-
1966-67	5,327	5,327	5,327	-	-	-	-
1967-68	6,869	6,869	6,869	-	-	-	-
1968-69	7,511	7,511	7,511	-	-	-	-
1969-70	11,801	11,801	11,801	-	-	-	-
1970-71	6,458	6,458	6,458	-	-	-	-
1971-72	4,831	4,831	4,831	-	-	-	-
1972-73	5,787	5,787	5,787	-	-	-	-
1973-74	4,994	4,994	4,994	-	-	-	-
1974-75	15,280	15,280	15,280	-	-	-	-
Calendar year							
1976	31,733	23,228	20,977	2,251	8,505	8,275	230
1977	53,263	33,365	23,677	9,688	19,898	17,276	2,622
1978	78,425	44,686	34,343	10,343	33,739	22,006	11,733
1979	79,397	51,858	35,305	16,553	27,539	20,132	7,407

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Table 10.16 Area Reforested by Government and Private Sectors: 1965-1992 (concluded)
(Hectares)

Year	Total area	Government sector			Private sector		
		Total	DENR	Other government agencies	Total	Timber licenses	Others
1980	60,516	39,881	32,956	6,925	20,635	15,579	5,056
1981	64,541	33,296	30,707	2,589	31,245	20,096	11,149
1982	63,262	35,201	31,202	3,999	28,061	21,588	6,473
1983	78,538	42,239	27,155	15,084	36,299	31,703	4,596
1984	38,935	16,088	15,520	568	22,847	14,186	8,661
1985	24,231	12,684	12,201	483	11,547	8,148	3,399
1986	32,998	24,426	22,495	1,931	8,572	6,572	2,000
1987	39,811	28,843	27,558	1,285	10,968	7,956	3,012
1988	64,183	31,226	30,890	336	32,957	23,126	9,831
1989	131,404	89,452	82,966	6,486	41,952	32,087	9,865
1990	191,663	153,949	146,718	7,231	37,714	[a]33,443	4,271
1991	93,039	73,602	72,238	1,364	19,437	18,089	1,348
1992	40,593	24,304	24,304	-	16,289	11,683	4,606

[a] Including enrichment planting of timber licenses.

Source: Forest Management Bureau.

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Chapter 11
Mines and Minerals

The mining industry contributes substantially to economic development in terms of foreign exchange, employment opportunity and revenues. Gross value added (at current prices) contribution of the industry to gross domestic product (GDP) in 1991 stood at P17.5 million or 1.41 percent, up by 5.07 percent from the previous year's P16.66 billion. The industry recovered from its poor performance as production value registered at P24.06 million or 7.55 over the 1990 value. However, mineral export declined by 1.19 percent from P21.72 billion in 1990 to P21.46 billion in 1991.

In 1992 employment in the mining sector contributed some 40,266 work force to the country's labor force. Workers under the metallics group constituted 35,178 or 87.36 percent of the industry's total while the remaining 12.63 percent (5,085) were from the nonmetallics group.

11.1 Mineral Resources

The Philippines is one of the countries in the world richly endowed with mineral resources. Metals, nonmetals and energy resources abound in the mountains, the plains, the coasts and even in the offshore areas. Locally found metallic minerals are bauxite, chromite, copper, gold, iron, lead, manganese, mercury, molybdenum, nickel.

Nonmetallic minerals found in the country include asbestos, barite, cement raw materials, clay, coal, construction raw materials, diatomite, dolomite, feldspar, guano, gypsum, limestone, magnesite, marble, natural gas, perlite, petroleum, phosphate rock, pyrite, rock asphalt, silica sand, sulfur, talc and tuff.

The development of these mineral resources had been given special attention by the past governments in this country. The Spanish regime (1521-1898) from its initial years in the 1570s was chiefly interested in gold. In the mid-1800s, the Spanish government through its *Inspeccion de Minas* prospected for copper. The first copper mine was opened by San Remigio Copper Mines in Carawisan, Antique in 1842. This was followed by Mankayan Mines operated by *Cantabro-Filipino Compania* from 1864 to 1874. Interest in oil and coal surfaced during this period as encouraging reports of geological investigations came from Cebu, Negros and Bondoc Peninsula.

During the American regime (1898-1946) mining activities focused on the development of gold deposit in Benguet, and later in other areas. Thus, gold mines proliferated throughout the country until the Japanese occupation in 1941. The Americans also paid particular attention to strategic minerals such

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as iron and oil. Hence, the declaration of the Surigao Iron Reservation in 1914 and its further expansion in 1937. For oil, the government-owned National Development Company undertook extensive geological assessment of oil possibilities from 1939 until 1941.

During the Japanese regime (1941-1945) many known deposits of minerals used in steel and arms manufacture were worked out. Some of those explored or operated were the copper deposits of Mankayan (Benguet), Rapu-Rapu (Albay), Carawisan (Antique), Lutopan (Cebu) and Sipalay (Negros); the chromite deposits of Acoje and Coto (Zambales), Dinagat (Surigao) and Opol (Misamis Oriental); the manganese deposits of Busuanga (Palawan), Guindulman (Bohol) and Siquijor (Negros); and the iron deposits of Larap (Camarines Norte), Mati (Davao), and Sibuguey (Zamboanga del Sur). The laterite iron deposits in Surigao were also studied and tested for metallurgical processing.

From 1946, mineral resources surveys and development were undertaken by the Philippine Republic. Gold mines in Benguet, Surigao and Camarines Norte were rehabilitated in the late 1940s. The Philippine Bureau of Mines, created by the Commonwealth government in 1937, carried out extensive exploration work for copper in the early 1950s with technical assistance from the International Cooperation Agency (ICA) of the United States of America. This led to the development and operation of many copper mines in the late 1950s. Thus, the copper industry rose to be the dominant sector in the mineral industry during the 60s, 70s up to the 80s.

However, towards the end of the 80s, gold once again took over the dominant role from copper due to the following factors: economic constraints on existing copper mines to limit production from ore deposits with significant amounts of recoverable gold or other by-products; government thrust on gold exploration and development since 1983; principally gold-oriented exploration activities of the private sector since 1980; emergence of small- scale mining as a principal contributor of Philippine gold production and government rationalization of this sector through the Small-Scale Mining Decree of 1983; and the discovery of new gold deposits through mass-based prospecting and application of recently developed concepts of gold metallogenesis related to volcanic activities. The disparity in importance of mineral commodities from one period to another is balanced by continued surveys and assessment conducted by the government. Specialized surveys for raw materials used in steel manufacture, cement raw materials, ceramic raw materials, building materials and other minerals useful for industrial and economic advancement are conducted on a continuing basis by the Department of Environment and Natural Resources (DENR) in coordination with the Mines and Geo-Sciences Bureau (MGB). The formulation, planning, monitoring, implementation and coordination of policies and programs in the field of energy is the prime responsibility of the Office of Energy Affairs (under the Office of the President).

Mineral Reserves. In 1992, metallic ore reserves was estimated at 6.27 billion metric tons, or 22.92 percent of the country's total mineral reserves. Copper ore

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reserves amounted to 3.95 billion metric tons, or 63.03 percent of total reserves, while nickel was placed at 1.17 billion metric tons or 18.71 percent.

Nonmetallic reserves amounted to 21.09 billion metric tons, 77.08 percent of total mineral reserves. Limestone for cement had the biggest reserves with 6.75 billion metric tons or 32.01 percent followed by limestone for industrial lime with 6.54 billion metric tons (31.03 percent) and shale with 2.82 billion metric tons (13.37 percent). See Table 11.1 for details on mineral ore reserves.

11.2 Mineral Production

The Philippines has ranked among the world's top ten producers of gold and chromite. It placed ninth in world chromite production in 1991 but production of gold for the same year declined, so it was dropped from the list of top ten gold producing countries. However, the growth of this export-oriented industry depends heavily on world metal prices. The combined effects of worldwide recession and consequently the softening on metal prices in the early 80s dampened the overall growth of the mineral sector in 1986.

In 1987, the trend was reversed as conditions brightened up due to improved metal prices as a result of a weak dollar and an increase in metal demand amidst its declining supply. This resulted to a 6.75 percent increase in production value despite the decline in production volume reported by most mineral producing companies.

Following the general uptrend in the economy, mining industry performed well in 1988. It produced a total of P22.38 billion worth of mineral products, reflecting a 14.73 percent improvement from the P19.51 billion produced the previous year. In 1989, mineral production value stood at P23.23 billion. The improved mineral output was partly due to the higher mill recovery rates realized by the big mining firms and the growing contribution of small-scale miners.

The industry was not spared from the difficulties experienced by the economy brought about by the series of manmade and natural calamities that struck the country in 1990. Except for nickel metal, chemical grade and refractory ore chromite, iron and manganese, all metallic minerals generated lower output during the year. Among the nonmetallics coal, silica sand, barite, shale clay and limestone for cement manufacture exhibited negative growth in terms of production. As a consequence, total production value also decreased by P859.99 million or 3.70 percent less than a year ago.

In 1991, however, the industry recovered from its poor performance as production value registered at P24.06 million or 7.56 over the 1990 value. The favorable performance was on account of the increased production in almost all sectors of non-metallic mining. Tables 11.2 and 11.3 present the volume and value of mineral production from 1984 to 1991.

Production by Region. In 1991, Central Visayas remain the top mineral producer generating P4.82 billion or 22.61 percent of the total production value.

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Cordillera Administrative Region came in second with P3.97 billion worth of minerals produced. From its previous fourth place slot, Western Visayas outranked Central Luzon by posting P3.12 billion or 14.63 percent. Central Luzon contributed P2.68 billion or 12.58 percent of total production.

Other regional producers reaching the P1 billion mark were Southern Tagalog with P1.73 billion or 8.12 percent, Bicol Region with P1.31 billion or 6.14 percent and Southern Mindanao with P1.09 billion or 5.13 percent.

Gold and silver are abundant in the provinces of Benguet, Zambales, Masbate, Cebu, Camarines Norte, Surigao del Norte, Agusan del Sur, Davao del Norte, Marinduque and Negros Occidental. Benguet was the biggest producer of both metals in 1991. During the year, the province produced 8,346 kilograms of gold and 11,369 kilograms of silver valued at P2.23 billion and P40.38 million, respectively. Second in gold production was Zambales with an output of 3,048 kilograms valued at P1.04 billion followed by Masbate with 2,591 kilograms worth P800.94 million.

Negros Occidental and Cebu were the second and third largest producers of silver with their respective production volume of 7,138 kilograms and 6,439 kilograms. Zambales followed with a production volume of 4,504 kilograms valued at P17.42 million.

Of the total copper produced during the year, 38.87 percent or 222.46 thousand Dry Metric Tons (DMT) came from the province of Cebu. Negros Occidental contributed 119.96 thousand DMT and Benguet, 110.45 thousand DMT valued at P1.45 billion and P1.61 billion, respectively. Chromite on the other hand, came primarily from Zambales, Surigao del Norte, Eastern Samar and Palawan.

Construction materials such as gravel, sand stones, pebbles, and limestone abound in almost all parts of the archipelago although exploration is limited to areas accessible to transportation. Table 11.4 gives more details on volume and value of mineral production, by region and province.

11.2.1 Metallic Minerals

Metals found in the Philippines are precious metals such as gold and silver and the base metals such as copper, zinc, nickel, lead, molybdenum, chromite, iron, cobalt and manganese.

Gold. The average price of gold during the period January to June 1991 stood at $364.93 per troy ounce. In 1990, the average price was quoted at $384.70 per troy ounce, slightly higher than the previous year's quotation of $381.11 per troy ounce.

Gold production increased by 5.41 percent from 24.59 thousand kilograms in 1990 to 25.92 thousand kilograms in 1991. Value of production likewise increased to P8.20 billion from the previous year's P7.17 billion. See Tables 11.2 and 11.3 for details.

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Among the producers, Dizon Copper-Gold Operation reported the highest output at 3,048 kilograms or 11.77 percent of the total production. Masbate Gold Operation came in second with 2,591 kilograms or 9.99 percent of total production. Philex Mining Corporation which was the country's top producer of gold for the last ten years remain third in 1991 with 9.10 percent share while Benguet Corporation contributed 8.22 percent. See Table 11.5.

Foreign exchange receipts realized during the year amounted to $275.64 million, 3.76 percent less than the previous year's $286.39 million.

Silver. The low industrial demand for silver metal pushed down its average price from $129.76 per kilogram in 1991 to $126.41 per kilogram in 1992.

Silver production continue to fall as it registered at 39.07 thousand kilograms in 1991 from 47.11 thousand kilograms in 1990. Production value likewise decreased by 21.44 percent from P170.80 million in 1990 to P134.17 million during the year. Maricalum Mining Corporation is the leading silver producer contributing 7,138 kilograms or 18.27 percent of total production. Volume of exports during the period was 19.59 thousand kilograms valued at $2.43 million.

Copper. Copper prices in 1992 averaged $2,009.16 per metric tons or 4.39 percent lower than the average price of $2,101.35 metric tons in 1991.

Copper metal produced in 1991 decreased by 17.98 percent from 180.46 thousand dry metric tons in 1990 to 148.01 thousand dry metric tons worth P7.68 billion. Atlas Consolidated Mining and Development Corporation topped the list of producers contributing 42.54 percent to total volume of mineral production. Maricalum Mining Corporation ranked second, sharing 21.49 percent while Dizon Copper-Gold Operation came third with 9.54 percent.

Of the total production, 52.51 percent were exported abroad and 35.95 percent were delivered to Philippine Associated Smelting and Refining (PASAR). Shipments of copper cathodes continously decreased by 0.20 and 9.71 percent in volume in 1990 and 1991, respectively while exports value increased by 8.70 percent from P7.22 billion in 1989 to P7.85 billion during the year. However, in 1991 exports value decreased to P6.80 billion or 13.39 percent.

Chromite. The Philippines remains to be in the ninth rank in world chromite production in 1989 and 1990 having produced a total of 180 thousand dry metric tons and 170 thousand dry metric tons, respectively. In 1991, the chromite industry continue to experience production slump. The volume of chromite produced in 1991 reached only 210.30 thousand DMT or 20.15 percent lower than the 1990's level of 263.38 thousand DMT. Production value likewise decreased by 11.24 percent from P453.15 million in 1990 to P402.23 million in 1991.

Masinloc Chromite Operation became the leading chromite producer in 1991 accounting for a hefty 38.44 percent of the total production volume. All

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other leading producers are Krominco (9.39 percent), Alamag Processing Corporation (9.39 percent), Acoje Mining Corporation - Zambales Chromite Project (2.47 percent) and Integrated Chromes Corporation (3.85 percent).

Other Metals. Production of other base metal also decreased. Production of manganese ore and iron decreased by 72.93 percent and 10.54 percent, respectively. While for the first time, there was no production of zinc.

11.2.2 Nonmetallic Minerals

The nonmetallic sector registered growth of 17.03 percent from P5.98 billion in 1990 to P7.00 billion or 29.07 percent of the total mineral production value in 1991.

Leading contributors to the nonmetallic sector include sand and gravel with 32.27 percent; salt, 31.14 percent; and coal, 20.31 percent of total production value.

11.3 Mineral Exports

The mining industry experienced a decline in mineral export by 1.19 percent from P21.72 billion in 1990 to P21.46 billion in 1991, with decrease registered in the metallic sector.

In 1991, the metallic sector, led by gold, copper and silver constituted 99.88 percent of the total export value while only 0.12 percent was contributed by the nonmetallic group. Export earnings of metallics decreased by 1.26 percent. On the other hand, nonmetallic export value rose remarkably by 81.05 percent from P13.77 million in 1990 to P24.92 in 1991.

Industrial demand for gold made a turnaround as export volume increased by 1.95 percent as well as export earnings by 12.66. Japan topped the list of the country's importers of gold with 20.49 percent share of the total export earnings of P7.63 billion during the year. South Korea and the People's Republic of China were the other markets for gold.

Volume of silver exported during the year decreased by 17.53 percent from 43,977 kilograms in 1990 to 36,268 kilograms in 1991. Trade receipts likewise fell by 16.69 percent from the previous year's P157.14 million. Japan was the major importer with 43.85 percent share followed by South Korea and by the People's Republic of China with 0.75 percent and 0.68 percent share to total silver export value, respectively.

Exports of copper concentrate increased by 5.33 percent from 366.59 thousand DMT in 1990 to 386.14 thousand DMT in 1991. Its value, however, decreased by 1.48 percent from P5.90 billion in 1990 to P5.82 billion in 1991. Japan absorbed the bulk getting 95.40 percent of the total export volume. Other markets for this mineral were South Korea and the People's Republic of China. See Table 11.7.

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11.4 Government and Mining

11.4.1 Mineral Resources Management

As provided by Executive Order No. 192 which was signed in July 1987, the newly reorganized Department of Environment and Natural Resources (DENR) shall be the primary government agency responsible for the conservation, management, development and proper use of the country's mineral resources.

The DENR's reorganization also paved the way for the creation of the Mines and Geo-Sciences Bureau (MGB) which absorbed the functions of the Bureau of Mines and Geo-Sciences (BMGS), the Mineral Reservations Development Board (MRDB), and the Gold Mining Reservations Development Board (GMRDB). The MGB's primary task is to recommend policies, regulations and programs pertaining to mineral resources development and geology to the DENR who shall implement them.

Geological Surveys and Mineral Exploration. Geological surveys are undertaken to generate data in various geological disciplines including economic geology of metals and nonmetals, geophysics, geochemistry, engineering geology, and other related fields.

In 1992, the total area surveyed to generate basic information on geologic survey was 228,627 hectares. Marine and offshore mineral exploration were also undertaken with the use of the "RPS Explorer," a marine survey vessel. The aggregate area surveyed was 128,711 hectares.

Mineral Land Surveys and Management. Mineral land surveys and management is concerned with the establishment of an orderly and systematic delineation of boundaries of mining and quarrying claims, prevention of mining conflicts and the provision of a readily available mineral land survey information. Mine safety inspection, evaluation of mineral properties, determination of compliance to environmental control measures and other related mining services were continuously provided to the mining public.

In 1992, 285 mining areas were inspected to promote safety in mining operations. A Special Assistance Unit for the miners was organized by the DENR to share their expertise in timbering method, proper gold recovery process, mine safety, proper handling of mercury and proper marketing. Likewise, a project entitled "Adopt a Tree, Adopt a Mining Forest Movement" is being implemented by DENR and MGB concerning reforestation of mined-out areas by mining companies.

Mineral Production Sharing Agreement (MPSA). MPSA contains the new governing concepts for incoming investments in mining industry. It is designed to promote the sharing of benefits from the exploration, development and utilization of mineral resources for the upliftment of national economy.

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11.4.2 Mineral Resources Development

The Philippine government gives priority to mineral resources development. Consistent with its pronounced policy of assistance, the following fiscal and nonfiscal measures were instituted:

a) The provision of preferential royalty rates for marginal mines (Executive Order 674-B, 1981);

b) Establishment of a package of incentives to BOI-registered mining companies (*Batas Pambansa Bilang* 391, 1981);

c) Allowing the continuation of availment of incentives under Sec. 53 of P.D. 463 (Mineral Resources Development Act of 1974) by mining firms notwithstanding the repeal of said section by *Batas Pambansa Bilang* 391;

d) Provision of a Special Credit Facility by the Central Bank to high grade mining firms listed in the stock exchanges (Central Bank (CB) Circular No. 846, 1982);

e) Financing of operating cash flow deficits of primary copper producers occasioned by depressed metal prices from the Copper Stabilization Fund (CB Circular No. 847, 1982);

f) Provision of a re-purchase option for gold producers, and bankers acceptance swap arrangement and inventory financing for copper and other metal producers (CB Circular No. 873, 1982)

g) Emplacement of a copper price subsidy program in 1983;

h) Establishment of a rediscounting facility (CB Circular 994, 1984);

i) Suspension of payment of all taxes, duties, imports, and other charges due the government by distressed copper mining companies (Letter of Instruction No. 1416, 1984);

j) Equitization of the outstanding obligations and rehabilitation of a few government-foreclosed mines; and

k) The proposed Mineral Resources Development Act of 1988 which when enacted by Congress would provide a new system of allocation and management of mineral resources, promote their exploration, development, utilization and conservation and for other purposes.

11.4.2.1 Philippine Mineral Resources Development Plan (1987-1992)

The medium-term Mineral Resources Development Plan outlines the following issues and challenges confronting the mineral industry during the period: investment climate for mineral resources development; small-scale mining; mining community development; mineral lands administration; mineral resource base; disposition of government-foreclosed mines; peace and order; foreign and local markets for mineral commodities; and research development.

The 1987-1992 Mineral Resources Development Plan has set the following goals and objectives: to promote an efficient and judicious use of mineral resources; to ensure the sustainable productive capacity of mineral resources; to encourage and support community-based mineral resources management and conservation; to achieve a more equitable sharing of benefits derived from

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the development and utilization of mineral resources; to increase the sector's contributions to the national efforts directed towards poverty and enhancement of welfare of small farmers and landless sectors; and to encourage the use of mining technology which will promote productive harmony between man and his environment.

Sources:

Mines and Geo-Sciences Bureau.
National Statistics Office, Trade Division.

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Table 11.1 Mineral Ore Reserves: 1991 and 1992
(Metric tons)

Kind of ore	1992 Estimated reserves	1992 Percent distribution	1991 Estimated reserves	1991 Percent distribution
Total	27,355,888,231	100.00	29,985,879,000	100.00
Metallics	6,270,402,000	22.92	6,785,809,000	22.63
Bauxite	408,240,000	6.51	408,240,000	6.02
Chromite	40,790,000	0.65	35,290,000	0.52
Copper	3,951,945,000	63.03	4,776,990,000	70.39
Gold	159,941,000	2.55	155,670,000	2.29
Iron	481,092,000	7.67	182,530,000	2.69
Lead	6,313,000	0.10	6,313,000	0.09
Manganese	2,231,000	0.04	1,956,000	0.03
Mercury	16,243,000	0.26	16,240,000	0.24
Molybdenum	30,608,000	0.49	30,610,000	0.45
Nickel	1,172,999,000	18.71	1,171,970,000	17.27
Nonmetallics	21,085,486,231	77.08	23,200,070,000	77.37
Asbestos	1,940,000	0.01	1,940,000	0.01
Barite	160,000	0.00	160,000	0.00
Clay	477,590,000	2.26	64,480,000	0.28
Diatomaceous earth	3,710,000	0.02	2,950,000	0.01
Dolomite	515,570,000	2.44	515,570,000	2.22
Feldspar	79,570,000	0.38	21,570,000	0.09
Guano	120,000	0.00	-	-
Gypsum	1,980,000	0.01	1,880,000	0.01
Limestone (cement)	6,748,700,000	32.01	6,618,830,000	28.53
Limestone (lime)	6,543,830,000	31.03	6,529,960,000	28.15
Magnesite	78,320,000	0.37	26,590,000	0.11
Marble	39,973,231	0.19	4,164,320,000	17.95
Perlite	46,880,000	0.22	27,610,000	0.00
Pumice and pumicite	23,760,000	0.11	21,980,000	0.09
Pyrite	985,100,000	4.67	986,930,000	4.25
Rock aggregates	1,103,790,000	5.23	751,250,000	3.24
Sand and Gravel	43,890,000	0.21	3,250,000	0.01
Pebbles	26,410,000	0.13	6,410,000	0.03
Rock Phosphate	90,000	0.00	-	-
Sulphur	48,780,000	0.23	48,780,000	0.21
Shale	2,818,360,000	13.37	2,143,260,000	9.24
Silica	1,451,413,000	6.88	1,166,260,000	5.03
Talc	510,000	0.00	610,000	0.00
Tuff	45,040,000	0.21	95,480,000	0.41

Source: Mines and Geo-Sciences Bureau.

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Table 11.2 Philippine Mineral Production: 1984-1991 (Thousands)

Mineral/mineral product	Unit	1984	1985	1986	1987	1988	1989	1990	1991
Metallics									
Precious metals									
Gold	Kg	25.73	33.06	35.43	32.78	30.49	30.04	24.59	25.92
Silver	Kg	48.96	52.42	51.53	53.45	54.63	50.63	47.11	39.07
Base metals									
Cobalt (metal)	MT	0.06	0.91	0.09	-	-	-	-	-
Copper (metal/concentrate)	MT	233.36	222.19	217.19	214.10	216.46	191.93	180.46	148.01
Nickel (metal)	MT	13.60	28.16	12.74	8.51	10.35	15.38	15.82	13.71
Zinc (metal)	MT	2.19	1.88	1.57	1.13	1.43	1.20	0.05	-
Chromite:									
Metallurgical concentrate	DMT	105.36	79.06	70.61	48.51	36.45	31.14	25.02	18.81
Metallurgical ore	DMT	17.66	43.30	43.70	21.36	31.35	127.17	117.19	89.21
Chemical grade	DMT	5.37	15.04	15.90	19.75	15.21	18.42	20.24	19.76
Refractory ore	DMT	132.51	134.63	72.00	99.03	87.88	92.98	100.93	82.52
Iron (lump, magnetite sand and others)	DMT	-	-	14.98	-	-	6.52	8.16	7.30
Manganese (washed and unwashed)	DMT	0.62	0.39	0.78	0.44	2.25	3.00	r15.00	4.06

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Table 11.2 Philippine Mineral Production: 1984-1991 (concluded)
(Thousands)

Mineral/mineral product	Unit	1984	1985	1986	1987	1988	1989	1990 r	1991
Nonmetallics									
Cement	Bags	91,269.76	76,991.90	68,713.61	83,001.54	107,481.43	151,243.07	r160,941.80	172,285.44
Coal	MT	1,216.39	1,258.87	1,235.50	1,169.17	1,335.69	1,344.68	1,246.78	1,307.04
Salt[1]	MT	401.01	421.06	442.11	466.43	492.08	488.67	490.41	492.86
Silica sand[1]	MT	511.84	439.03	246.01	213.41	311.96	582.01	r256.08	275.04
Sand and gravel	Cu.M.	14,583.93	11,134.62	12,481.75	13,782.73	14,842.27	15,140.12	15,672.67	15,676.59
Cement raw materials:									
Limestone for cement manufacture	MT	3,333.39	2,864.92	3,597.99	3,926.28	3,600.22	3,859.52	3,818.14	5,384.27
Shale clay	MT	372.11	363.77	371.45	522.57	860.01	858.60	758.23	808.13
Gypsum	MT	0.60	0.30	13.08	16.30	2.25	2.00	30.00	28.00
White clay	MT	8.62	10.84	16.62	5.37	4.73	18.17	104.95	51.53
Marble (unprocessed)	Cu. M.	4.92	4.01	15.02	7.12	11.44	8.28	8.57	24.18
Barite	MT	-	-	0.00	0.37	0.35	0.35	0.29	0.11
Bentonite clay	MT	38.2	25.03	1.80	2.02	2.03	5.96	14.61	42.07

[1] Estimate.

Source: Mines and Geo-Sciences Bureau.

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Table 11.3 Value of Philippine Mineral Production: 1984-1991
(Million pesos)

Mineral/mineral product	1984	1985	1986	1987	1988	1989	1990	1991
Total	13,885.92	17,855.70	18,272.87	19,506.33	22,379.98	23,228.79	22,368.79	24,059.15
Metallics	10,806.32	14,392.08	14,727.04	16,153.09	17,636.56	17,341.49	16,391.67	17,064.12
Precious metals	4,971.71	6,274.12	8,569.33	9,584.20	9,069.46	8,133.08	7,336.92	8,330.33
Gold	4,772.59	6,087.88	8,394.77	9,352.27	8,843.91	7,937.93	7,166.12	8,196.16
Silver	199.12	186.24	174.56	231.93	225.55	195.15	170.80	134.17
Base metals	5,834.61	8,117.96	6,157.71	6,568.89	8,567.10	9,208.41	9,054.75	8,733.79
Cobalt (metal)	26.23	334.25	33.45	-	-	-	-	-
Copper (metal)	4,970.07	5,629.95	5,460.59	6,141.26	7,952.92	7,948.11	7,890.60	7,676.53
Nickel (metal)	466.39	1,712.61	321.86	145.23	293.86	812.04	686.06	648.32
Zinc (metal)	16.48	14.13	10.58	7.10	14.74	19.97	0.74	-
Chromite:								
Metallurgical concentrate	110.12	131.74	118.99	99.96	88.18	64.59	74.38	36.42
Metallurgical ore	21.15	55.70	48.08	23.86	35.00	148.47	137.49	121.89
Chemical grade	5.99	18.01	21.14	26.59	22.24	29.71	32.64	36.46
Refractory ore	217.99	221.47	141.21	124.71	159.31	184.64	208.64	207.46
Iron (lump, magnetite sand and others)	-	-	1.36	-	-	0.28	0.39	0.47
Manganese (washed and unwashed)	0.19	0.10	0.45	0.18	0.85	0.60	23.81	6.24

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Table 11.3 Value of Philippine Mineral Production: 1984-1991 (concluded)
(Million pesos)

Mineral/mineral product	1984	1985	1986	1987	1988	1989	1990	1991
Nonmetallics	3,079.60	3,463.62	3,545.83	3,353.24	4,743.42	5,887.30	5,977.12	6,995.03
Coal	1,133.67	1,509.46	1,149.01	931.03	1,028.48	1,042.12	1,059.76	1,420.75
Salt	340.86	365.20	391.13	412.65	1,043.40	1,800.84	1,802.74	2,178.44
Silica sand/quartz	61.50	48.73	29.49	51.23	45.18	39.28	46.10	57.73
Sand and gravel	1,142.17	1,070.92	1,221.34	1,391.98	1,706.86	2,074.20	2,194.17	2,257.43
Cement raw materials:								
Limestone for cement manufacture	153.43	142.24	95.09	93.58	287.66	150.41	139.24	215.25
Shale clay	10.54	15.54	11.29	9.22	38.70	32.35	27.60	31.71
Gypsum	0.15	0.07	6.79	9.59	0.88	1.60	24.00	22.40
Others	237.28	311.46	641.69	453.96	592.26	746.50	683.518	811.32

Source: Mines and Geo-Sciences Bureau.

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Figure 11.1 Value of Philippine Mineral Production: 1985-1991

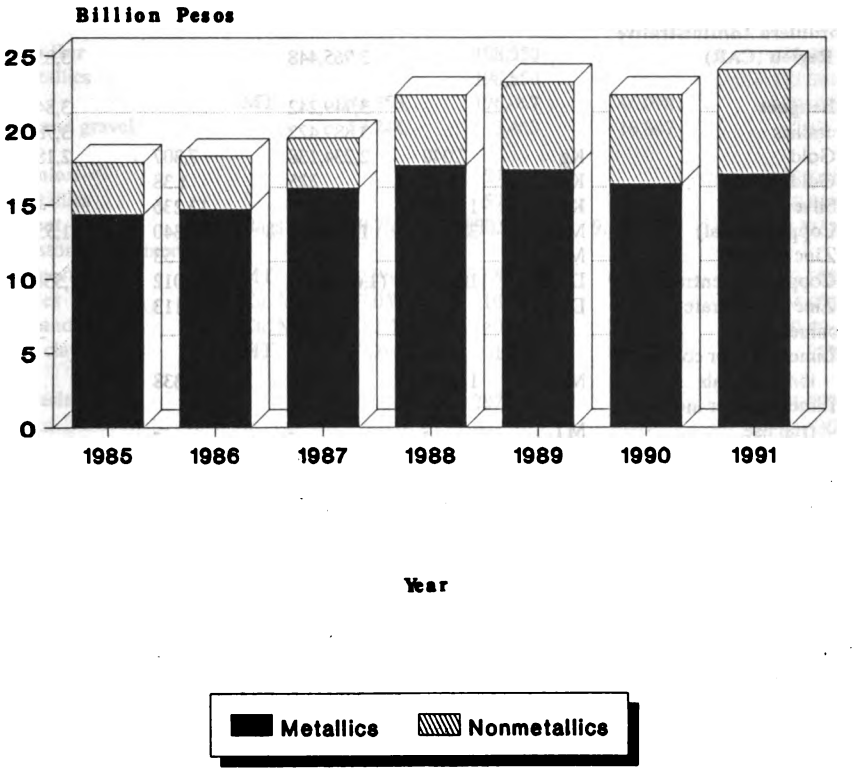

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Philippines			21,301,784		r20,956,844
Total metallics			17,064,138		16,391,632
Total nonmetallics			6,995,021		5,977,115
Total panned gold delivered to Central Bank	Kg	8,722	2,743,152	5,131	1,447,007
Total panned silver	Kg	3,958	14,224	4,063	14,630
Cordillera Administrative Region (CAR)			3,965,448		3,859,400
Benguet			3,949,242		3,843,303
Metallics			3,889,422		3,785,899
Gold	Kg	7,040	2,234,138	7,307	2,180,316
Gold (SSM)	Kg	1.31	225	1.38	310
Silver	Kg	11,369	40,378	12,236	46,198
Copper (metal)	MT	25,567	1,614,681	27,340	1,558,336
Zinc (metal)	MT	-	-	53	738
Copper concentrate	DMT	110,451	(1,614,681)	116,012	(1,558,336)
Zinc concentrate	DMT	-	-	113	(738)
Nonmetallics			59,821		57,405
Limestone for construction materials	MT	11,770	965	16,338	1,212
Limestone for industrial use	MT	-	-	-	
Quicklime	MT	11,966	(21,538)	11,809	(18,385)
Rock aggregate	Cu.M.	-	-	-	-
Sand and gravel	Cu.M.	376,238	54,178	383,195	53,647
Stones, cobbles and boulders	Cu.M.	34,019	4,675	27,220	2,545
Adobe, escombro	Cu.M.	90	3	-	-
Kalinga-Apayao			373	-	3
Nonmetallics			373	-	3
Pebbles	Cu. M.	-	-	29	3
Stone, cobbles and boulders	Cu. M.	2,656	373	4	-
Mountain Province			15,832		16,094
Metallic			30		
Gold (SSM)	Kg	.10	30	-	
Nonmetallics			15,802		16,094
Sand and gravel	Cu. M.	109,736	15,802	114,958	16,094

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Region I - Ilocos			625,024		549,537
Ilocos Norte			81,446		97,684
Nonmetallics			81,446		97,684
Feldspar	MT	44,277	8,770	164,383	33,934
Marble (unprocessed)	Cu. M.	-	-	-	-
Salt	Cu. M.	8,379	37,035	8,586	31,562
Sand and gravel	Cu. M.	235,149	33,861	229,917	32,188
White clay	MT	11,030	1,779	-	-
Ilocos Sur			198,550		172,089
Nonmetallics			198,550		172,089
Salt	MT	44,359	196,067	46,098	169,456
Sand and gravel		17,244	2,483	18,807	2,633
La Union			57,517		48,664
Nonmetallics			57,517		48,664
Cement	Bags	9,718,769	(830,955)	9,198,452	(633,313)
Limestone for cement manufacture	MT	482,361	5,018	471,822	3,695
Pebbles	Cu. M.	47,039	10,267	18,225	4,655
Sand and gravel	Cu. M.	282,178	40,634	282,108	39,495
Shale clay	MT	37,294	1,599	44,790	819
Pangasinan			287,511		231,099
Metallics					30
Gold	Kg	-	-	0.12	30
Nonmetallics			287,511		231,069
Cement	Bags	16,921,222	(1,446,764)	11,899,146	(618,637)
Limestone for cement manufacture	MT	864,300	42,849	573,845	39,363
Limestone for industrial use	MT	-	-	-	-
Rock phosphate	MT	129	36	291	585
Salt	MT	35,486	156,848	35,437	130,266
Sand and gravel	Cu. M.	250,285	36,119	250,763	35,107
Shale clay	MT	198,024	9,989	90,204	4,723
Silica sand for cement manufacture	MT	53,928	15,360	39,655	15,672
Silica sand	MT	67,258	14,443	91,989	2,461
White clay	MT	14,306	11,867	4,712	2,892
Region II - Cagayan Valley			83,830		76,810
Cagayan			24,136		24,136

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Nonmetallics			24,832		24,136
Guano	MT	-	-	-	-
Limestone for industrial use	MT	-	-	-	-
Sand and gravel	Cu. M.	172,442	24,832	172,399	24,136
Isabela			58,998		52,660
Metallics			4,820		-
Metallurgical chromite ore (SSM)	DMT	3,097	4,820	-	-
Gold (SSM)	Kg	-	-	-	-
Nonmetallics			54,178		52,660
Guano	MT	-	-	-	-
Sand and gravel	Cu. M.	376,238	54,178	376,144	52,660
Soil	Cu. M.	-	-	-	-
Stones, cobbles and boulders	Cu. M.	-	-	-	-
Nueva Vizcaya					14
Nonmetallics		-			14
Dionite	MT	-	-	700	14
White clay	MT	-	-	-	-
Quirino			-	-	-
Nonmetallics		-	-	-	-
Guano	MT	-	-	-	-
Region III - Central Luzon			2,678,798		3,059,215
Bataan			9,254		8,783
Nonmetallics			9,254		8,783
Sand and gravel	Cu. M.	62,706	9,030	62,691	8,777
Stones, cobbles and boulders	Cu. M.	62,949	132	265	7
Aggregates	Cu. M.	1,460	92	-	-
Bulacan			398,796		314,598
Nonmetallics			398,796		314,598
Cement	Bags	32,273,986	(2,759,426)	32,023,999	(2,205,541)
Crushed stones/rocks	Cu. M.	8,789	743	31,126	2,043
Graywacke/sandstone	MT	82,904	5,340	64,287	3,508
Hydrated/slaked lime	MT	1,202	(154)	1,617	(903)
Limestone for cement manufacture	MT	1,132,348	93,879	757,015	50,225

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Limestone for construction materials	Cu. M.	637	465	-	-
Limestone for industrial use	MT	-	-	-	-
Marble (unprocessed)	Cu. M.	18,093	7,425	1,848	1,413
Salt	MT	54,214	239,626	56,684	208,370
Diatomaceous earth	MT	119,692	4,454	-	-
Aggregates	Cu. M.	949	53	-	-
Pebbles	Cu. M.	2,632	274	-	-
Sand and gravel	Cu. M.	235,149	33,861	235,570	32,980
Shale clay	MT	122,763	7,543	354,623	13,242
Silica sand	MT	1,710	26	370	25
Silica sand for cement manufacture	MT	54,418	3,857	46,303	2,742
White clay	MT	6,400	1,157	2,003	50
Stone, cobbles and boulders	Cu. M.	1,842	94	-	-
Nueva Ecija			3,689		3,951
Metallics			278		672
Manganese ore	DMT	385	278	305	172
Manganese ore (SSM)	DMT	-	-	5,000	500
Nonmetallics			3,411		3,280
Crushed Stones or rocks		8,363	407	-	-
White clay	MT	-	-	18,200	455
Sand and gravel	Cu. M.	18,812	2,709	19,121	2,677
Pebbles	Cu. M.	6,100	196	4,922	148
Limestones for construction materials	Cu. M.	50	100	-	-
Pampanga			30,790		30,464
Nonmetallics			30,790		30,464
Feldspar	MT	2,800	1,008	2,602	578
Pumice	MT	18,910	436	965	484
Sand and gravel	Cu. M.	203,796	29,347	210,014	29,402
Tarlac			36,089		32,871
Nonmetallics			36,089		32,871
Pumice	MT	-	-	-	-
Rock aggregate	Cu. M.	28,107	4,458	21,981	2,082
Sand and gravel	Cu. M.	219,472	31,604	219,417	30,788
Stones, cobbles and boulders	Cu. M.	2,200	28	-	-
Zambales			2,200,178		2,668,548

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Metallics			2,173,890		2,645,770
Gold	KG	3,048	1,043,810	3,890	1,275,795
Silver	KG	4,504	17,425	5,745	24,387
Copper (metal)	MT	14,125	887,212	16,425	1,016,883
Copper concentrate	DMT	65,912	(887,212)	79,280	(1,016,883)
Metallurgical chromite concentrate	DMT	2,724	16,151	20,005	65,855
Metallurgical chromite ore (SSM)	DMT	370	679	32,712	51,859
Refractory chromite ore	DMT	80,845	205,612	100,925	208,643
Metallurgical chromite ore	MT	2,484	3,002	5,736	2,348
Nonmetallics			26,288		22,778
Crushed stones/rocks	Cu. M.	-	-	2,328	298
Jade	MT	-	-	5	8
Pumice	MT	-	-	100	60
Salt	MT	5,914	26,140	5,885	21,633
Stone, cobbles and boulders	Cu. M.	4,625	148	7,092	740
Silica quartz	MT.	-	-	130	39
Region IV - Southern Tagalog			1,729,100		2,229,632
Batangas			132,952		136,161
Nonmetallics			132,952		-
Bentonite clay	MT	30,000	33,000	3,000	1,200
Cement	Bags	7,373,925	(630,471)	8,013,300	(551,716)
Crushed stones/rocks	Cu. M.	649	45	-	-
Gypsum	MT	28,000	22,400	30,000	24,000
Salt	MT	5,436	24,027	5,414	19,902
Sand and gravel	Cu. M.	125,413	18,059	133,218	18,651
Shale clay	MT.	12,738	866	43,101	1,698
Soil	Cu. M.	173	4	-	-
Stones, cobbles and boulders	Cu. M.	34	3	400	3
Silica sand	MT	26,751	1,547	19,578	1,408
White clay	MT	30,000	33,000	63,000	69,300
Cavite			226,642		187,476
Nonmetallics			226,642		187,476
Crushed stones/rocks	Cu. M.	-	-	-	-
Salt	MT	51,257	226,556	51,000	187,476
Sand and gravel	Cu. M.	-	-	-	-

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Volcanic cinders	Cu. M.	3,460	86	-	-
Laguna			5,315		10,783
Nonmetallics			5,315		10,783
Soil	Cu. M.	836	84	-	
Adobe	Cu. M.	-	-	-	-
Crushed stones/rocks	Cu. M.	-	-	-	-
Sand and gravel	Cu. M.	7,383	1,063	76,796	10,751
Stones, cobbles and boulders	Cu. M.	1,181	116	838	13
Volcanic cinders	Cu. M.	38,534	1,115	-	-
White clay	MT	-	-	50	19
Rock aggregates	Cu. M.	20,713	2,937	-	-
Marinduque			343,071		985,126
Metallics			337,603		979,750
Gold	Kg	174	52,875	453	126,747
Silver	Kg	1,025	3,127	3,460	10,990
Copper (metal)	MT	5,942	281,602	18,049	842,013
Copper concentrate	DMT	21,702	(281,602)	64,372	(842,013)
Nonmetallics			5,467		5,376
Crushed stones/rocks	Cu. M.	-	-	36	4
Pebbles	Cu. M.	-	-		
Quicklime	MT	442	(740)	2,812	(4,113)
Rock aggregates	Cu. M.	180	27	75	9
Sand and gravel	Cu. M.	37,624	5,418	38,241	5,354
Stones, cobbles and boulders	Cu. M.	109	22	56	9
Mindoro Occidental			379,800		315,743
Nonmetallics			379,800		315,743
Limestone for agricultural use	MT.	12	32	-	-
Jade	MT.	-	-	139	254
Limestone for construction materials	MT.	200	12	-	-
Pebbles	Cu. M.	374	37	-	-
Greenstones	MT	55	55		
Salt	MT	85,265	376,871	85,081	312,758
Sand and gravel	Cu. M.	18,812	2,709	19,152	2,681
Marble	Cu. M.	190	28	-	-
Stalactite	MT	-	-	10	50
Soil	Cu. M.	1,218	55	-	-
Mindoro Oriental			39,852		39,906

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Nonmetallics			39,852		39,906
Barite	MT	110	62	289	170
Coal	MT	2,185	2,376	2,219	1,886
Marble (unprocessed)	Cu. M.	1,830	1,332	2,005	2,984
Pebbles	Cu. M.	155	20	-	-
Sand and gravel	Cu. M.	249,258	35,893	249,039	34,865
Soil	Cu. M.	2,220	163	-	-
Stones, cobbles and boulders	Cu. M.	30	5	-	-
Palawan			486,996		481,424
Metallics			469,792		455,304
Nickel (metal)	MT	7,430	429,012	9,782	449,876
Nickel (beneficiated ore)	DMT	302,900	(429,012)	358,420	(449,876)
Metallurgical chromite ore (SSM)	DMT	20,267	35,492	10,694	5,428
Metallurgical chromite concentrate (SSM)	DMT	5,124	3,587	-	-
Refractory chromite ore (SSM)	DMT	1,525	1,701		
Nonmetallics			17,204		26,121
Limestone for construction materiall	MT	2,221	158	-	-
Salt	MT	2,957	13,070	2,942	10,815
Pebbles	Cu. M.	168	48	-	-
Sand and gravel	Cu. M.	19,125	2,754	19,158	2,682
Silica sand	MT	30,636	1,145	68,791	12,624
Stone, cobbles, boulders	Cu. M.	142	29	-	-
Quezon			42,112		11,166
Nonmetallics			42,112		11,166
Coal	MT	9,112	9,905	7,399	6,289
Crushed stones/rocks	Cu. M.	225	18	11	-
Hydrated lime	MT	320	(96)	514	(676)
Limestones for construction materials	Cu. M.	-	-	-	-
Limestone for agricultural use	MT	20,176	213	-	-
Marble (unprocessed)	Cu. M.	1,146	2,781	1,143	2,600
Quicklime	MT	4,484	(2,107)	6,212	(7,930)
Rock phosphate	MT	10,000	5,000	-	-
Sand and gravel	Cu. M.	7,525	1,084	7,662	1,073
Silica bull quartz	MT	28,394	22,929	3,044	1,201
Soil	Cu. M.	2,146	17		

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Stones, cobbles and boulders	Cu. M.	2,345	164	432	3
Rizal			56,778		47,996
Metallics			1,436		
Gold (SSM)	Kg	5,743	1,436	-	-
Nonmetallics			55,343		47,996
Basalt	Cu. M.	20,715	3,063	243,275	1,496
Cement	Bags	50,286,851	(4,299,526)	43,370,586	(2,986,065)
Crushed stones/rocks	Cu. M.	-	-	42,286	244
Diatomaceous earth	Cu. M.	-	-	-	-
Fullers earth	MT	200	60	555	158
Limestone for agriculture	MT	5,432	1,595	-	-
Limestone for cement manufacture	MT	219,915	2,830	429,572	4,118
Marble (unprocessed)	Cu. M.	118	176	-	-
Rock aggregates	Cu. M.	-	-	10,000	2,400
Sand and gravel	Cu. M.	153,631	22,123	153,263	21,457
Silica sand	MT	47,784	2,763	24,799	367
Silica sand for cement manufacture	MT	90,491	1,094	143,223	1,317
Soil	Cu. M.	52,918	4,233		
Tuff	MT	71,459	17,406	99,911	16,436
Guano	MT	-	-	38	4
Romblon			15,583		13,851
Nonmetallics			15,583		13,851
Crushed stones/rocks	Cu. M.	-	-	-	-
Fullers earth	Cu. M.	140	140	-	-
Marble (unprocessed)	Cu. M.	2,038	1,925	791	764
Pebbles	Cu. M.	3,761	167	85	34
Sand and gravel	Cu. M.	92,492	13,319	92,310	12,923
Soil	Cu. M.	-	-	-	-
Stones, cobbles and boulders	Cu. M.	70	24	-	-
White clay	MT	-	-	160	131
Opallene chest	MT	8	8	-	-
Region V - Bicol			1,307,996		r1,357,143
Albay			65,151		44,675
Nonmetallics			65,151		44,675
Bentonite	MT	404	95	-	-
Coal	MT	59,631	64,819	51,972	44,176

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Perlite	Cu. M.	2,894	237	1,369	319
Ball clay	MT	-	-	2,629	179
Camarines Norte			312,493		401,618
Metallics			302,206		371,830
Gold (SSM)	Kg	960	297,833	1,216	365,955
Silver	Kg	1,179	4,373	1,510	5,875
Nonmetallics			10,287		29,788
Diatomaceous earth	Cu. M.	342	62	311	149
Pebbles	Cu. M.	-	-	265	127
Sand and gravel	Cu. M.	107,548	10,225	210,797	29,512
White clay	MT	-	-	-	-
Camarines Sur			40,952		39,523
Metallics			6,052		2,231
Metallurgical chromite ore (lump) (SSM)	DMT	3,485	6,052	2,231	2,231
Nonmetallics			34,899		37,291
Guano	MT	9,344	6,558	4,931	9,862
Ball clay	MT	7,115	498	4,043	332
Sand and gravel	Cu. M.	191,254	27,541	191,990	26,879
White clay	MT	220	170	13,030	219
Pumice	MT	395	132	-	-
Catanduanes			41,311		40,235
Nonmetallics			41,311		40,235
Sand and gravel	Cu. M.	286,882	41,311	287,390	40,235
Masbate			828,789		766,769
Metallics			807,575		746,819
Gold	Kg	2,591	800,943	2,708	687,679
Gold (SSM)	Kg	-	-	157.94	50,034
Silver	Kg	1,904	6,632	2,383	8,734
Silver (SSM)	Kg	-	-	110.65	372
Nonmetallics			21,214		19,950
Coal	MT	11,894	12,929	12,527	10,548
Pebbles	Cu. M.	-	-	34	455
Sand and gravel	Cu. M.	57,535	8,285	57,472	8,946
Stones, cobbles and boulders	Cu. M.	-	-	80	2
Sorsogon			19,301		18,776
Nonmetallics			19,301		18,776
Sand and gravel	Cu. M.	134,035	19,301	134,111	18,776

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Region VI - Western Visayas			3,117,444		2,504,938
Aklan			15,403		14,398
Nonmetallics			15,403		14,398
Ball clay	MT	-	-	32	11
Pebbles	Cu. M.	-	-	-	-
Sand and gravel	Cu. M.	95,627	13,770	95,603	13,384
Silica quartz	MT	2,700	432	8,920	1,003
Silica sand	MT	8,357	1,201	-	-
Antique			682,318		506,271
Nonmetallics			682,318		506,271
Coal	MT	592,306	643,837	553,369	470,364
Pebbles	Cu. M.	10	5	-	-
Salt	MT	2,464	10,891	2,471	9,083
Sand and gravel	Cu. M.	191,568	27,586	191,598	26,824
Capiz			143,518		139,056
Nonmetallics			143,518		139,056
Sand and gravel	Cu. M.	995,464	143,347	995,215	139,056
White clay	MT	245	172	-	-
Iloilo			498,114		498,114
Nonmetallics			601,976		498,114
Black clay	MT	700	250	-	-
Limestone for industrial use	MT	-	-	-	-
Sand and gravel	Cu. M.	-	-	-	-
Salt	MT	136,078	601,465	135,426	497,826
Limestone for agricultural use	MT	-	-	10	8
Hydrated lime	MT	80	(56)	11	(9)
Quicklime		218	(202)	-	-
White clay	MT	357	261	560	280
Negros Occidental			1,674,228		1,347,099
Metallics			1,549,731		1,227,527
Gold	KG	247	71,001	155	43,660
Silver	KG	7,138	22,926	7,073	24,864
Copper (metal)	MT	31,802	1,450,933	33,839	1,136,273
Copper concentrate	DMT	119,957	(1,450,933)	134,497	(1,136,273)
Manganese	DMT	2,335	4,872	8,545	22,730
Nonmetallics			124,496		119,572
Guano	MT	8	6	-	-

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Limestone for agricultural use	MT	11,649	790	3,287	96
Limestone for industrial use	MT	-	-	-	-
Hydrated lime	MT	1,293	(10,336)	7,580	3,325
Pebbles	Cu. M.	-	-	-	-
Rock phosphate	MT	683	151	-	-
Salt	MT	5,914	26,140	5,887	21,641
Sand and gravel	Cu. M.	634,950	96,617	670,634	93,889
Stones, cobbles and boulders	Cu. M.	-	-	360	37
Tuff	MT	181	29	243	36
Silica quartz	MT	-	-	4,356	549
Silica sand	MT	867	764	-	-
Region VII - Central Visayas			4,816,044		4,451,542
Bohol			365,211		336,807
Nonmetallics			365,211		336,807
Crushed stones/rocks	Cu. M.	-	-	-	-
Guano	MT	6	3	52	12
Limestone for industrial use	MT	356,541	310,938	829,753	282,001
Marbles (unprocessed)	Cu. M.	-	-	2,075	3,736
Pebbles	Cu. M.	-	-	23	31
Rock phosphate	MT	410	109	-	-
Salt	MT	1,922	8,495	1,917	7,047
Sand and gravel	Cu. M.	307,262	44,246	307,184	43,006
Silica sand	MT	49,344	1,417	46,574	976
Red clay	MT	4	3	-	-
Cebu			4,233,802		3,841,392
Metallics			3,532,718		3,293,645
Gold	Kg	1,335	410,498	1,599	437,916
Silver	Kg	6,439	20,151	8,238	27,032
Copper (metal)	MT	62,969	3,102,070	73,925	2,828,696
Copper concentrate	DMT	222,458	(3,102,070)	261,389	(2,828,696)
Nonmetallics			701,084		547,747
Andesite	Cu. M.	4,880	682	115,864	2,897
Bentonite	MT	50	10	6,950	10,425
Blackstone	MT	274	226	310	217
Cement	Bags	4,668,299	(399,140)	4,065,681	(279,922)
Coal	MT	193,955	210,829	210,445	178,878
Corraline	MT	35	19	-	-

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Crushed stones/rocks	Cu. M.	669	16	375	4
Diatomaceous earth	Cu. M.	50	20	-	-
Diorite	MT	101,765	20,353	-	-
Dolomite	MT	608,779	56,276	320,529	32,487
Fossilized Limestones	MT	7	5	-	-
Graywacke/sandstone	MT	21,955	312	2,750	28
Guano	MT	181	81	793	1,380
Limestone for agricultural use	Cu. M.	12,275	2,246	386	79
Limestone for cement manufacture	MT	216,778	18,860	228,635	10,504
Limestone for construction materials	Cu. M.	29,778	3,703	22,558	4,398
Limestone for industrial use	MT	2,276	982	1,077	200
Mactan stone	Cu. M.	3,508	99	19,221	375
Marble (unprocessed)	Cu. M.	740	202	706	3,113
Pyrite concentrate	DMT	194,735	30,165	232,157	30,270
Rock phosphate	MT	9,411	1,544	952	308
Sand and gravel	Cu. M.	2,348,270	338,151	1,849,375	258,912
Red clay	MT	440	50	-	-
Aggregates	Cu. M.	1,292	32	-	-
Salt	MT	3,450	15,249	3,442	12,653
Silica sand	Cu. M.	3,096	451	3,735	566
Soil	Cu. M.	279	9	-	-
Stones, cobbles and boulders	Cu. M	853	58	200	2
Serpentine peridotite	MT.	1,175	431	100	50
Tuff	MT.	210	23		
Negros Oriental			216,956		273,343
Nonmetallics			216,956		273,343
Coal	MT	16,837	18,302	13,638	11,592
Hydrated/slaked lime	MT	38	(19)	-	-
Limestone for construction materials	Cu. M.	-	-	-	-
Limestone for industrial use	MT	85	110	503	604
Pebbles	Cu. M.	-	-	49	24
Rock aggregate	Cu. M.	-	-	-	-
Salt	MT	4,436	19,607	4,414	16,226
Sand and gravel	Cu. M.	1,240,102	178,575	1,739,667	243,553
Silica bull quartz	MT	1,856	349	14,505	1,343
Stones, cobbles and boulders	Cu. M.	150	14	-	

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Soil	Cu. M.	-	-	-	-
Siquijor			75		
Metallics			75		
Manganese (SSM)	MT	250	75		-
Region VIII - Eastern Visayas			340,126		336,015
Eastern Samar			75,924		89,109
Metallics			49,060		62,777
Chemical grade chromite	DMT	19,756	36,457	20,240	32,637
Metallurgical chromite ore (SSM)	DMT	12,026	12,603	27,414	30,140
Nonmetallics			26,863		266,332
Sand and gravel	Cu. M.	186,551	26,863	188,072	266,330
White clay	MT	-	-	97	2
Leyte			104,397		82,490
Nonmetallics			109,397		82,490
Pyrite concentrates	DMT	26,237	22,784		
Pebbles	Cu. M.	-	-	-	-
Rock phosphate	MT	1,158	282	2,020	707
Sand and gravel	Cu. M.	533,044	76,758	548,544	76,796
Bentonite	MT	10,928	6,648	4,157	1,343
Limestones for agricultural use	MT	20,731	2,924	24,969	3,643
Hydrated lime	MT	14,174	(31,238)	14,296	(26,393)
Eastern Leyte			2,709	-	2,681
Nonmetallics			2,709	-	2,681
Sand and gravel	Cu. M.	18,812	2,709	19,152	2,681
Southern Leyte			4,289		4,388
Nonmetallics			4,289		4,388
Sand and gravel	Cu. M.	29,786	4,289	31,245	4,388
Northern Samar			1,298		20,681
Nonmetallics			1,298		20,680
Coal	MT	-	-	23,986	20,388
Pebbles	Cu. M.	580	958	-	-
Silica sand	Cu. M.	215	340	-	-
White clay	MT	-	-	2,141	292
Western Samar			136,667		136,667
Nonmetallics			146,509		136,667

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Pyrite concentrate	DMT	138,635	130,933	197,455	119,295
Sand and gravel	Cu. M.	108,168	15,576	109,709	15,359
Sulfur		-	-	6,512	2,012
Region IX - Western Mindanao			555,189		457,833
Zamboanga del Norte			108,696		91,074
Metallics			11,169		2,649
Gold (SSM)	Kg	-	-	-	-
Metallurgical chromite ore (SSM)	DMT	12,437	10,665	1,399	2,649
Manganese (SSM)	DMT	604	503	-	-
Nonmetallics			97,527		88,425
Sand and gravel	Cu. M.	667,064	97,497	631,608	88,425
Marble	Cu. M.	12	30	-	-
Zamboanga del Sur			446,493		366,759
Metallics			12,527		9,859
Gold (SSM)	Kg	36.77	12,527	20.95	6,763
Metallurgical chromite ore (SSM)	DMT	-	-	2,580	3,096
Nonmetallics			433,966		356,900
Coal	MT	237,003	257,622	238,255	202,517
Limestone for agricultural use	MT	165	146	455	169
Marble (unprocessed)	Cu. M.	11	27	-	-
Salt	MT	27,660	121,992	27,463	100,954
Sand and gravel	Cu. M.	376,238	54,178	376,144	52,660
Silica quartz	MT	-	-	5,000	600
Region X - Northern Mindanao			968,796		931,908
Agusan del Norte			56,436		156,364
Metallics				0.033	6
Gold (SSM)	Kg	-	-	0.033	6
Nonmetallics			56,436		56,358
Sand and gravel	Cu. M.	391,915	56,436	402,318	56,324
Pebbles	Cu. M.	-	-	148	34
Agusan del Sur			183,691		186,167
Metallics			159,085		162,031
Gold	Kg	470	157,341	578	158,362
Gold (SSM)	Kg	-	-	7.119	1,780
Silver	Kg	466	1,743	627	1,889
Nonmetallics			24,606		24,136

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Sand and gravel	Cu. M.	170,875	24,606	172,399	24,136
Bukidnon			12,784		11,742
Metallics			209		40
Metallurgical chromite ore (SSM)	DMT	130	115	40	40
Manganese	DMT	50	94	-	-
Nonmetallics			12,574		11,702
Feldspar	MT	210	105	40	12
Guano	MT	82	90	6	4
Limestone for agricultural use	MT	4,501	503	2,337	231
Limestone for construction materials	Cu. M.	-	-	-	-
Hydrated/slaked lime	MT	250	(559)	354	(569)
Silica sand	MT	-	-	240	60
Sand and gravel	Cu. M.	78,383	11,287	76,624	10,727
Serpentine stone	MT	-	-	1,920	384
Silica quartz	MT	800	420	20	1
Schist	MT	413	169	40	10
White clay	MT	-	-	1,000	248
Limestone for industrial use	MT	-	-	120	24
Misamis Occidental			61		348
Nonmetallics			61		348
Soil	Cu. M.	-	-	2,320	87
Stones, cobbles and boulders	Cu. M.	829	61	3,718	261
Misamis Oriental			174,728		164,032
Metallics			5,122		2,211
Manganese ore (SSM)	DMT	440	423	1,161	413
Metallurgical chromite ore (SSM)	DMT	1,609	1,224	2,830	1,791
Metallurgical chromite ore	DMT	2,593	3,474		
Gold (SSM)	Kg	-	-	0.035	8
Nonmetallics			169,606		161,821
Cement	Bags	12,934,192	(1,105,873)	13,933,150	(959,297)
Feldspar	MT	692	380	1,343	836
Limestone for cement manufacture	MT	12,973	376	-	-
Sand and gravel	Cu. M.	1,131,685	162,963	1,092,072	152,890
Shale clay	MT	180,580	5,434	153,393	5,332

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Silica sand for cement manufacture	MT	-	-	32,527	2,752
Silica quartz	MT	900	420	-	-
Red clay	MT	108	14	148	10
Stones, cobbles and boulders	Cu. M.	261	20	-	-
Surigao del Norte			541,098		513,255
Metallics			489,405		467,950
Gold	Kg	672	210,026	622	184,707
Gold (SSM)	Kg	-	-	-	-
Silver	Kg	99	335	444	1,655
Nickel (metal)	MT	1,277	219,306	6,036	236,187
Nickel (beneficiated ore)	DMT	254,274	(219,306)	249,695	(236,187)
Metallurgical chromite ore	DMT	21,215	37,155	10,969	15,841
Metallurgical chromite ore (SSM)	DMT	7,700.00	5,420	18,814.52	20,641
Metallurgical chromite concentrate	DMT	10,697	16,499	5,020	8,530
Metallurgical chromite concentrate (SSM)	DMT	268	188	-	-
Iron ore (SSM)	DMT	7,303	475	8,163	390
Nonmetallics			51,692		45,305
Cement	Bags	4,232,775	(361,902)	2,844,125	(195,818)
Limestone for cement manufacture	MT	152,874	10,774	112,690	4,919
Pebbles	Cu. M.	-	-	15	13
Sand and gravel	Cu. M.	282,179	40,634	287,280	40,219
Silica sand for cement manufacture	MT	14,301	285	9,220	153
Stones, cobbles and boulders	Cu. M.	-	-	9	1
Region XI - Southern Mindanao			1,093,552		1,132,500
Davao del Norte			566,910		813,080
Metallics			386,385		668,242
Gold	Kg	175	43,493	553	155,498
Gold (SSM)	Kg	-	-	0.672	170
Silver	Kg	988	2,861	1,221	4,172
Copper (metal)	MT	7,603	340,031	10,881	508,402
Copper concentrate	DMT	31,858	(340,031)	42,623	(508,402)
Nonmetallics			180,525		144,837

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (continued) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Limestone for agricultural use	MT	2,272	4,997	-	-
Mica	MT	4	155	-	-
Sand and gravel	Cu. M.	1,197,361	172,420	1,034,553	144,837
Silica sand	MT	27,994	2,953		
Davao del Sur			40,093		37,339
Nonmetallics			40,093		37,339
Bentonite	MT	684	1,877	500	1,177
Calcite	MT	147	65	-	-
Cement	Bags	19,290,499	(1,649,338)	19,609,788	(1,350,134)
Limestone for agricultural use	MT	3,099	362	4,623	505
Limestone for industrial use	MT	-	-	1,286	3,087
Guano	MT	1	-	-	-
Magnesite	MT	-	-	26	2
Limestone for cement manufacture	MT	993,476	23,607	792,196	19,069
Sand and gravel	Cu. M.	78,383	11,287	76,623	10,727
Shale clay	MT	128,162	2,895	72,118	1,788
Silica sand for cement manufacture	MT	-	-	9,617	984
Davao Oriental			47,269		5,760
Metallics			37,488		1,376
Metallurgical chromite ore (SSM)	DMT	1,266	823	1,720	1,376
Refractory chromite	DMT	150	150	-	-
Gold (SSM)	Kg	15.67	36,516	-	-
Nonmetallics			9,781		4,384
Limestone for agricultural use	MT	-	-	85	10
Magnesite	MT	13,605	1,482	3,649	386
Silica sand for cement manufacture	MT	44,372	8,299	25,099	3,987
South Cotabato			170,751		139,572
Metallics			40,280		43,375
Gold (SSM)	Kg	212	40,280	190.432	43,375
Nonmetallics			130,471		96,196
Limestone for agricultural use	MT	192	192	1,074	224
Salt	MT	17,730	78,358	12,260	45,068
Sand and gravel	Cu. M.	360,562	51,921	363,606	50,905

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Table 11.4 Mineral Production by Province and Category: 1990 and 1991 (concluded) (Value in thousand pesos)

Region/province Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Surigao del Sur			268,529		136,749
Metallics			40,403		53
Metallurgical chromite ore (SSM)	DMT	529	370	53	53
Gold (SSM)	Kg	210.70	40,033	-	-
Nonmetallics			228,127		136,697
Coal	MT	184,117	200,135	132,967	113,022
Sand and gravel	Cu. M.	194,382	27,991	168,125	23,675
Region XII - Western Mindanao			20,438		10,372
Lanao del Norte			20,438		10,372
Nonmetallics			20,438		10,372
Cement	Bags	14,584,925	(1,247,011)	15,982,573	(1,100,400)
Limestone for industrial use	MT	-	-	15,654	3,021
Limestone for cement manufacture	MT	1,309,242	17,056	452,366	7,351
Shale clay	MT	128,572	3,382	-	-
Hydrated lime	MT	-	-	55	(66)

Note: Details may not add up to totals due to rounding. Values for copper, nickel (beneficiated ore) and zinc concentrates are the same with values in metal form and therefore are not reflected in the overall production values. Values for cement and lime are excluded in the total nonmetallic values. Panned gold by delivery to Central Bank are not available by province.

Source: Mines and Geo-Sciences Bureau.

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Table 11.5 List of Leading Mineral Producers in the Philippines: 1983-1991

Producer[1]	Unit	Production 1983	1984	1985	1986	1987	1988	1989	1990	1991
Leading copper producers										
1. Atlas Consolidated Mining and Development Corporation										
Copper concentrate	DMT	425,291	401,760	323,234	244,526	287,842	303,559	280,939	261,389	222,458
Copper metal	MT	121,942	118,069	91,535	69,673	81,049	85,355	78,912	73,925	62,969
2. Maricalum Mining Corporation										
Copper concentrate	DMT	a	a	a	150,094	144,847	136,606	120,601	134,497	119,957
Copper metal	MT	a	a	a	41,872	40,604	39,017	30,273	33,839	31,802
3. Dizon Copper-Gold Operations (BC)										
Copper concentrate	DMT	118,033	105,281	110,261	107,489	89,691	98,800	87,331	79,280	65,912
Copper metal	MT	25,845	23,450	23,928	23,108	19,153	20,955	18,156	16,425	14,125
4. Philex Mining Corporation										
Copper concentrate	DMT	84,052	84,568	99,620	94,521	97,849	91,467	80,559	67,280	61,881
Copper metal	MT	20,591	20,390	23,644	22,011	22,716	20,997	18,389	15,055	13,940
5. Lepanto Cons. Mining Co.										
Copper concentrate	DMT	a	a	a	a	a	a	a	a	48,570
Copper metal	MT	a	a	a	a	a	a	a	a	11,627

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Table 11.5 List of Leading Mineral Producers in the Philippines: 1983-1991 (continued)

Producer[1]	Unit	Production 1983	1984	1985	1986	1987	1988	1989	1990	1991
Leading gold producers										
1. Dizon Copper-Gold Operation (BC)	Kg	3,580	4,477	4,000	3,745	3,528	3,544	3,813	3,890	3,048
2. Masbate Gold Operation (ACMDC)	Kg	2,788	2,526	2,638	2,424	a	2,193	2,623	2,708	2,591
3. Philex Mining Corporation	Kg	4,288	4,549	5,733	5,283	5,702	4,207	3,491	2,695	2,359
4. Benguet Corporation	Kg	3,421	3,300	3,334	3,645	3,685	3,695	3,041	2,164	2,130
5. Lepanto Consolidated Mining Co., Inc.	Kg	a	a	a	a	2,283	2,393	1,970	1,725	1,543
Leading silver producers										
1. Atlas Consolidated Mining and Development Corp.	Kg	12,818	14,065	9,699	7,971	10,005	9,835	7,799	8,238	6,439
2. Lepanto Consolidated Mining Company Inc.	Kg	6,968	3,784	6,404	6,395	6,348	7,551	7,175	7,170	7,041
3 Maricalum Mining Corporation	Kg	a	a	a	a	8,193	7,820	6,415	7,073	7,138
4. Dizon Copper-Gold Operation (BC)	Kg	6,365	6,616	6,647	7,093	6,301	5,317	5,511	5,745	4,504
5. Marcopper Mining Corp.	Kg	5,505	5,830	6,863	4,879	a	4,567	4,205	3,460	a

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Table 11.5 List of Leading Mineral Producers in the Philippines: 1983-1991 (concluded)

Producer[1]	Unit	Production 1983	1984	1985	1986	1987	1988	1989	1990	1991
Leading chromite producers										
1. Masinloc Chromite Operation (BC)	DMT	110,727	115,257	126,826	70,802	97,982	87,549	92,985	97,560	80,845
2. Krominco	DMT	a	a	a	a	a	a	a	a	19,756
3. Alamag Processing Corporation	DMT	a	a	15,038	15,900	19,753	15,211	18,424	20,240	19,756
4. Acoje Mining Company Inc. (Zambales Chromite Project)	DMT	101,110	110,724	69,874	70,572	48,505	36,452	27,310	20,005	5,208
5. Integrated Chrome Corporation	DMT	a	a	a	a	a	5,044	7,144	14,432	8,102

[1] Based on 1991 ranking.
a Not included in top five mineral producers for the year.

Source: Mines and Geo-Sciences Bureau.

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Table 11.6 Nonmetallic Mineral Production: 1990 and 1991
(Value in thousand pesos)

Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Total					
Clays			89,272		88,722
Bentonite clay	MT	42,066	41,630	14,607	14,145
White clay	MT	51,528	46,627	104,953	73,888
Other clays:					
Ball clay	MT	7,115	498	6,704	521
Black clay	MT	700	250	-	-
Fuller's earth	MT	340	200	555	158
Red clay	MT	552	68	148	10
Construction materials			2,318,585		2,234,189
Adobe, broken	Cu. M.	90	3	-	-
Andesite	Cu. M.	4,880	682	115,864	2,897
Basalt	Cu. M.	20,715	3,063	243,275	1,496
Black stone	MT	274	226	310	217
Corraline Stone	MT	35	19		
Crushed stones/rocks	Cu. M.	18,695	1,229	76,162	2,593
Diatomaceous earth	Cu. M.	120,084	4,535	311	140
Limestone for construction materials	Cu. M.	44,656	5,402	38,896	5,611
Mactan stone	MT	3,508	99	19,221	375
Marble (unprocessed)	Cu. M.	24,178	13,927	8,568	14,610
Pebbles	Cu. M.	60,819	11,971	23,839	5,523
Perlite	Cu. M.	2,894	237	1,369	319
Rock aggregates	Cu. M.	52,701	7,599	22,056	2,091
Sand and gravel	Cu. M.	15,676,591	2,257,429	15,672,673	2,194,174
Serpentine stones	Cu. M.	1,175	431	2,020	434
Soil	Cu. M.	59,790	4,565	2,320	87
Stones, cobbles and boulders	Cu. M.	54,295	5,967	40,714	3,622
Volcanic cinders	Cu. M.	41,994	1,201	-	-
Lime			(57,742)		(62,055)
Slaked or hydrated	MT	17,357	(33,156)	24,427	(31,627)
Quicklime	MT	17,110	(24,587)	20,833	(30,428)
Limestone for:			326,031		293,902
Agricultural use	MT	78,232	9,004	37,226	4,965
Industrial use	MT	761,174	317,027	848,393	288,926
Fertilizer materials			197,743		163,828
Guano	MT	9,622	6,739	5,820	11,262
Pyrite concentrate	DMT	359,607	183,883	429,612	148,565
Rock phosphate	MT	21,793	7,121	13,263	4,000

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Table 11.6 Nonmetallic Mineral Production: 1990 and 1991 (concluded)
(Value in thousand pesos)

Mineral/mineral product	Unit	1991 Quantity	1991 Value	1990 Quantity	1990 Value
Miscellaneous			2,344,386		1,917,261
Barite	MT	110	62	289	170
Calcite	MT	147	65	-	-
Dolomite	MT	608,779	56,276	320,529	32,487
Diorite	MT	101,765	20,353	70	14
Feldspar	MT	47,979	10,264	168,368	35,359
Greenstones	MT	55	55	-	-
Fossilized Limestone	MT	7	5	-	-
Opallene Chert	MT	8	8	-	-
Jade	MT	-	-	144	261
Magnesite	MT	13,605	1,482	3,675	388
Mica	MT	4	155	-	-
Pumice	MT	19,305	568	1,065	544
Salt (from sea water)	MT	492,859	2,178,437	490,407	1,802,736
Sandstone/graywacke	MT	104,859	5,652	67,037	3,535
Schist		413	169	40	10
Silica sand	MT	275,042	28,829	256,076	18,486
Silica quartz	MT	34,650	24,550	35,975	4,736
Stalactite	MT	-	-	10	50
Sulfur		-	-	6,512	2,012
Tuff	MT	71,850	17,458	99,911	16,472
Cement raw materials			298,250		218,453
Limestone for cement manufacture	MT	5,384,267	215,247	3,818,141	139,244
Shale clay	MT	808,133	31,707	758,229	27,602
Silica sand	MT	257,510	28,895	305,644	27,608
Gypsum	MT	28,000	22,400	30,000	24,000
Cement and coal			1,420,754		1,059,760
Cement	Bags	172,285,443	(14,730,405)	160,941,800	(11,080,843)
Coal	MT	1,307,040	1,420,754	1,246,777	1,059,760

Note: Details may not add up to totals due to rounding.
Figures in parentheses not included in totals.

Source: Mines and Geo-Sciences Bureau.

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Table 11.7 Mineral Exports of the Philippines by Country of Destination: 1990 and 1991
(Value in thousand)

Mineral/country of destination	Unit	1991 Quantity	1991 FOB value Pesos	1991 FOB value U.S. dollars	1990 Quantity	1990 FOB value Pesos	1990 FOB value U.S. dollars
Total			21,462,525	784,067		21,722,626	886,770
Metallics			21,437,602	783,154		21,708,860	886,247
Nonmetallics			24,922	913		13,765	522
Gold	Kg	23,749.44	7,632,878	275,638	23,296	6,775,404	286,394
Japan		4,644	1,564,204	56,820	5,888	1,742,750	71,544
South Korea		46	14,929	528	83	25,367	972
USA		-	-	-	136	42,164	1,608
England		-	-	-	42	11,917	523
Gold delivered to Central Bank (CB)		16,347.44	5,195,442	186,588	13,482	3,918,015	165,873
Gold delivered to Pasar		2,655	893,977	31,020	3,665	1,035,191	45,874
China		57	18,327	681	-	-	-
Silver	Kg	36,267.72	130,908	4,778	43,977	157,137	6,497
Japan		16,565	57,408	2,094	17,206	55,633	2,315
South Korea		296	984	35	605	1,930	76
USA		-	-	-	663	2,833	108
England		-	-	-	2,088	7,790	340
Taiwan		-	-	-	-	-	-
Silver delivered to Central Bank		8,576.72	35,396	1,274	10,056	36,367	1,552
Silver delivered to Pasar		10,585.00	36,233	1,342	13,359	52,585	2,106
China		245	886	33	-	-	-

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Table 11.7 Mineral Exports of the Philippines by Country of Destination: 1990 and 1991 (continued)
(Value in thousand)

Mineral/country of destination	Unit	1991 Quantity	1991 FOB value Pesos	1991 FOB value U.S. dollars	1990 Quantity	1990 FOB value Pesos	1990 FOB value U.S. dollars
Copper concentrate	DMT	386,143	5,816,568	214,460	366,593	5,903,823	243,470
China		8,928	156,542	5,819	-	-	-
Japan		367,719	5,548,881	204,707	347,479	5,635,910	233,284
South Korea		9,496	111,145	3,933	14,922	195,110	7,420
USA		-	-	-	4,192	72,809	2,766
Taiwan		-	-	-	-	-	-
Copper concentrate delivered to Pasar		153,059	(2,471,444)	(190,214)	251,001	(4,117,909)	(165,495)
Copper cathodes (metal)	MT	104,477	6,798,310	249,670	115,723	7,849,574	309,008
Japan		48,577	3,175,642	115,380	56,918	3,882,489	152,140
Taiwan		22,057	1,459,859	52,851	30,950	2,119,821	83,663
South Korea		14,768	882,047	34,910	14,428	988,205	38,564
Singapore		5,573	364,328	13,269	3,280	224,642	8,906
Indonesia		1,289	85,250	3,085	3,076	180,037	7,664
China, People's Republic of (PROC)		8,040	501,176	18,274	5,190	317,214	12,918
Thailand		2,996	195,258	7,053	1,881	137,366	5,153
Greece		999	660,323	2,191	-	-	-
Germany		208	74,425	2,658	-	-	-
Metallurgical chromite concentrate	DMT	526	1,170	43	29,502	74,245	2,965
China		-	-	-	5,361	16,514	599
Japan		-	-	-	1,850	2,621	102
Ferrochrome Phils., Inc.		-	-	-	22,291	55,109	2,265
Inchrome		526	1,170	43	-	-	-

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Table 11.7 Mineral Exports of the Philippines by Country of Destination: 1990 and 1991 (continued)
(Value in thousand)

Mineral/country of destination	Unit	1991 Quantity	1991 FOB value Pesos	1991 FOB value U.S. dollars	1990 Quantity	1990 FOB value Pesos	1990 FOB value U.S. dollars
Metallurgical chromite ore	DMT	13,238	27,709	1,018	20,973	52,759	2,105
China		2,250	5,065	188	10,481	33,104	1,272
Ferrochrome Phils., Inc.		4,973	10,858	394	10,492	19,655	833
Inchrome		6,015	11,786	436	-	-	-
Chemical chromite ore	DMT	19,347	38,923	1,451	19,191	32,960	1,439
West Germany		19,347	38,923	1,451	19,191	32,960	1,439
Nickel (beneficiated ore)	DMT	637,087	816,301	29,716	517,535	652,549	25,961
Japan		637,087	816,301	29,716	517,535	652,549	25,961
Refractory chromite ore	DMT	83,300	174,836	6,380	87,849	210,405	8,408
Sweden		25,222	21,344	803	25,758	29,098	1,119
U.S.A.		11,529	35,890	1,306	20,221	56,805	2,264
Canada		7,437	23,793	860	11,258	30,373	1,259
Brazil		-	-	-	3,920	13,314	512
Japan		11,317	39,803	1,443	11,175	35,303	1,371
Thailand		2,069	7,372	269	4,987	15,661	637
Chile		7,370	23,572	863	4,126	11,930	490
Netherlands		1,993	6,016	217	1,485	3,828	159
Taiwan		-	-	-	1,408	4,256	177
Peru		-	-	-	2,564	6,870	296
Australia		1,023	3,547	127	947	2,964	124
Norway		15,400	13,497	490	-	-	-

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Table 11.7 Mineral Exports of the Philippines by Country of Destination: 1990 and 1991 (concluded)
(Value in thousand)

Mineral/country of destination	Unit	1991 Quantity	1991 FOB value Pesos	1991 FOB value U.S. dollars	1990 Quantity	1990 FOB value Pesos	1990 FOB value U.S. dollars
Dolomite	MT	212,174	24,499	898	112,877	11,288	413
Japan		132,056	16,488	612	96,407	9,641	344
China		-	-	-	16,470	1,647	69
Taiwan (Rep. of China)		80,118	8,012	286	-	-	-
Guano	MT	-	-	-	868	1,526	75
Japan		-	-	-	868	1,526	75
Marble (Unprocessed)	Cu.M.	91	121	4	246	659	24
Japan		-	-	-	246	659	24
Taiwan (Rep. of China)		91	121	4	-	-	-
Pebbles	Cu.M.	-	-	-	14	292	10
Japan		-	-	-	14	292	10
Stones	Cu.M.	171	302	11	-	-	-
Taiwan		171	302	11	-	-	-

Note: Details may not add up to totals due to rounding.
Figures in parenthesis not included in totals.

Source: Mines and Geo-sciences Bureau.

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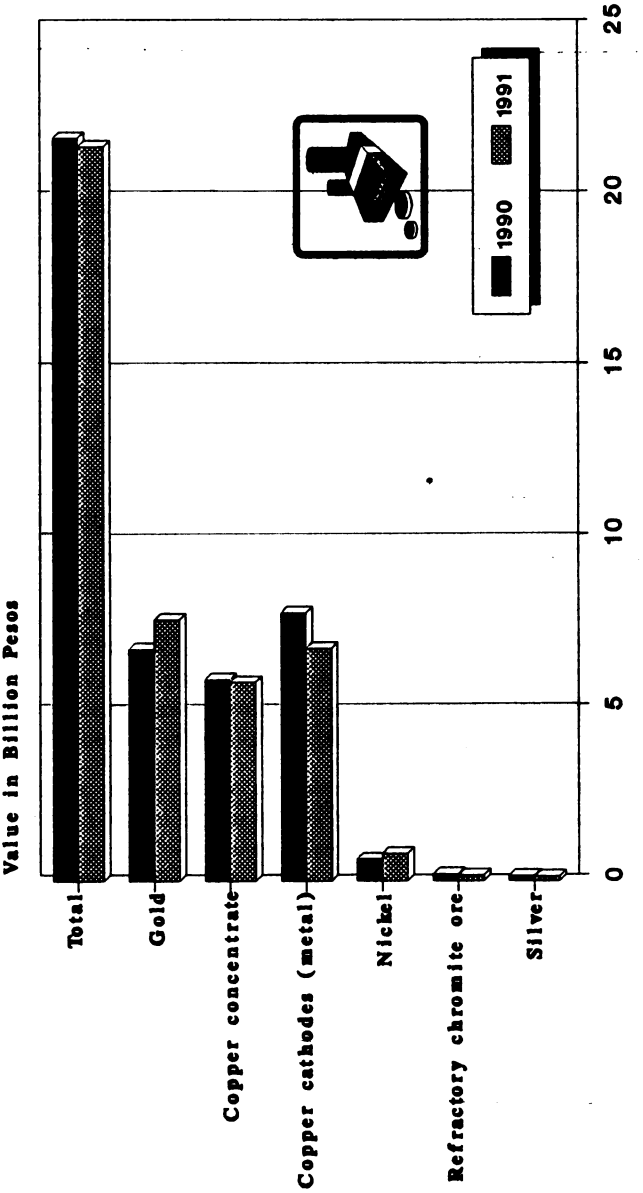
Figure 11.2 Value of Philippine Mineral Export: 1990 and 1991



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CHAPTER 12
Energy and Water

12.1 Energy

Since the oil crisis in the early 70s, the Philippines has embarked on a comprehensive program of energy self-reliance in order to reduce the country's dependence on imported oil. Towards this end, massive efforts to develop indigenous energy resources such as oil and gas, coal, geothermal and nonconventional energy resources like solar and biomass-based fuels have been actively pursued over the past two decades.

This chapter discusses the development of the country's energy resources, supply and consumption, the electric power sector and the policies and strategies of the energy sector. The second part of this chapter focuses on water resources and supply.

12.1.1 Energy Resources Development

Capital expenditures for the energy resource development sector for the period 1992-2000 is estimated at P55.0 billion at constant 1992 prices. Capital requirement for oil and gas development is projected to reach P20.8 billion; coal, P5.8 billion; geothermal, P23.9 billion and nonconventional, P4.5 billion. Of the total, private sector investments are projected to reach 59.1 percent. Total planned expenditure for geothermal development constitutes 43.4 percent, the highest among the different energy resources. See Table 12.1.

Oil and Gas. Exploration activities for petroleum has been active since 1990 following the discovery of West Linapacan. In 1992, an additional five wells were drilled with a total footage of 43.7 thousand feet. Oil production for the year totalled to 3.26 million barrels. See table 12.2

Coal. In 1992, a total of 63 exploration and production contracts were in effect. Exploration activities showed a total of 1.55 billion tons of potential reserves, of which 370 million tons are proven.

The country has a total of 14 coal regions, with an aggregate proven coal reserves of 370.44 million metric tons as of December 31, 1993. Semirara Island is the richest coal region accounting for 145.45 million metric tons or 39.26 percent of the country's total proven reserves. Refer to Tables 12.3 and 12.4.

Geothermal. The government continues to intensively explore the country's geothermal energy source since this energy resource base is the least cost alternative to oil-based energy in the face of the rising cost of world oil prices. The Philippines remains the world's second largest producer of geothermal

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energy next to the U.S. Geothermal energy resources have been initially assessed in 25 sites to have a total potential capacity of around 3,388 megawatts (MW). Of these geothermal potentials, 28.98 percent or 980 MW is ready to be harnessed, while the remainder needs to be explored further.

In 1993, a total of 32 geothermal wells were drilled in the country's five geothermal fields of Tiwi (Albay), Mak-ban (Laguna), Tongonan (Leyte), Palimpinon (Southern Negros), and Bac-Man (Albay/Sorsogon), bringing the total number of geothermal wells to 490. Installed generating capacity of these additional wells totalled 998 MW, with a proven steam capacity of 1,554 MW resulting to an oil displacement of about 9.80 million barrels fuel-oil equivalent (MMBFOE). See Table 12.5 for more details.

Hydropower. A total of 11,677 MW of hydropower potential has been identified in 163 sites throughout the country. This includes the 2,147 MW of hydroelectric power plants already operational as of end-1989. As of 1991, the total hydropower capacity was estimated at 2,155 MW, a slight increase over the 1990 hydro capacity of 2,153 MW. Hydropower generation for 1991 reached 5,160 Gigawatthours (GWH), which is 14.9 percent lower than the previous year's level because of low water levels in dam reservoir.

Nonconventional Energy. These include bagasse, agriwaste, alcohol, coconut oil, bio-gas, solar water heaters and windmills.

Development of the nonconventional energy sources is in line with the government's pursuit for energy self-reliance and rural development. The program is centered on the promotion and dissemination of appropriate technologies utilizing the abundant energy sources in the countryside.

In 1992, it contributed the equivalent of 14.66 MMBFOE. Bagasse and agriwastes provide the bulk of nonconventional energy production while installations such as photovoltaics, solar heating systems and windmills have made useful energy available in remote areas of the country.

12.2 Energy Supply and Consumption

12.2.1 Petroleum

Supply. The country's supply of petroleum consists of crude oil and petroleum products.

Crude oil supply in 1992 reached 91.96 million barrels, the bulk of which (96.8 percent) were imported from foreign countries. The rest (3.2 percent) were produced from the country's oil wells. Imported crude oil reflected an increase of 16.11 percent over the previous year's level. The Middle East countries supplied 72.89 million barrels or 81.9 percent of total crude oil importation. Refer to Tables 12.7 and 12.8.

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On the other hand, imported petroleum products reached 15.70 million barrels valued at $305.42 million. Fuel oil accounted for 6.6 million barrels or 42.24 percent of total petroleum products importation. See Table 12.9 for more details.

Meanwhile, production of the country's oil refineries reached 82.77 million barrels with fuel oil and diesel oil accounting for 33.19 percent and 32.30 percent, respectively. Refer to Table 12.10.

Consumption. Consumption of petroleum products continued to rise since 1985 registering 92.94 million barrels in 1992, up by 8.62 percent over the previous year's level. Diesel, which is used mainly for power generation, has the highest consumption of 36.23 percent of the total. Fuel oil followed with consumption share of 30.40 percent. See Table 12.11 for more details.

12.2.2 Coal

Coal production in 1992 registered at 1.58 million metric tons, a shortfall of 0.45 percent over the previous year's level. Coal consumption, on the other hand, reached 2.72 million metric tons or an increase of 18.93 percent over the 1992 level. Coal was primarily used in cement manufacture (42.81 percent) and power generation (37.62 percent).

12.3 Electric Power

12.3.1 Development of the Electric Power Sector

The country's electric power industry was initiated by private enterprise. During the Spanish regime in the late nineteenth century, the *La Eletricista* constructed the first central electricity generating station in Manila, consisting of ten 60-kilowatt AC steam generators. The industry grew steadily as private business firms poured in capital to install power plants in the relatively progressive areas of the country.

On November 3, 1936, the government gained entrance to the power sector with the enactment of Commonwealth Act No. 120 creating the state-owned National Power Corporation (NPC), to undertake the development of the country's hydropower potentials. In 1977, the NPC chapter was revised to expand its power generation base to include geothermal, oil, coal, nuclear, and other energy sources.

In 1972, Presidential Decree No. 40 was promulgated which rationalized the disorganized power sector. This decree gave NPC the government's mandate to install additional generation and transmission facilities in the country's major islands and ultimately, to become sole owner and operator of a single integrated power network envisioned for the country.

At that time (1972), roughly 530 small electric utilities were operating in the country of which 320 operated inefficient and obsolete diesel generating sets

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with less than 100-kilowatt capacity. The biggest utility then was the privately-owned Manila Electric Company (MERALCO) with 1,404 megawatts capacity. On the other hand, NPC had 654 MW accounted for mainly by hydropower plants.

The succeeding years saw the integration of small private and municipal power systems and their eventual takeover by electric cooperatives, which grew in number in accordance with the rural electrification thrust. In addition, the prohibitive hike in costs of power generation, especially spiralling fuel oil costs, led to the folding up of numerous small power firms.

Starting 1988, NPC has taken over the operation of power plants in small islands formerly managed by rural electric cooperatives, in line with the government's objective of providing affordable power rates in the rural areas.

To sustain the country's move towards economic progress, the government continue to further improve power generation. In consonance to this, RA 6957 was created in 1990, authorizing private sectors to finance, construct, operate and maintain infrastructure projects through the Build-Operate-Transfer (BOT) scheme. This paved way to the construction of the 210-MW gas turbine in Navotas, the first power plant under the BOT scheme built by Hopewell Energy Ltd. and inaugurated in 1991.

12.3.2 Electric Generation and Consumption

To meet the expanding power demands in the country, NPC increased the number of its power plants, bringing its total generating capacity to 6,628 MW in 1992 from 6,481 MW in 1991. Due to frequent breakdown of old thermal plants and poor operating performance of hydroelectric plants caused by the dry spell, NPC increased its dependence on oil-based power generation, which displayed the highest share of 3,145 MW to the total generating capacity or capacity mix of 47.45 percent. See Table 12.14 for details.

Electricity generated by NPC boosted to 25,567 GWH in 1992 from the production level of 25,437 GWH in 1991. This translates to an improvement of 130 GWH or 0.51 percent. Oil-based power generation, which grew consistently over the past seven years, shared more than half (52.55 percent) of the aggregate power production in 1992. It was followed by geothermal (22.26 percent), surpassing hydro potential, which used to gain higher power production until 1990. See Table 12.15 for details.

As of 1992, the nationwide installed generating capacity has reached a total of 6,880 MW, of which 96.34 percent was attributable to NPC power plants. The capacity mix was 48.98 percent oil-based, 32.22 percent hydro, 12.91 percent geothermal and 5.89 percent coal. Other sectors with generating capacities include self-generating industries, private establishments, MERALCO and National Electrification Administration (NEA). See Table 12.16 for details.

On the other hand, electric energy generated exhibited a slight improvement of 0.13 percent from 25,649 GWH in 1991 to 25,682 GWH in 1992, about 99.55 percent of which was generated by NPC. Industrial and residential sectors,

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with consumption shares of 35.28 percent and 24.67 percent, respectively remained as the highest consumers of the bulk of electricity generated in 1992. See Table 12.17 for details.

12.3.3 Electrification

The task of distributing electric power to various consumer sectors is undertaken by the government and the private sectors. Nationwide electrification level has climbed to 69.57 percent of the 9.31 million potential households in 1991 from 68 percent for the previous year.

MERALCO, the largest electricity distributor in the country and NPC's biggest customer, serves mainly the electricity needs of Metro Manila Area. As of 1991, MERALCO has energized 2.55 million households out of the 2.73 million potential connections in 109 municipalities of Metro Manila. MERALCO has also expanded its distribution in certain areas of Cavite, Laguna, Bulacan, Batangas and Quezon. See Table 12.18 for details.

On the other hand, the rural electrification program of NEA continued to extend electricity service, as well as improve service reliability of existing systems to the rural areas and remote barangays, while simultaneously improving the viability of rural electric cooperatives. As of September 30, 1993, there were 226 rural electric cooperatives nationwide, energizing a total of 22,857 barangays in 1,349 municipalities. Total household connections has reached 3.59 million, representing 51 percent of the 7.07 million households in 1993. See Table 12.19 for details.

Families with Electricity. As of 1991, families in the country which have electricity reached 7.39 million or 61.69 percent of the 11.98 million families nationwide, a figure higher than the registered rate of 59.89 percent in 1988. Electrification rate of 80.88 percent in urban areas was significantly higher than the rate in rural areas of only 42.82 percent.

Being a highly urbanized place, National Capital Region (NCR) recorded the highest electrification rate of 96.63 percent among the regions. This was followed by Central Luzon and Ilocos Region, with electrification rates of 84.89 percent and 71.65 percent, respectively. On the other hand, the Autonomous Region of Muslim Mindanao (ARMM) represented the least electrified families, with a rate of 19.87 percent. See Table 12.20 for more details.

12.4 Philippine Energy Plan: 1992 - 2000

The Philippine energy plan for the 90s provides a framework for an optimum mix of policies and strategies for attaining greater reliability of energy supply, efficiency of energy use and environmental sustainability.

To meet its fundamental objectives more specific policy thrusts were outlined such as: sustained momentum in the exploration and development of oil and other indigenous resources; diversification of sources of energy imports;

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encouragement of private sector participation in energy projects; enhancement of market-based reorientation of domestic energy pricing; promotion of fuel and diversification in power generation; intensified promotion of energy conservation and energy efficient technologies; enhancement of assessment and planning for the energy needs of countryside development; integration of environmental concerns in planning and implementation of energy projects; rationalization of operation of energy institutions and strengthening of coordination of energy policy and program execution.

12.5 Water

12.5.1 Water Service Development

The Filipinos during the 18th and 19th centuries relied only on dug/drilled wells and a few developed springs for their water needs. It was only in 1882 when the first waterworks system of the country, the Carriedo Waterworks, was created to serve the city of Manila. The coming of the Americans at the turn of the 20th century further developed this service. The Carriedo Waterworks was reorganized in 1919 into the Metropolitan Water District and was made responsible for the construction of the Balara Filtration Plant, which until this time, is still operating. Moreover, new water systems were provided for bigger towns and cities, while handpumps were introduced in less populated areas. Many of these facilities were destroyed during World War II.

In an effort to speed up reconstruction, the National Waterworks and Sewerage Authority (NAWASA) was created in 1955 to effect a centralized and consolidated control and supervision of all waterworks and sewerage system in the country.

By the 70s, in line with the objective of providing water supply to every Filipino household, the NAWASA was abolished and replaced with three specialized agencies that would take responsibility over Metro Manila and its contiguous areas; the Local Water Utilities Administration (LWUA), which handles cities and municipalities with population of 20,000 or more; and the Rural Waterworks Development Corporation (RWDC) which is concerned with the rural population and the smaller provincial urban communities.

Other agencies with responsibilities in the water sector include the then Ministries of Public Works and Highways (MPWH), Local Government (MLG), and Health (MOH), and the National Water Resources Council (NWRC).

The MPWH was made the central coordinating office for all water supply plans, programs and policies and was further made the principal implementing arm for engineering and construction of the rural water supply projects. The MOH is responsible for promoting safe water supplies, concurring the sites of water sources and exercising surveillance of water quality. Finally, the NWRC

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served as the planning and policy formulating agency for water resources development and management.

In January 1987, the government injected further institutional reforms for the sector with the issuance of E.O. No. 124. The major features of the order in relation to the sector are as follows: 1) the Rural Waterworks Development Corporation was abolished and its function and assets were transferred to the LWUA; 2) the NWRC was reorganized and renamed as National Water Resources Board (NWRB) and some of its technical functions were absorbed by the DPWH; 3)the MWSS and LWUA remained to be attached to DPWH; and 4) the DPWH continued to implement water supply projects, particularly the basic level of water service.

12.5.2 Water Supply

12.5.2.1 Basic Levels of Water Service

The various agencies involved in water supply provide three levels of water service, namely: Level I or Point Source; Level II or Communal Faucet System; and Level III or Individual House Connections or Waterworks System.

Level I is generally a protected well or spring with no distribution system. It is generally suitable for areas where houses are few and scattered thinly. The supply coverage is 40- 100 households per deep well and 5-40 households per shallow well.

Level II is generally intended for rural areas where houses are clustered densely enough to justify a simple piped distribution system with public standpipes. General features include supply derived from a point source; electrically driven pump for wells or low level spring, storage tank; distribution networks with public faucets; and supply coverage of 4-5 households per faucet.

Level III water supply service refers to a pipe system with individual house connections. It is generally suited for densely populated urban areas. Sources may also include rivers or lakes, aside from deep well and springs. Distribution network consists of individual house connections and some public faucets. Supply coverage is 600 households. Table 12.21 presents the Water Supply Targets for 1988 up to the year 2000.

12.5.2.2 Household Water Supply

There were 41.37 percent of the total 11.98 million families in the country who depended largely on the community water system as their main source of water supply in which 21.27 percent had individual faucets inside their houses or yards and 19.66 percent used public faucets. The next widely used source was tubed/piped well, accounting for 32.32 percent, most of which were shared with others. Dependence on rain water (0.61 percent) further dropped to a minimal level as more families shifted to other improved sources of water supply.

In the urban areas, majority or 55.75 percent of the families relied on community water system, in which water distribution was mainly through

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faucets installed inside their houses or yards. Inspite of the increased dependence of rural families on community water system by 2.36 percent, tubed/piped well remained as their largest source of water supply, accounting for 36.95 percent of the total families in rural areas.

Majority of the regions, led by NCR, depended mainly on faucet from the community water system. However, tubed/piped well was more dominantly used in Ilocos, Cagayan Valley, Southern Mindanao and Central Mindanao, dug well in Western Visayas while spring, river, stream and others in ARMM. Refer to Table 12.22 for more details.

12.5.2.3 Water Districts

A water district is a nonprofit, quasi-public independently-administered local entity created primarily for the purpose of acquiring, installing, improving, maintaining and operating water supply and distribution system for domestic, industrial, municipal, and agricultural uses of residents within the boundaries of such district. It is also tasked to provide, maintain and operate the waste water collection, treatment and disposal facilities of communities within the said area. The national umbrella of these water districts is the Philippine Association of Water District or PAWD, formed in August 31, 1974. All water districts issued with a Certificate of Conditional Conformitance or CCC by LWUA automatically become members of the association.

In 1991, there were 560 water districts spread all over the country, showing a slight increase of 1.45 percent from the figure in 1990 or an average annual rate of 9.08 percent from 1989. Among the regions, Central Luzon had the highest number of water district, obtaining 15.89 percent of the total. It was closely followed by Western Visayas, with a mark of 14.46 percent. On the other hand, Central Mindanao registed the lowest number of water district of only 3.57 percent. Refer to Table 12.23 for more details.

Sources:

12.1-12.2.2	Department of Energy, Supply Planning and Monitoring Division
12.3-12.3.2	National Power Corporation; Department of Energy, Supply Planning and Monitoring Division
12.3.3,12.4	Department of Energy, Supply Planning and Monitoring Division; National Electrification Administration; National Statistics Office.
12.5-12.5.2.1	Department of Public Works and Highways, *Water Supply Sewerage Master Plan of the Philippines: 1988-2000.*
12.5.2.2	National Statistics Office.
12.5.2.3	Local Water Utilities Administration.
12.5.2.4	The Water Supply Program: 1988-2000.

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Table 12.1 Capital Investment Requirements for National Energy Program: 1992-2000
(In million pesos, at constant 1992 prices)

	1992		1993		1994		1995		1996	
	Local	Forex	Local	Forex	Local	Forex	Local	Forex	Local	Forex
Energy Resource Development	1,497	5,134	2,358	6,523	2,889	6,715	1,959	4,845	1,422	3,663
Oil and gas	21	3,301	41	1,947	33	2,275	34	2,275	38	2,077
Government	21	56	41	44	33	62	34	62	38	71
Private	0	3,245	0	1,903	0	2,213		2,213		2,006
Coal	327	73	392	124	480	80	560	74	624	289
Government	97	56	127	99	156	62	203	62	245	288
Private	230	17	266	25	324	18	357	12	379	2
Geothermal	1,108	1,687	1,861	4,286	2,287	4,157	1,247	2,286	612	1,030
Government	832	1,286	1,585	3,885	1,984	3,714	997	1,926	362	670
Private	276	401	276	401	303	443	250	360	250	360
Nonconventional	41	73	64	165	89	204	118	210	149	267
Government	4	20	8	85	12	93	15	60	17	75
Private	37	53	56	80	77	111	103	150	132	192
Power	3,287	12,270	5,905	23,215	8,179	26,699	8,676	24,518	9,013	25,060
Electrification	4,400	5,635	3,464	4,868	2,886	3,658	2,886	2,626	3,095	2,154
Government	904	2,331	753	2,685	736	1,623	706	561	784	413
Private	3,496	3,304	2,711	2,186	2,149	2,036	2,180	2,065	2,312	1,741
Downstream	1,456	127	611	732	800	1,153	634	658	496	177
Government	1,456	127	611	732	800	1,153	634	658	496	177
Private	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a	n.a.	n.a.
Grand total	10,640	23,166	12,339	35,337	14,754	38,226	14,154	32,646	14,027	31,053
Government	6,601	16,146	9,030	30,744	11,900	33,406	11,265	27,847	10,955	26,753
Private	4,039	7,020	3,309	4,593	2,854	4,820	2,889	4,800	3,072	4,300

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Table 12.1 Capital Investment Requirements for National Energy Program: 1992-2000 (concluded)
(In million pesos, at constant 1992 prices)

	1997		1998		1999		2000	
	Local	Forex	Local	Forex	Local	Forex	Local	Forex
Energy Resource Development	1,165	2,888	1,344	3,031	1,406	3,194	1,473	3,527
Oil and gas	25	2,053	25	2,112	25	2,142	25	2,362
Government	25	47	25	47	25	47	25	267
Private		2,006		2,065		2,095		2,095
Coal	578	51	673	49	670	50	666	47
Government	194	47	288	47	288	47	288	47
Private	384	4	385	2	382	3	378	0
Geothermal	370	448	370	448	396	490	370	448
Government	120	89	120	89	120	89	120	89
Private	250	360	250	360	276	401	250	360
Nonconventional	193	335	277	421	315	512	413	670
Government	19	80	22	85	25	90	31	100
Private	174	255	255	336	290	422	382	570
Power	9,224	24,942	9,941	20,521	9,713	20,813	11,007	24,925
Electrification	3,208	2,242	3,324	2,301	3,446	2,390	4,345	2,478
Government	802	443	837	443	884	472	909	502
Private	2,406	1,800	2,487	1,859	2,562	1,918	3,436	1,977
Downstream	496	177	496	177	496	177	496	177
Government	496	177	496	177	496	177	496	177
Private	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Grand total	14,093	30,249	15,105	26,030	15,061	26,574	17,321	31,108
Government	10,880	25,824	11,729	21,408	11,551	21,735	12,876	26,107
Private	3,214	4,424	3,377	4,621	3,510	4,839	4,445	5,001

Source: Department of Energy Affairs, Philippine Energy Plan: 1992-2000.

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Table 12.2 Historical Performance in the Oil and Gas Exploration and Development: 1973-1992

Year	Number of wells drilled			Seismic lines (Km)	Geophy-sical permits	Geophysical survey contract	Service contract	Discovery wells	Development and production wells	Crude oil production wells (million barrels)
	Onshore	Offshore	Footage (Ft)							
Total	46	128	1,457,346	211,878	60	71	39	35	n.a.	47.29
1973	-	2	20,996	13,882	-	-	8	-	-	-
1974	1	2	25,320	15,270	-	-	3	-	-	-
1975	-	10	88,001	12,133	-	-	2	-	-	-
1976	3	5	81,882	6,112	1	1	9	2	-	-
1977	6	9	127,332	10,141	1	3	2	3	-	-
1978	5	7	89,912	18,995	2	7	3	1	-	-
1979	6	18	172,252	19,886	5	8	3	3	5	8.57
1980	7	14	173,455	24,641	6	10	1	4	-	3.62
1981	2	15	119,230	22,893	5	7	-	3	2	1.86
1982	2	11	83,769	5,663	5	2	-	4	5	3.57
1983	3	2	22,986	22,887	-	3	-	2	-	4.87
1984	1	1	33,473	3,343	-	-	-	1	-	3.89
1985	-	-	-	540	-	1	-	-	-	2.89
1986	-	-	-	2,524	-	1	-	-	-	2.52
1987	1	3	27,489	2,794	-	5	2	-	1	2.04
1988	2	5	164,670	2,918	-	3	1	3	-	2.18
1989	2	5	48,984	1,504	-	4	2	2	-	1.88
1990	3	2	24,776	2,734	4	1	2	2	-	1.73
1991	2	8	69,804	2,917	4	2	0	1	n.a.	1.09
1992	0	5	43,699	10,238	10	9	1	3	n.a.	3

Source: Department of Energy Affairs. Philippine Energy Plan: 1992-2000.

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Table 12.3 Performance in the Coal Development Program: 1973-1992

Year	Cumulative number of service contracts	Annual production (MT. R.O.M.)	Reserves (In million MT)	
			Proven	Potential
Total	63	15,209,333	370	1,558
1973	-	39,004	77	125
1974	-	50,745	77	125
1975	-	105,128	77	125
1976	-	122,000	77	125
1977	5	284,554	77	125
1978	17	254,515	77	125
1979	37	263,135	125	1,010
1980	45	328,786	186	1,690
1981	50	330,720	220	1,753
1982	55	557,983	263	1,538
1983	55	1,019,594	312	1,506
1984	49	1,216,388	337	1,535
1985	45	1,261,564	354	1,558
1986	45	1,235,503	354	1,558
1987	52	1,208,072	354	1,558
1988	50	1,358,241	370	1,558
1989	51	1,360,416	370	1,558
1990	58	1,243,013	370	1,558
1991	61	1,309,312	370	1,558
1992	63	1,660,660	370	1,558

Source: Department of Energy Affairs. *Philippine Energy Plan: 1992-2000.*

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Table 12.4 Summary of Philippine Coal Reserves by Coal Region: As of December 31, 1993 (Million metric tons)

Coal region	Resource Potential (proven)	Positive reserves	Probable reserves	In-situ reserves	Mineable reserves
Total	1,158.00	1,422.07	133.85	370.44	264.09
Cagayan Valley	336.00	68.48	53.18	103.94	88.35
Cebu (Central)	40.00	1.26	1.18	2.04	1.23
Cebu (Northern)	75.00	0.88	0.42	1.16	0.70
Cebu (Southern)	50.00	1.73	1.29	2.59	1.55
Davao	100.00	0.21		0.21	0.18
Masbate	2.5	0.08		0.09	0.05
Mindoro	100.00	1.30	0.20	1.43	0.86
Negros	4.50	1.05		1.05	0.63
Polillo-Batan-Catanduanes	17.00	6.52	1.27	7.37	4.42
Quezon	2.00	0.09		0.09	0.06
Samar	27.00	6.33	4.68	8.58	8.06
Semirara	550.00	1,266.86	27.89	145.45	126.86
Surigao	209.00	32.03	37.80	57.23	34.34
Zamboanga	45.00	35.25	5.94	39.21	23.53

Source: Department of Energy Development Services, Coal/Uranium Division.

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Table 12.5 Historical Performance in the Geothermal Resources Development: 1972-1993

Year	Number of fields (cumulative)	Number of wells drilled (cumulative)	Total well capacity (MW)	Installed generating capacity (cumulative) (MW)	Oil displacement (MMBFOE
Total	5	490	20,714	998	111.30
1972	1	1	5	-	-
1973	1	3	11	-	-
1974	2	7	16	-	-
1975	2	14	58	-	-
1976	4	33	138	-	-
1977	4	56	253	3	-
1978	4	88	430	3	0.01
1979	5	143	699	223	1.13
1980	5	192	902	446	3.58
1981	5	244	1,153	501	4.78
1982	5	290	1,377	559	6.18
1983	5	327	1,546	784	7.06
1984	5	339	1,348	894	7.83
1985	5	352	1,485	894	8.53
1986	5	358	1,448	894	7.91
1987	5	364	1,427	894	7.79
1988	5	376	1,367	894	8.35
1989	5	394	1,309	888	9.17
1990	5	415	1,316	888	9.42
1991	5	435	1,402	888	9.93
1992	5	458	1,470	888	9.83
1993	5	490	1,554	998	9.80

MMBFOE - million barrels of fuel oil equivalent.

Source: Department of Energy Affairs. *Philippine Energy Plan: 1992-2000.*

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Table 12.6 Historical Performance in the Nonconventional Resources Development: 1973 - 1992 (In MMBFOE)

Year	Bagasse	Agriwaste	Others	Total
1973	2.25	n.a.	-	2.25
1974	7.37	3.37	0.20	10.94
1975	6.43	3.70	0.28	10.41
1976	7.54	4.28	0.32	12.14
1977	7.59	4.83	0.35	12.77
1978	6.41	6.37	0.43	13.21
1979	6.35	6.27	0.44	13.06
1980	5.90	7.60	0.01	13.51
1981	6.22	6.34	0.33	12.89
1982	7.35	5.82	0.07	13.24
1983	5.47	9.05	0.07	14.59
1984	6.57	8.23	0.21	15.01
1985	4.36	12.00	0.18	16.54
1986	4.09	11.65	0.47	16.21
1987	3.54	11.23	0.56	15.33
1988	4.59	9.33	0.52	14.44
1989	6.14	9.12	0.27	15.53
1990	5.42	10.35	0.32	16.09
1991	6.15	8.54	0.36	15.05
1992	6.06	8.19	0.41	14.66

Source: Department of Energy Affairs. *Philippine Energy Plan: 1992 - 2000*

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Table 12.7 Supply of Crude Oil by Country of Origin: 1988-1992
(Thousand barrels)

Country	1988		1989		1990		1991		1992	
	Quantity	Percent distri-bution	Quantity	Percent distri-bution	Quantity	Percent distri-bution	Quantity	Percent distri-bution	Quantity	Percent distri-bution
Total	72,887	100.0	72,792	100.0	81,819	100	77,821	100.0	91,955	100.0
Philippines	2,105	2.9	1,906	2.6	1,720	2.1	1,164	1.5	2,945	3.2
Imports	70,782	97.1	70,886	97.4	80,099	97.9	76,657	98.5	89,010	96.8
Middle East	51,979	71.3	55,413	76.1	65,531	80.1	60,382	77.5	72,891	79.3
Saudi Arabia	4,579	6.3	9,696	13.3	25,659	31.4	34,682	44.5	43,441	47.2
Kuwait	9,966	13.7	10,024	13.8	6,748	8.2	-	-	4,997	5.4
Dubai	9,181	12.6	9,929	13.6	17,777	21.7	10,045	12.9	-	-
Iran	12,901	17.7	15,137	20.8	5,331	6.5	11.408	14.6	9,467	10.3
Iraq	1,313	1.8	4,224	5.8	3,843	4.7	-	-	-	-
Qatar	2,752	3.8	2,273	3.1	4,009	4.9	4,247	5.4	2,568	2.8
Oman	5,440	7.5	-	-	1,030	1.3	-	-	-	-
Neutral Zone	1,785	2.4	-	-	-	-	-	-	-	-
United Arab Emirates	4,062	5.6	4,130	5.7	1,133	1.4	-	-	12,418	13.5
Other regions	18,804	25.8	15,473	21.3	14,567	17.8	16,275	20.9	16,119	17.5
Indonesia	-	-	-	-	708	0.9	1,432	1.8	1,631	1.8
Pakistan	-	-	-	-	311	0.4	160	0.2	-	-
China (PROC)	4,208	5.8	3,875	5.3	1,154	1.4	2,990	3.8	761	.8
Malaysia	9,244	12.7	7,859	10.8	7,474	9.1	7,130	9.2	9,194	10.0
Brunei	2,138	2.9	2,219	3.0	4,491	5.5	4,562	5.9	4,302	4.7
Australia	3,214	4.4	1,520	2.1	430	0.5	-	-	231	.

Source: Department of Energy Affairs.

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Table 12.8 Crude Oil Importation by Origin: 1988-1992
(Volume in thousand barrels; CIF value in thousand dollars)

	1988		1989		1990		1991		1992	
Country	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Total	70,783	1,008,444	70,886	1,199,097	80,098	1,724,929	76,657	1,439,808	89,011	1,660,261
Middle East	51,979	721,058	55,413	920,341	65,530	1,373,670	60,382	1,094,206	72,891	1,319,283
Saudi Arabia	4,579	58,481	9,696	157,737	25,659	581,653	34,682	617,433	43,441	775,783
Kuwait	9,966	133,669	10,024	166,298	6,748	110,179	-	0.00	4,997	92,214
Dubai	9,181	131,194	9,929	156,635	17,777	350,648	10,045	185,527	-	-
Iran	12,901	179,871	15,137	254,165	5,331	140,391	11,408	199,833	9,467	170,488
Iraq	1,313	16,780	4,224	72,036	3,843	65,844	-	-	-	-
Qatar	2,752	39,468	2,273	39,647	4,009	79,420	4,247	91,413	2,568	50,217
Oman	5,440	81,163	-	-	1,030	16,607	-	-	-	-
Neutral Zone	1,785	25,013	-	-	-	-	-	-	-	-
United Arab Emirates	4,062	55,419	4,130	73,823	1,133	28,928	-	-	12,418	230,581
Other regions	18,804	287,386	15,473	278,756	14,568	351,259	16,275	345,602	16,120	340,978
Indonesia	-	-	-	-	708	24,814	1,432	31,283	1,631	34,312
Pakistan	-	-	-	-	311	9,076	161	3,405	-	-
Malaysia	9,244	147,351	7,859	148,256	7,474	176,562	7,130	159,873	9,194	198,125
Brunei	2,138	34,876	2,219	42,549	4,491	112,477	4,562	98,601	4,303	90,561
China (PROC)	4,208	54,967	3,875	58,845	1,154	18,792	2,990	52,440	761	12,679
Australia	3,214	50,192	1,520	29,106	430	9,538	-	-	231	5,301

Source: Department of Energy Affairs.

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Table 12.9 Petroleum Products Importations: 1988-1992
(Volume in thousand barrels; CIF value in thousand dollars)

	1988		1989		1990		1991		1992	
Product	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Total	7,263	119,455	11,147	178,606	9,754	186,391	13,245	272,936	15,695	305,419
Avgas	32	1,041	25	1,076	38	2,433	40	2,439	23	1,218
Avturbo	-	-	-	-	-	-	-	-	-	-
Diesel	1,044	18,790	1,220	29,266	2,377	62,174	4,815	133,394	6,423	165,374
Fuel oil	4,181	54,104	7,946	112,764	4,927	83,617	4,663	67,116	6,629	96,060
Liquified petroleum gas	1,193	19,526	1,146	17,478	1,904	27,456	2,028	34,311	2,571	41,658
Lube oil base stocks	73	14,838	-	-	-	-	94	6	-	-
Slop oil	155	700	147	1,097	139	1,102	132	1,228	14	103
HVGO	188	3,428	-	-	-	-	-	-	-	-
Feedstock	371	6,457	174	3,698	-	-	875	16,596	-	-
Solvents	17	494	-	-	17	541	-	-	30	1,006
Used lubricating oil	9	77	11	70	1	25	-	-	-	-
MS	-	-	41	1,046	51	1,953	-	-	-	-
Jet A-1	-	-	220	5,926	299	7,088	-	-	-	-
Kerosene	-	-	218	6,186	-	-	598	17,852	-	-

Note: Details may not add up to totals due to rounding.

Source: Office of Energy Affairs.

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Table 12.10 Refinery Production: 1984-1992
(Thousand barrels)

Product	1984	1985	1986	1987	1988	1989	1990	1991	1992
Total	53,427	46,427	51,276	61,926	66,435	67,767	77,284	74,176	82,769
Avgas	(9)	12	1	-	-	-	-	-	-
Avturbo	3,323	2,595	2,908	4,023	4,978	4,420	3,421	3,453	4,067
Premium gasoline	5,976	6,292	6,783	8,370	8,610	9,150	10,863	8,916	10,101
Regular gasoline	2,514	2,494	2,617	3,455	3,078	3,450	3,398	2,952	3,278
Diesel oil	17,030	14,733	15,789	17,839	20,840	20,806	23,729	24,156	26,733
Fuel oil	18,546	15,124	17,304	20,947	20,728	22,160	26,428	24,131	27,474
Kerosene	2,383	2,128	2,304	2,586	2,829	3,415	3,897	3,299	4,280
LPG	1,593	1,553	1,878	2,309	2,390	2,276	2,703	2,777	2,914
Asphalts	363	240	254	280	285	365	300	333	266
Refinery process gas	147	-	-	-	-	-	-	-	-
Solvents	199	184	208	274	345	469	568	778	456
Naptha	1,362	1,072	1,230	1,843	2,352	1,256	1,977	3,381	3,200

Source: Department of Energy Affairs.

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Table 12.11 Domestic Net Consumption of Petroleum Products: 1984-1992
(Thousand barrels)

Product	1984	1985	1986	1987	1988	1989	1990	1991	1992
Total	61,432	54,494	57,742	67,144	72,455	81,607	85,480	85,569	92,945
Avgas	39	36	35	36	39	39	36	28	28
Avturbo	2,824	2,710	2,716	3,304	3,759	4,281	3,983	3,847	4,447
Premium gasoline	5,954	5,885	6,334	7,055	7,751	8,829	9,390	9,112	9,160
Regular gasoline	2,717	2,562	2,806	3,090	3,247	3,471	3,465	2,965	3,236
Kerosene	2,269	2,074	2,273	2,545	2,815	3,456	3,704	3,580	3,916
Diesel	17,090	15,702	16,223	17,839	19,188	22,237	25,220	28,263	33,671
Fuel oil	24,390	20,039	21,511	26,645	27,794	30,349	30,375	28,757	28,259
Liquified petroleum gas	2,225	2,234	2,464	2,843	3,503	4,183	4,598	4,684	5,431
Process gas	147	-	-	-	-	-	-	-	-
Asphalts	347	284	289	282	317	342	286	326	304
Solvents	155	160	200	246	288	297	267	182	159
Lubes and greases	796	710	747	897	887	1,058	1,070	907	1,023
Waxes and petrolatum	-	-	-	1	-	-	-	-	-
Others	-	-	5	7	11	13	15	10	11
Refinery fuel and loss	2,479	2,098	2,139	2,354	2,856	3,052	3,071	2,908	3,300

Source: Department of Energy Affairs.

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Table 12.12 Coal Production and Value: 1965-1992
(Quantity in metric tons, value in thousand pesos)

Year	Quantity	Value
1965	94,541	2,375
1966	75,324	1,757
1967	69,753	1,616
1968	32,150	898
1969	53,341	1,157
1970	42,401	1,133
1971	40,024	1,588
1972	38,900	1,635
1973	39,004	1,766
1974	50,746	7,608
1975	105,128	13,158
1976	122,000	19,330
1977	284,554	45,529
1978	254,515	42,057
1979	263,135	51,311[a]
1980	328,786	88,772[a]
1981	330,720	112,445[a]
1982	557,983	189,714[a]
1983	1,019,594	392,544[a]
1984	1,216,388	1,131,241
1985	1,261,564	1,173,255
1986	1,235,503	1,107,245
1987	1,208,072	n.a.
1988	1,358,241	n.a.
1989	1,360,416	n.a.
1990	1,287,000	n.a.
1991	1,253,489	n.a.
1992	1,584,359	n.a.

[a] Value of production computed at P195/metric ton in 1979; P270/metric ton in 1980; P340/metric ton in 1981 and 1982; and P385/metric ton in 1983.
Source: *Department of Energy Affairs.*

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Table 12.13 Coal Consumption Sector: 1977-1993
(Metric tons)

Year	Total	Power generation	Cement	Mining	Coco-veg	Chemical	Steel/metal nickel	Fertilizer
1977	245,544	22,355	166,915	56,274	-	-	-	-
1978	259,197	25,356	182,134	47,423	3,000	1,284	-	-
1979	232,780	32,883	142,118	39,904	5,898	11,977	-	-
1980	281,227	52,378	168,566	26,839	9,737	23,707	-	-
1981	270,390	51,477	164,811	11,871	7,237	31,094	-	3,900
1982	331,728	53,023	193,055	8,861	60,219	16,570	-	-
1983	1,056,292	80,958	489,837	417,258	63,143	5,096	-	-
1984	1,692,312	229,091	831,235	573,782	47,312	-	10,892	-
1985	2,393,547	711,481	674,732	935,585	45,743	-	1,762	24,244
1986	1,844,180	822,658	626,453	290,711	73,293	-	8,224	22,841
1987	2,019,463	1,023,823	709,402	215,332	50,129	-	8,472	12,305
1988	2,538,833	1,115,324	997,969	293,950	56,233	44,004	15,973	15,380
1989	2,133,164	1,053,563	631,850	308,365	65,170	45,597	14,219	14,400
1990	2,054,919	770,765	865,579	288,077	46,122	57,660	11,916	14,800
1991	2,530,017	934,281	1,092,699	352,741	77,151	51,469	13,333	8,343
1992	2,288,517	880,402	885,502	404,229	51,409	33,655	11,901	21,419
1993	2,721,671	1,023,840	1,165,153	420,988	51,408	27,632	17,223	15,427

Source: Department of Energy Affairs.

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Table 12.14 Installed Capacity of NPC Power Plants by Plant Type and Energy Source: 1982-1992 (Megawatts)

Area/Plant type	Installed capacity 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Philippines	4,459	5,000	5,195	5,549	5,788	5,788	5,782	6,006	6,037	6,481	6,628
Oil-based	2,583	2,603	2,298	2,362	2,365	2,365	2,359	2,581	2,612	3,056	3,145
Hydro	1,267	1,564	1,654	1,944	2,124	2,124	2,124	2,132	2,132	2,132	2,190
Geothermal	559	784	894	894	894.	894	894	888	888	888	888
Coal	50	50	350	350	405	405	405	405	405	405	405
Luzon	3,636	3,906	[a]4,101	4,101	4,111	4,111	4,111	[b]4,321	[b]4,321	4,591	4,609
Oil-based	2,230	2,230	1,925	1,925	1,925	1,925	1,925	2,135	2,135	2,405	2,405
Hydro	856	1,126	1,216	1,216	1,226	1,226	1,226	1,226	1,226	1,226	1,244
Geothermal	550	550	660	660	660	660	660	660	660	660	660
Coal	-	-	300	300	300	300	300	300	300	300	300
Visayas	266	478	510	542	601	601	594	633	663	715	621
Oil-based	205	192	224	256	260	260	253	297	328	380	286
Hydro	2	2	2	2	2	2	2	2	2	2	2
Geothermal	9	234	234	234	234	234	234	229	228	228	228
Coal	50	50	50	50	105	105	105	105	105	105	105
Mindanao	557	616	584	906	1,077	1,077	1,077	1,053	1,053	1,175	1,398
Oil-based	149	181	149	181	181	181	181	149	149	271	454
Hydro	409	436	437	726	896	896	896	904	904	904	944

Note: Details may not add up to totals due to rounding.
[a] Excludes the 305-MW Rockwell Thermal Plant.
[b] Capacity addition due to commissioning of seven 30 MW gas turbines.

Source: National Power Corporation.

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Table 12.15 Gross Energy Generation of NPC Power Plants by Area and Plant Type: 1982-1992
(Million kilowatthours)

	Gross energy generation										
Area/Plant type	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Philippines	17,413	18,682	18,666	18,757	19,263	20,995	22,944	24,087	24,799	25,437	25,567
Oil-based	10,016	11,514	8,536	6,713	6,970	9,183	9,546	10,075	11,541	12,664	13,436
Hydro	3,751	2,964	5,167	5,514	5,989	5,235	6,212	6,473	6,047	5,077	4,270
Geothermal	3,586	4,093	4,540	4,945	4,586	4,516	4,842	5,316	5,470	5,761	5,692
Coal	60	111	423	1,585	1,718	2,061	2,344	2,223	1,741	1,935	2,169
Luzon	14,398	15,294	14,655	14,449	14,756	16,030	17,439	18,222	18,822	19,532	19,936
Oil-based	9,011	10,145	7,787	5,825	6,328	8,376	8,829	9,150	10,328	11,347	11,927
Hydro	1,832	1,274	2,519	2,869	2,956	1,961	2,588	2,599	2,370	1,873	1,925
Geothermal	3,555	3,875	4,125	4,284	3,900	3,710	4,024	4,444	4,495	4,490	4,426
Coal	-	-	224	1,471	1,572	1,983	1,998	2,029	1,629	1,822	1,658
Visayas	777	1,057	1,177	1,343	1,467	1,693	1,876	1,999	2,051	2,280	2,492
Oil-based	676	719	551	561	624	800	703	922	955	886	703
Hydro	10	9	12	7	11	9	9	11	9	10	12
Geothermal	31	218	415	661	686	806	818	872	975	1,271	1,266
Coal	60	111	199	114	146	78	346	194	112	113	511
Mindanao	2,238	2,331	2,834	2,965	3,040	3,272	3,629	3,866	3,926	3,625	3,139
Oil-based	329	650	198	327	18	7	14	3	258	431	806
Hydro	1,909	1,681	2,636	2,638	3,022	3,265	3,615	3,863	3,668	3,194	2,333

Note: Details may not add up to totals due to rounding.

Source: National Power Corporation.

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Table 12.16 Installed Generating Capacities and Capacity Utilization of Electric Plants by Plant Type: 1990-1992

Plant type	1990 Installed capacity (MW)	1990 Capacity utilization (percent)	1991 Installed capacity (MW)	1991 Capacity utilization (percent)	1992 Installed capacity (MW)	1992 Capacity utilization (percent)
Total	6,864	43.75	6,789	n.a.	6,880	n.a.
Hydro	2,148	32.14	2,155	n.a.	2,217	n.a.
NPC	2,132	32.31	2,132	n.a.	2,190	n.a.
NEA cooperatives	16	9.20	23	n.a.	24	n.a.
Private utilities	-	-	-	-	3	n.a.
Coal	525	42.08	405	n.a.	405	n.a.
NPC	405	48.65	405	n.a.	405	n.a.
Private utilities	-	-	-	-	-	-
Self-generating industries	120	19.84	-	-	-	-
Geothermal (NPC)	888	70.27	888	n.a.	888	n.a.
Oil/diesel	3,136	45.26	3,341	n.a.	3,370	n.a.
NPC	2,612	50.53	3,056	n.a.	3,145	n.a.
Meralco	75	43.07	n.a.	n.a.	-	-
NEA cooperatives	38	6.01	n.a.	n.a.	69	n.a.
Private utilities	159	9.62	n.a.	n.a.	156	n.a.
Self-generating industries	253	19.81	n.a.	n.a.	-	-
Nonconventional	167	29.44	n.a.	n.a.	n.a.	n.a.
NEA cooperatives	-	-	-	n.a.	n.a.	n.a.
Self-generating industries	167	29.44	n.a.	n.a.	n.a.	n.a.

Note: Details may not add up to totals due to rounding.

Sources: Department of Energy; National Power Corporation.

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Table 12.17 Electric Energy Consumption by Sector: 1987-1992
(Gigawatthours)

Sector	1987		1988		1989		1990		1991		1992	
	Consumption	Percent distribution	Consumption	Percent distribution	Consumption	Percent distribution	Consumption	Percent distribution	Consumption	Percent distribution	Consumption	Percent distribution
Total	23,853	100.0	24,539	100.0	25,572	100.0	26,327	100.0	25,649	100.0	25,682	100.0
Residential	5,211	21.8	5,105	20.8	5,161	20.2	5,609	21.3	6,249	24.4	6,336	24.7
Commercial/Transport	3,751	15.7	3,978	16.2	4,428	17.3	4,695	17.8	4,869	19.0	4,878	19.0
Industrial	7,495	31.4	8,566	34.9	9,763	38.2	9,943	37.8	9,339	36.4	9,060	35.2
Utilities' own use and losses	[a]1,041	[a]4.4	[a]1,077	[a]4.4	[a]1,125	[a]4.4	[a]1,134	[a]4.3	1,086	4.2	1,128	4.4
Transmission, transformation, distribution and other unaccounted losses	4,735	19.9	4,348	17.7	3,797	14.8	3,980	15.1	3,176	12.4	3,211	12.5
Others[1]	1,620	6.8	1,465	6.0	1,299	5.1	966	3.7	930	3.6	1,069	4.2

[a] Utilities' own use only.
[1] Includes consumption by government offices, streetlights, irrigation/water supply.

Source: Department of Energy

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Figure 12.1 Energy Consumption by Sector: 1988-1992

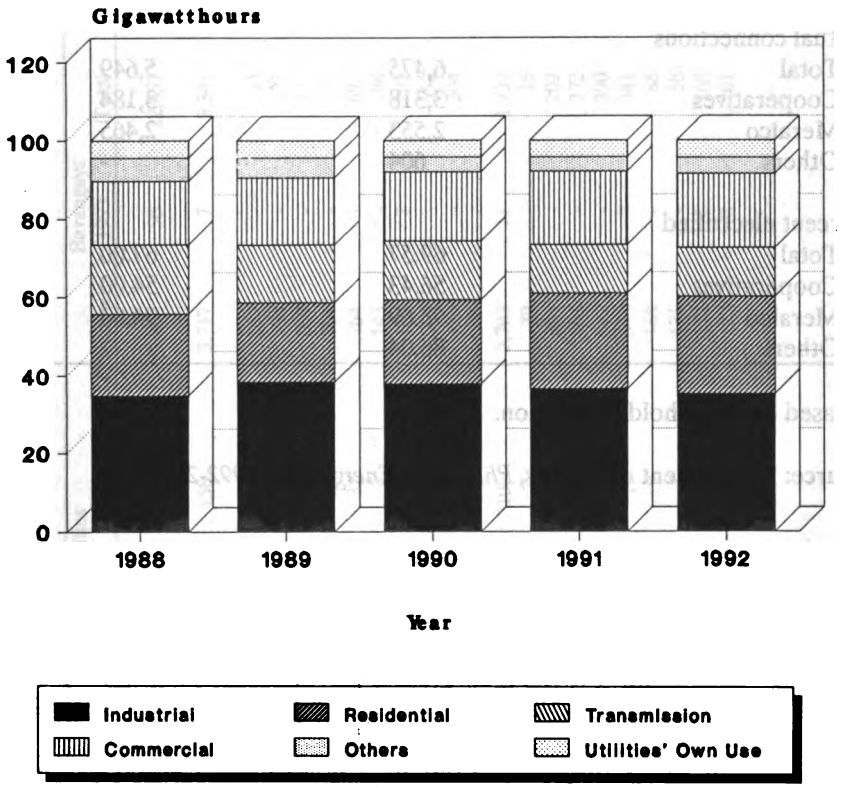

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Table 12.18 Status of Household Electrification in the Philippines: 1990 and 1991 (Connections in thousands)

Particulars	1991	1990
Potential connections		
Total[1]	9,307	8,478
Cooperatives	5,880	5,845
Meralco	2,725	2,633
Others	702	-
Actual connections		
Total	6,475	5,649
Cooperatives	3,318	3,184
Meralco	2,553	2,465
Others	604	-
Percent electrified		
Total	69.57	67.00
Cooperatives	56.43	54.00
Meralco	93.69	94.00
Others	86.04	-

[1] Based on household population.

Source: Department of Energy, *Philippine Energy Plan 1992-2000.*

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Table 12.19 Status of Energization by Region and Cooperative: As of September 30, 1993

Region/cooperative	Municipalities Coverage	Municipalities 1993	Municipalities Total	Barangays Coverage	Barangays 1993	Barangays Total	Total connections Potential	Total connections 1993	Total connections Total
Philippines	1,425	3	1,349	35,603	50	22,857	7,068,000	20,247	3,589,168
Region I	167	2	158	3,747	7	3,341	656,000	1,556	463,813
Ilocos Norte	23	-	23	557	-	554	83,000	162	75,742
La Union	18	-	18	534	-	503	76,000	117	56,650
Benguet	14	-	13	267	-	201	86,000	574	51,009
Abra	27	-	23	304	-	252	31,000	24	21,884
Ilocos Sur	34	1	32	764	-	695	91,000	169	71,477
Mt. Province	10	-	8	143	-	98	21,000	72	8,355
W. Pangasinan	9	-	9	192	7	182	46,000	-	27,526
C. Pangasinan	15	-	15	560	-	552	120,000	269	97,223
Pangasinan III	17	1	17	426	-	304	102,000	169	53,947
Region II	116	1	106	2,703	11	1,732	460,000	3,758	230,260
Batanes	6	-	4	29	-	15	3,000	53	1,457
Cagayan I	12	-	12	386	-	202	76,000	377	36,962
Cagayan II	21	-	21	503	-	372	74,000	293	37,076
Isabela I	15	-	15	502	-	390	95,000	117	58,011
Isabela II	22	-	19	553	7	341	89,000	51	41,447
Ifugao	10	-	9	165	-	88	25,000	80	7,002
Kalinga Apayao	9	-	5	171	-	58	25,000	47	7,872
Nueva Vizcaya	15	1	15	272	2	165	53,000	2,646	28,819
Quirino	6	-	6	122	2	101	20,000	94	11,614

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Table 12.19 Status of Energization by Region and Cooperative: As of September 30, 1993 (continued)

Region/cooperative	Municipalities Coverage	Municipalities 1993	Municipalities Total	Barangays Coverage	Barangays 1993	Barangays Total	Total connections Potential	Total connections 1993	Total connections Total
Region III	103	0	103	2,317	1	2,150	701,000	1,276	548,156
Nueva Ecija I	5	-	5	97	-	93	42,000	45	37,995
Nueva Ecija II	22	-	22	511	-	431	125,000	-	78,952
San Jose City	1	-	1	41	-	40	15,000	103	10,897
Pampanga I	6	-	6	113	-	113	47,000	300	32,912
Pampanga II	7	-	7	170	-	166 *	78,000	-	67,567
Pampanga III	6	-	6	97	-	96	40,000	-	37,362
PRESCO	-	-	-	41	-	41	7,000	-	6,831
Tarlac I	15	-	15	412	1	357	82,000	184	49,503
Tarlac II	5	-	5	119	-	118	42,000	-	32,233
Zambales I	6	-	6	118	-	107	30,000	-	21,256
Zambales II	7	-	7	112	-	111	36,000	-	27,944
Peninsula (Bataan)	12	-	12	230	-	221	73,000	644	60,477
Coop systems taken over by MERALCO [1]	11	-	11	256	-	256	84,000	-	84,227
Region IV	[r]150	0	[r]145	[r]3,542	7	2,547	725,000	2,812	423,529
Batangas I	12	-	12	365	1	347	71,000	149	60,427
Batangas II	17	-	17	483	-	434	111,000	626	72,680
Laguna	11	-	11	159	-	135	34,000	-	25,918
Marinduque	6	-	6	218	-	162	32,000	59	14,043
Mindoro Occ.	9	-	9	133	-	79	45,000	75	13,181
Lubang	2	-	2	25	-	16	5,000	41	2,666
Mindoro Or.	15	-	15	424	-	270	92,000	721	38,048
Palawan	11	-	11	268	3	117	62,000	197	29,350
Busuanga	2	-	2	40	1	34	7,000	-	1,984

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Table 12.19 Status of Energization by Region and Cooperative: As of September 30, 1993 (continued)

Region/cooperative	Municipalities Coverage	Municipalities 1993	Municipalities Total	Barangays Coverage	Barangays 1993	Barangays Total	Total connections Potential	Total connections 1993	Total connections Total
Quezon I	23	-	23	804	2	499	115,000	239	59,490
Aurora	7	-	6	141	-	99	21,000	420	12,454
Quezon II	6	-	4	115	-	52	21,000	44	8,472
Tablas	9	-	9	102	-	90	21,000	76	7,865
Romblon	4	-	2	66	-	14	13,000	165	1,840
Coop systems taken over by MERALCO [1]	16	-	16	199	-	199	75,000	-	75,111
Region V	112	0	102	3,385	0	2,143	624,000	1,047	339,878
Albay	18	-	18	720	-	468	147,000	-	94,135
Camarines Norte	12	-	12	273	-	190	64,000	-	35,166
Camarines Sur I	10	-	10	280	-	197	49,000	71	26,616
Camarines Sur II	10	-	10	259	-	224	61,000	-	45,081
Camarines Sur III	7	-	7	229	-	173	52,000	94	32,943
Camarines Sur IV	9	-	9	259	-	186	42,000	-	20,435
Catanduanes	11	-	11	314	-	226	30,000	47	17,784
Sorsogon I	8	-	8	254	-	199	38,000	87	25,211
Sorsogon II	8	-	8	289	-	217	49,000	-	32,499
Masbate	15	-	8	436	-	59	80,000	117	8,915
Ticao	4	-	1	72	-	4	12,000	631	1,093
Region VI	128	0	128	3,856	3	2,289	834,000	2,011	339,149
Aklan	19	-	19	380	1	241	70,000	266	34,898
Antique	16	-	15	537	-	283	64,000	63	21,875
Capiz	17	-	17	472	-	286	96,000	-	37,534
Iloilo I	15	-	15	795	-	410	79,000	467	43,389
Iloilo II	15	-	15	585	2	337	84,000	235	24,487

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Table 12.19 Status of Energization by Region and Cooperative: As of September 30, 1993 (continued)

Region/cooperative	Municipalities Coverage	Municipalities 1993	Municipalities Total	Barangays Coverage	Barangays 1993	Barangays Total	Total connections Potential	Total connections 1993	Total connections Total
Iloilo III	13	-	13	339		182	55,000	38	12,441
Guimaras	3	-	3	96	-	46	19,000	-	3,876
VRESCO	9	-	9	194	-	135	111,000	-	41,982
Central Negros	5	-	5	152	-	133	115,000	451	68,341
Negros Occ.	17	-	17	306		236	141,000	491	50,326
Region VII	120	0	120	2,706	9	1,809	558,000	2,012	237,138
Bohol I	26	-	26	603	2	502	73,000	180	40,807
Bohol II	21	0	21	491	-	325	77,000	142	30,467
Cebu I	18	-	18	366	-	214	81,000	104	30,012
Cebu II	13	-	13	323	-	202	82,000	435	34,859
Cebu III	5	-	5	134	3	76	44,000	644	23,865
Camotes	4	-	4	56	-	41	14,000	35	3,587
Bantayan	3	-	3	43	3	43	17,000	236	7,636
Negros Or. I	11	-	11	285	-	119	74,000	73	18,668
Negros Or. II	13	-	13	271	1	189	82,000	144	42,459
Siquijor	6	-	6	134	-	98	14,000	19	4,778
Region VIII	134	0	119	4,339	3	2,057	521,000	1,088	205,518
Leyte I	13	-	13	499	0	248	52,000	76	27,761
Leyte II	3	-	3	196	-	189	32,000	113	24,892
Leyte III	9	-	9	285	-	198	33,000	29	12,392
Leyte IV	6	-	6	245	-	185	39,000	90	18,995
Leyte V	12	-	12	416	-	266	83,000	145	35,258
Biliran	7	-	7	116	-	70	19,000	98	7,560
Southern Leyte	18	-	18	495	-	303	55,000	199	24,588
Samar I	11	-	8	414	2	146	36,000	107	15,283

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Table 12.19 Status of Energization by Region and Cooperative: As of September 30, 1993 (continued)

Region/cooperative	Municipalities Coverage	Municipalities 1993	Municipalities Total	Barangays Coverage	Barangays 1993	Barangays Total	Total connections Potential	Total connections 1993	Total connections Total
Samar II	15	-	14	507	-	222	53,000	87	16,922
Eastern Samar	23	-	13	596	1	81	55,000	33	9,962
Northern Samar	24	-	16	570	-	149	64,000	111	11,905
Region IX	87	0	78	2,430	0	927	477,000	781	160,274
Zamboanga Norte	22	-	22	554	-	208	99,000	-	28,186
Zamboanga Sur I	22	-	22	622	-	273	107,000	47	34,563
Zamboanga Sur II	23	-	21	544	-	213	89,000	422	29,126
Zamboanga City	1	-	1	90	-	74	73,000	226	48,058
Basilan	7	-	6	261	-	105	41,000	-	11,228
Sulu	8	-	3	242	-	27	49,000	-	6,067
Tawi-tawi	2	-	1	52	-	15	9,000	-	1,973
Cagayan de Sulu [2]	1	-	1	15	-	6	3,000	-	278
Siasi	1		1	50		6	7,000	86	795
Region X	120	0	114	2,408	3	1,612	513,000	1,968	270,016
Surigao Norte	12	-	12	200	-	150	41,000	85	28,632
Siargao	9	-	9	131	-	63	13,000	59	2,943
Dinagat	7	-	1	90	-	12	16,000	21	1,080
Agusan Norte	12	-	12	244	-	216	75,000	517	51,051
Agusan Sur	14	-	14	316	1	144	69,000	123	28,393
Misamis Or. I	11	-	11	166	-	130	37,000	64	21,223
Misamis Or. II	12	-	12	270	-	179	45,000	-	25,400
Bukidnon I	13	-	13	295	1	168	84,000	490	32,578
Bukidnon II	9	-	9	159	-	118	51,000	314	20,942
Misamis Occ. I	8	-	8	226	-	167	30,000	26	17,029
Misamis Occ. II	8	-	8	253	-	207	41,000	168	36,271
Camiguin	5	-	5	58	1	58	11,000	101	4,474

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Table 12.19 Status of Energization by Region and Cooperative: As of September 30, 1993 (concluded))

Region/cooperative	Municipalities Coverage	Municipalities 1993	Municipalities Total	Barangays Coverage	Barangays 1993	Barangays Total	Total connections Potential	Total connections 1993	Total connections Total
Region XI	83	-	81	1,513	4	880	563,000	1,366	246,682
Surigao Sur I	7	-	7	137	-	92	40,000	97	40,294
Surigao Sur II	12	-	12	167	1	110	32,000	86	15,698
Davao Oriental	11	-	11	183	-	96	64,000	-	24,733
Davao Norte	18	-	18	362	3	211	136,000	249	47,162
Davao Sur	15	-	13	327	-	145	108,000	234	40,066
Southern Cotabato I	10	-	10	157	-	111	72,000	236	29,784
Southern Cotabato II	10	-	10	180	-	115	111,000	464	48,945
Region XII	97	-	95	2,657	2	1,370	436,000	572	124,755
Lanao Norte	15	-	15	317	-	256	50,000	37	27,962
Lanao Sur	38	-	37	1,168	-	630	90,000	-	21,897
Maguindanao	21	-	21	567	2	193	138,000	150	20,198
Northern Cotabato	11	-	11	348	-	171	83,000	341	32,904
Sultan Kudarat	12	-	11	257	-	120	75,000	44	21,794

[1] Includes Bulacan I and II, Sapang Palay, Cavite, Talim, Rizal, and Mauban, Sampaloc, Quezon cooperative systems.
[2] Stopped operation.

Source: National Electrification Administration.

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Table 12.20 Number of Families With Electricity by Region, Urban and Rural: 1991

Area/region	Total number of families	Families with electricity	
		Number	Percent
Philippines	11,975,441	7,387,877	61.69
Urban	5,938,543	4,802,812	80.88
Rural	6,036,899	2,585,065	42.82
National Capital Region (NCR)	1,644,390	1,588,946	96.63
Cordillera Administrative Region (CAR)	227,719	109,750	48.20
Autonomous Region in Muslim Mindanao (ARMM)	310,837	61,748	19.87
I. Ilocos	671,526	481,142	71.65
II. Cagayan Valley	489,375	283,225	57.87
III. Central Luzon	1,194,940	1,014,346	84.89
IV. Southern Tagalog	1,615,856	1,148,556	71.08
V. Bicol	823,709	360,754	43.80
VI. Western Visayas	1,069,712	481,011	44.97
VII. Central Visayas	904,437	438,128	48.44
VIII. Eastern Visayas	661,344	242,571	36.68
IX. Western Mindanao	478,750	204,685	42.75
X. Northern Mindanao	685,493	371,448	54.19
XI. Southern Mindanao	830,030	434,622	52.36
XII. Central Mindanao	367,323	166,946	45.45

Source: National Statistics Office. *1991 Family Income and Expenditures Survey.*

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Table 12.21 Water Supply Targets: 1988-2000

Category	1988	1989	1990	1991	1992	1993-2000
Rural Areas						
Point sources (Level I)	10,392	16,238	27,119	30,202	24,820	44,340
Construction	7,828	14,576	20,796	24,433	19,518	13,340
Shallow well	4,381	7,901	10,831	11,825	9,520	5,070
Deep well	2,767	5,337	8,357	10,820	8,550	7,200
Spring developed	405	1,068	1,393	1,788	1,448	1,070
Others	270	270	215	-	-	-
Repair/rehabilitation	2,564	1,662	6,323	5,769	5,320	21,500
Replacement	-	-	-	-	-	9,500
Piped systems (Level II/III)	131	204	262	262	226	794
Other urban areas						
Piped systems (Level II/III)	84	105	184	162	162	1,004
Construction	34	55	184	112	112	654
Repair/rehabilitation	50	50	50	50	50	350

Source: Department of Public Works and Highways. *Water Supply, Sewerage and Sanitation Master Plan of the Philippines: 1988-2000.*

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Table 12.22 Number of Families by Main Source of Water Supply by Region, Urban and Rural: 1991

Area/region	Total number of families	Main source of water supply: Faucet inside the house/yard community water system	Faucet, other community water system	Tubed/ piped well, own use	Tubed/ piped well, others	Dug well	Spring river stream, and others	Rain	Peddler
Philippines	11,975,441	2,599,804	2,354,627	1,711,212	2,158,765	1,770,401	1,020,254	73,564	286,818
Urban	5,938,543	2,091,858	1,218,822	756,456	885,064	532,406	207,896	17,263	228,779
Rural	6,036,899	507,945	1,135,807	954,756	1,273,699	1,237,995	812,358	56,301	118,301
National Capital Region (NCR)	1,644,390	961,619	367,418	61,251	81,272	36,291	399	-	136,140
Cordillera Administrative Region (CAR)	227,719	72,397	73,188	21,164	13,836	19,913	26,096	-	1,126
Autonomous Region in Muslim Mindanao (ARMM)	310,837	19,075	16,925	6,258	9,298	106,908	130,247	18,674	3,453
I. Ilocos	671,526	68,991	55,679	252,217	194,647	87,373	12,232	-	388
II. Cagayan Valley	489,375	47,603	39,986	146,482	165,924	74,430	14,540	-	412
III. Central Luzon	1,194,940	225,216	151,974	443,630	325,589	29,838	4,362	-	14,331
IV. Southern Tagalog	1,615,856	363,700	325,829	267,266	332,307	219,436	97,184	294	9,840
V. Bicol	823,709	138,220	171,706	77,722	139,628	172,103	106,630	-	17,699
VI. Western Visayas	1,069,712	88,615	165,517	115,918	207,129	391,071	62,634	15,886	22,942
VII. Central Visayas	904,437	131,413	231,978	41,106	160,086	186,977	110,958	9,860	32,059
VII. Eastern Visayas	661,344	103,188	201,585	55,513	114,255	102,621	77,816	757	5,610
IX. Western Mindanao	478,750	49,160	114,868	10,895	37,615	131,751	109,183	-	25,278
X. Northern Mindanao	685,493	146,510	225.652	19,276	74,582	85,657	123,271	3,833	6,712
XI. Southern Mindanao	830,030	139,783	156,007	126,069	201,919	69,776	102,230	24,260	9,987
XII. Central Mindanao	367,323	44,314	56,315	66,445	100,678	56,258	42,472	-	841

Note: Details may not add up to totals due to rounding. Source: National Statistics Office. 1991 Family Income and Expenditure Survey.

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Table 12.23 Number of Water District s by Region: 1989-1991

	Region/province	1989	1990	1991
	Philippines	473	552	560
I.	Ilocos	46	52	53
II.	Cagayan Valley	34	41	41
III.	Central Luzon	79	87	89
IV.	Southern Tagalog	60	71	73
V.	Bicol	45	53	53
VI.	Western Visayas	71	80	81
VII.	Central Visayas	21	26	26
III.	Eastern Visayas	30	37	37
IX.	Western Mindanao	20	22	22
X.	Northern Mindanao	23	29	30
XI.	Southern Mindanao	30	34	35
XII.	Central Mindanao	14	20	20

Source: Local Water Utilities Administration.

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Chapter 13
Manufactures

For more than a decade (1980-1991), the annual contribution of the manufacturing sector to the Gross Domestic Product (GDP) stands at approximately 25 percent. The share was observed to be gradually decreasing in 1992 and 1993.

The Gross Value Added (GVA) of the sector reveals an increasing trend within the same period. Despite this trend, it registered an unsteady growth rate, the highest in 1984 at 44.37 percent and the lowest in 1992 at 3.10 percent.

13.1 Sources of Manufacturing Statistics

Statistics on manufacturing industries are gathered nationwide by the National Statistics Office (NSO) through censuses conducted every five years and annual and monthly surveys conducted in between censal years. This is done to meet the demand for adequate statistics on manufacturing activities in the country through a systematic way of reporting and storing data.

The Annual Survey of Manufactures was started in 1956 as a joint project of the National Economic Council (now the National Economic and Development Authority) and the International Cooperation Administration (now the United States Assistance for Industrial Development) with the full operating responsibilities of the then Bureau of the Census and Statistics (BCS). On July 1, 1958, it was integrated into other statistical survey projects of the BCS. In 1970, it was made a part of the BCS Annual Survey of Establishments (ASE), which also covered the sectors on business, utilities and services.

The ASE (Manufacturing) is a nationwide sample survey which gathers major types of data on manufacturing industries between census years. For 16 years, from 1956 to 1974, the survey covered only establishments with 5 or more workers. After the 1975 census year, the survey expanded its coverage to all known manufacturing establishments regardless of the number of workers. This covered the period from 1976 to 1982. Beginning 1984, the survey covered only large establishments (those with an average total employment of 10 or more workers). Aside from the ASE, the NSO also conducts the Census of Establishments (CE) every five years. It is a nationwide collection and compilation of statistical information pertaining to the business operations of establishments during the reference period. Like the ASE, manufacturing is one of the sectors covered by the CE. The inquiry was first taken in 1903, then in 1918, 1939, 1948, 1961, 1967, 1972, 1975, 1978, 1983 and 1988. Another source of manufacturing statistics is the Survey of Key Manufacturing Enterprises (SKEM). The SKEM

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was launched in 1981 to meet the increasing demand for flash indicators on the movements on production, employment and compensation of large manufacturing enterprises. Included in the survey are manufacturing establishments listed among the top 500 corporations. It was formerly administered by the National Economic and Development Authority through its Statistical Coordination Office (now the Economic and Social Statistics Office of the National Statistical Coordination Board). In May 1986, this function was transferred to the National Statistics Office (NSO).

13.1.1 Concepts and Definitions

Defined below are concepts and terms used in the annual survey which conform to international recommendations on industrial censuses and surveys.

Manufacturing is the mechanical or chemical transformation of organic or inorganic substances into new products, either by power-driven machines or by hand, in a factory or in the workers' home. Manufactured products are sold either wholesale or retail. The assembly of component parts into manufactured products and major repair work are considered manufacturing.

Establishment is an economic or business unit under a single ownership or control or under a single legal entity in one or predominantly one kind of activity at a single fixed location and having permanency of assets, such as goods for resale, products, materials, equipment, and others in its premises during the operation.

Manufacturing establishment is a plant, mill, factory or shop at a single physical location where a particular manufacturing, fabricating, processing and/or assembling operation is performed.

Average Total Employment (ATE) is the arithmetic average of the total number of persons who work in or for the establishment, including working owners and active business partners and unpaid family workers, managers, production workers and other employees in specified payroll periods (nearest the 15th of February, May, August and November). Also included are persons on paid holiday and paid vacations during the payroll period for which the employment data are required. The ATE of an establishment is computed by getting the number of persons employed during pay period nearest the middle of each quarter divided by four, regardless of the number of quarters the establishment was in operation.

Total compensation are payments to employees/workers in cash and in kind which includes salaries and wages, overtime pay, commission, dismissal pay, vacation and sick leave pay, and other remunerations paid to employees during the entire year prior to all deductions such as SSS/GSIS contribution, withholding taxes, group insurances, union dues, and the like.

Total receipts (revenue/sales) include the value/cash received and receivables for products sold, goods resold and industrial and nonindustrial services rendered to others.

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Value of output represents the total value of products sold and goods resold and adjusted for change in inventories (ending less beginning) of finished products, work-in-process and merchandise of resale; value of contract work and industrial services done for others; and cost of fixed assets produced on own account. Value of products sold also includes those transferred from the plant to wholesale branches, central warehouses, retail stores and other establishments of the same enterprise. Not included is the value of products made by the establishment from materials owned by others which is reported as "receipts for contract work". Valuation is at producer's price (ex-establishment price and net of discounts, returns and allowances). Cost of materials consumed and industrial services are the costs of materials, supplies, fuels consumed and adjusted for change in inventory (beginning less ending); electricity purchased; contract work and industrial services done by others; and cost of goods sold.

Total costs are the costs of all materials, supplies and fuels purchased, industrial and non-industrial services done by others, costs of goods resold, electricity purchased, indirect taxes, interest and other costs incurred during the year whether paid or payable. Valuation should be at market price including taxes and other charges, net of discounts, rebates, returns and allowances. Excluded are depreciation and amortization, donations and contributions, bad debts, income tax, salaries and wages, and losses.

Census value added represents the difference between the value of output and the total cost of materials, supplies and fuels consumed, electricity purchased, contract work and industrial services done by others, and cost of goods resold. Capital expenditures for fixed assets during the year include cost of acquisition of new and used fixed assets, fixed assets produced by the establishment for its own use, major alterations, additions and improvements to fixed assets, whether done by others or done on own account.

Gross additions to fixed assets is equal to capital expenditures for the year less the value of sales of fixed assets during the year.

Inventories refer to all materials and supplies, fuels, goods for resale, work-in-process and finished products owned and held or under the control of the establishment. Valuation should be at current replacement cost based on market prices at indicated dates. Replacement cost is the cost of an item in terms of its present price rather than its original cost.

13.2 Manufacturing Statistics

13.2.1 Annual Statistics

The initial survey of manufacturing establishments conducted in 1956 covered a total of 7,208 establishments (manufacturing establishments with 5 or more workers). Total employment was registered at 205,809, while total output generated was P2,345 million. Nearly two decades after, the coverage was

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expanded to include 13,313 establishments in 1974 with total employment of 531,973 and gross output of P47,553 million.

In 1976, when the coverage of the survey was changed from manufacturing establishments with five or more workers to all known manufacturing establishments regardless of employment, the number of establishments covered increased significantly to 78,476 from 13,313 in 1974. In 1982, a total of 83,292 establishments were covered with employment of 1,088,254 and gross output of P158.78 billion. Table 13.2a presents selected statistics for all manufacturing establishments from 1976 to 1982.

On the other hand, Table 13.2 presents selected statistics from 1983 to 1989 for large manufacturing establishments (those with 10 or more workers).

The 1988 Census of Establishments. This was the latest census conducted by NSO which covered a total of 78,635 manufacturing establishments, employing 1,091,379 workers. Paid employees during the year comprised 968,407 or 88.7 percent of the total while the rest were working owners and unpaid family workers. Annual compensation was P33,220.4 million or an average annual pay of P39,310 per paid employee. Manufacturing industries generated a total output of P396.3 billion in 1988. Cost of materials consumed reached P258.4 billion while census value added was estimated at P137.9 billion or about 34.8 percent of total output. See Tables 13.4 and 13.4a.

The 1989 Annual Survey of Establishments. The 1989 ASE covered 77,805 manufacturing establishments which employed 1,207,799 workers. Compared to the previous year's level, employment grew by 10.7 percent. The number of paid employees comprised 90.8 percent of the total whose average annual compensation was estimated at P39,250 per employee. Manufacturing industries generated a total of P482.9 billion in output value, of which 95.9 percent was accounted for by establishments with average total employment (ATE) of 10 or more workers. On the other hand, census value added was estimated at P167.8 billion or about 34.7 percent of output value. Please refer to Tables 13.3 and 13.3a.

Top 10 Manufacturing Industries. The top 10 manufacturing industries in 1989 generated a total of P354.8 billion in output value. This represented 76.6 percent of the output of establishments with ATE of 10 or more workers. Food manufacturing was consistently the top grosser as it recorded an output of P99.9 billion or 21.6 percent of the total value of output. Petroleum refineries were the second largest contributor to output registering P42.7 billion (9.2 percent) followed by other chemical products which accounted for 8.2 percent of value of output. Please see Table 13.5.

Regional Dispersal of Manufacturing Industries. Table 13.6 shows the regional distribution of manufacturing industries for 1988 and 1989. Until 1989, the National Capital Region (NCR) remains as the country's industrial center where nearly half (49.0 percent) of the manufacturing establishments with ATE

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of 10 or more workers are located. It also accounted for the same proportion in output valued at P227.6 billion. Southern Tagalog reported the second largest number of establishments (11.7 percent), as well as in output valued at P89.7 billion (19.4 percent). Central Luzon ranked third in number of establishments and value of output at 9.4 percent and 7.4 percent, respectively. The whole of Visayas accounted for 12.9 percent of the total number of establishments and their combined output in 1989 reached P51.7 billion (11.2 percent). The whole of Mindanao, on the other hand, accounted for 12.6 percent of the total number of establishments and the aggregated output was P49.1 billion (10.6 percent).

13.2.2 Monthly Statistics

The 1991 and 1992 indices of production, employment and compensation for manufacturing are presented in Tables 13.7 to 13.9. The index of value of production (IVP) for 1991 showed a fluctuating trend with the highest point observed in October at 268.1 while the lowest point was recorded in February at 221.2. For 1992, the IVP was increasing during the first quarter, slowed down in April and gained momentum towards the end of the third quarter. At year's end, the IVP suffered a declining trend. The highest index was observed in August at 275.3 while the lowest was seen in January at 234.8. For 1991 and 1992, the average IVP was at 240.7 and 257.1, respectively. The index of employment (IE) for both 1991 and 1992 showed a general decreasing trend, except for May 1992 when the index increased by 1.6 points. The average IE of 100.1 for 1992 shows that the employment levels during the year were almost at par with the 1985 levels. On the other hand, the average IE of 103.6 for 1991 reveals that employment levels were slightly higher than that of 1985.

The index of compensation (IC) for 1991 and 1992 showed a general increasing trend towards the end of both years, as it is during this period that employees received additional benefits in form of bonuses. However, fluctuations can be observed during the middle of the year.

13.3 Capital Investments of Newly Registered Manufacturing Establishments

Data on equity investments of newly registered manufacturing establishments compiled by the Securities and Exchange Commisssion are shown in Tables 13.10 to 13.16.

The manufacturing sector continued to expand, with capital investments of registered business organizations reaching P1.96 billion in 1992. In terms of net investments, the manufacturing sector recorded an all time high of P13.76 billion in 1991, 141.40 percent higher than its 1990 level. This was reversed in 1992 as net investments was down by 65.29 percent. Refer to Table 13.11. By size of capital investments, business organizations with capital size of P100,000-P999,999 continued to dominate the number of investors. However, those with

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capital size amounting to P1 million or more consistently gained the biggest share of total investments. See Table 13.12.

The number of foreign investors in the country had been decreasing since 1990. In terms of amount of capital stocks, a positive trend was observed from 1988 to 1991 at an average rate of 60.42 percent. However, in 1992, the amount of capital stock decreased by 45.74 percent. Among the foreign investors, the Japanese were the top investors in the manufacturing sector from 1988 to 1992. From 1990 to 1992, the Japanese had infused a total of P4.16 billion in investments followed by the Americans (P1.56 billion), British (P373.3 million) and Chinese (P284.5 million). See Table 13.13.

In 1991, capital investments of manufacturing corporations and partnerships with foreign equity registered P638.4 million or a 26.15 percent decrease from the previous year's level. A positive growth was seen in 1992 when investments increased to P808.3 million. Please refer to Table 13.14.

Table 13.15 shows that for five consecutive years (1987-1992) the number of investors engaged in manufacturing continued to expand but the amount of investments showed an irregular trend.

In 1992, more than three-quarters (78.58 percent) of the country's 1,704 capital investments were concentrated in the National Capital Region. Investments in Southern Tagalog, which was a distant second, accounted for only 9.45 percent of the total.

Figures in Table 13.16 show that the transport equipment industry received the highest infusion of new investments in 1990 at P315.6 million (16.71 percent). However, in 1991, food manufacturing industry took the lead with fresh investments of P388.5 million (20.84 percent).

13.4 Government Assistance to Manufacturing

13.4.1 The Department of Trade and Industry

In line with the national goal to develop an economic atmosphere with the impetus of the private sector supported by the government, the Department of Trade and Industry (DTI) and agencies under it, namely, Board of Investment (BOI), Council for Investment (CI), Export Processing Zone Authority (EPZA), Construction Industry Authority of the Philippines (CIAP), and Bonded Export Marketing Board (BEMB), known as the Industry and Investment Group (IIG), has served as a link between the government and the business community.

The IIG has been tasked to seek investments and to promote the country's potential for local and international investments. The group's effort have earned the investors' confidence and this prompted the government and the private sector to prepare medium and long-term industry sectoral programs, with the private sector sharing technical expertise and advice for planning and implementation.

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13.4.2 The Board of Investments (BOI)

In order to provide the economy with a new and comprehensive policy on investments, the Investment Incentives Act (Republic Act 5185) was enacted by the Congress of the Philippines in September 1967. Together with the provisions of various incentives and guarantees to domestic and foreign enterprises that would go into preferred areas of investments, the law also created the Board of Investments, empowering it with both planning and implementing functions. The BOI was charged with the responsibility of drawing up annually a list of priority areas, evaluating project applications for the manufacture of preferred products, administering the grant of various taxes and nontax incentives, and supervising and monitoring registered projects. For enterprises to avail of these incentives, they are required to be registered with the BOI.

The BOI also implemented the provisions of the subsequent laws that were enacted, namely: the Foreign Business Regulations (1968), the Export Incentives Act or Republic Act No. 6135 (August 1970), the Agriculture Investment Incentives Decree (June 1977), and the Investment Promotion Act for Less Developed Areas (November 1979).

In January 1981, all these laws, except the Investment Promotion Act for Less Developed Areas, and the many decrees that had been issued over the years were consolidated into one single code, the Omnibus Investments Code, by virtue of Presidential Decree No. 1789. The Code refined and harmonized the various incentives and streamlined registration and incentives availment procedures.

In 1987, a new Investment Incentives Code, which was a modification of the 1981 Omnibus Investments Code was approved by the President. This new code is discussed in the next section.

13.4.3 The 1987 Investment Incentives Code

In order to encourage domestic investments and foreign capital inflow the government devised an investment incentives scheme for the country. These sets of incentives have, over the years, undergone several improvements and refinements in the light of the government's intensified quest for increased foreign investments, as well as redirecting domestic investments in preferred areas which will contribute to the accelerated development of the country.

The Omnibus Investment Code of 1987 is an improvement of the provisions of the Omnibus Investments Code of 1981 as amended in 1983. It is a compilation of foreign investment laws and various incentive schemes administered by the DTI through either the BOI or the EPZA. It gives foreign and local investors complete alternative incentive schemes available to them and the requirements of registration of foreign investments without incentives. It also consolidates the following incentives and privileges which were embodied under separate laws: the additional incentives to enterprises located in less developed areas; the privileges granted to holders of the special investors' resident visa; incentives

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to regional headquarters and regional warehouses located in the Philippines; and incentives to firms located in the export processing zones.

Other main features of the Code are the following: it introduces the concept of an income tax holiday for enterprises engaged in preferred areas of investment; it provides a new incentive for labor-intensive enterprises in the form of tax deduction for additional direct labor expenses; and it provides for a private sector representation in the BOI. Enterprises registered under the Investments Priorities Plan of the BOI are entitled to the following incentives.

Fiscal Incentives. The following are the fiscal incentives: income tax holiday of six years from date of commercial operation, for new pioneer firms and four years for nonpioneer firms; tax and duty-free importation of capital equipment, machineries and accompanying spare parts within five years from the effectivity of the code; tax credit on domestic capital equipment for the same period and under the same conditions as provided in the preceding paragraph; tax and duty-free importation of breeding stocks and genetic materials under the same conditions as the preceding incentive; additional deduction for labor expenses for five years from registration, 50 percent for incremental labor wages for skilled and unskilled workers in registered projects, which is doubled when the projects are located in less developed areas; tax credit for taxes and duties on raw materials, supplies and semi-manufactured products used in the manufacture of export products and forming part thereof including duties on the inputs for such raw materials, supplies and semi-manufactured products; access to bonded manufacturing trading warehouse system for registered export-oriented enterprises; exemption from wharfage dues and any export tax, duty, impost and fees for nontraditional exports by a registered enterprise; exemption from contractor's tax both on the national and local levels; tax and duty exemption of imported spare parts for 70 percent export products with custom bonded warehouse.

Nonfiscal Incentives. The nonfiscal incentives are the following: simplification of customs procedures for the importation of equipment, spare parts, raw materials and supplies and exports of processed products; no restrictions on the use of consigned equipment provided a re-export bond is posted and employment of foreign nationals in supervisory, technical or advisory positions for five years from registration, extensible for limited periods.

In Less Developed Areas. Registered enterprises located in less developed areas are entitled to the following incentives: incentives provided for a pioneer registered enterprise under its law of registration; and deduction from taxable income of 100 percent of the cost of necessary and major infrastructure and public facilities constructed.

EPZA Registered Firms. Aside from being entitled to all the incentives given to firms registered with the BOI, BOI firms shall also be entitled to the following incentives: special tax treatment of merchandise within the zone; exemption

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from local taxes (with certain exceptions) and licenses; and exemption from real taxes on production equipment and machineries not attached to real estate.

Regional Warehouses. Multinational companies establishing regional warehouses to supply spare parts or manufactured components and raw materials to the Asia-Pacific region and other foreign markets are also entitled to certain incentives.

Regional or Area Headquarters Incentives. Multinational companies establishing regional or area headquarters in the Philippines may be licensed to supervise, superintend, inspect or coordinate its own affiliates, subsidiaries or branches in the Asia-Pacific region. These regional or area headquarters and their expatriate executives shall also be entitled to certain incentives.

13.4.4 The Investment Priorities Plan

The Investment Priorities Plan is an overall plan prepared annually by the BOI, which contains the specific activities and generic categories of economic activity wherein investments are encouraged through granting of fiscal and other incentives, and the corresponding products and commodities to be grown, processed or manufactured for domestic or export market. It also contains specific public utilities which can qualify for incentives and which shall be supported by studies of existing and prospective regional demands for the services of such public utilities in the light of the level and structure of income, production, trade, prices and relevant economic and technical factors of the regions as well as the existing facilities to produce such services.

Preferred areas or activities of investment are classified as pioneer or nonpioneer. Pioneer projects are those that produce or manufacture new products; or utilize technological process untried in the country; engaged in the pursuit of agricultural, forestry, and mining activities and/or services that are considered essential to the attainment of the national goal; produce nonconventional sources of energy and use or converts coal or other nonconventional fuels in its production. Otherwise it is nonpioneer projects. Pioneer projects are accorded a higher degree of preference and given more incentives than nonpioneer projects.

The 1993 IPP was formulated to meet the following goals: to generate employment; to increase Philippine exports; to increase productivities in agriculture and fishery; to develop domestic oriented-industries that are competitive with imports; to upgrade infrastructure and other facilities needed to support agro-industrial development; to promote the sustainable use of the country's natural resources; to develop tourism facilities and tourist destination clusters; and to support priority development programs of other government agencies.

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13.4.5 Foreign Investments Policies

The overall government policy on foreign investments is centered on facilitating its entry through simplified and automatic investment procedures and regulations. Foreign investments are encouraged particularly in activities that pave the way for the desired transfer of technology and access to foreign markets. The Omnibus Investment Code of 1987 sets forth the policies governing foreign investments.

Foreign investors registered under the IPP of the BOI, aside from enjoying the rights of repatriation of investments, remittance of earnings and freedom from expropriation and property acquisition, are also entitled to the various incentives previously discussed under the section on incentives. Foreign investors maybe registered under the IPP, if its total investment in a partnership or any association does not exceed 40 percent of the outstanding capital, and satisfies all the other requirements for registration. If investment share exceeds 40 percent, it may still qualify for registration if the enterprise proposes to engage in a pioneer project, in which, considering the nature and extent of capital requirements, processes, technical skills and relative business risks involved, the available measured capacity cannot be readily and adequately filled by Philippine nationals; or if the applicant is exporting at least 70 percent of its total production; and that it obligates itself to attain the status of a Philippine national (meaning foreign investment share does not exceed 40 percent) within 30 years of registration, except for companies exporting 100 percent of their products.

On the other hand, the entry of foreign investments exceeding forty 40 percent of the capital stock, are regulated under Book Two of the Omnibus Investments Code. In granting approval to such foreign firms, BOI sees to it that activities are consistent with the Investments Priorities Plan; contribute to the sound and balanced development of the economy on a self-sustaining basis; the business does not conflict with the Philippine Constitution on various laws of the country; the business activity is not one which is already adequately exploited by Filipinos; and the business does not promote monopolies or combinations in restraint of trade.

If foreign equity participation does not exceed 40 percent, the enterprise is only required to file a report on the foreign investment with the BOI for record purposes.

13.4.6 The One Stop Action Center for Investments

To hasten investment application and registration, the One Stop Action Center for Investment (OSAC) was created through Executive Order 136 in February 1987. It was set up to make easier for foreign and domestic investors to do business in the country by providing the necessary information and documentation. It put together several government agencies concerned in investment into one team tasked with the prescreening and official acceptance of application for investment registration. The OSAC which is housed in one

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place is made up of representatives from Board of Investments, Central Bank of the Philippines, Securities and Exchange Commission, Department of Tourism, Garments and Textile Export Board, Department of Labor and Employment, Commission on Immigration and Deportation, and Bureau of Customs.

Under a Memorandum of Agreement with SEC, the OSAC permitted registration and licencing of corporation/partnership with more than 40 percent of foreign equity and registered headquarters. It provided free feasibility studies for small and medium sized industries, it accepted employment of foreign nationals by BOI- registered firms. The continued simplification of investment procedures resulted in the registration of 9,565 OSAC-assisted investments in 1989, which is 158.00 percent greater than that in 1988.

13.5 Industrial Development Programs

13.5.1 Regionalization of Small and Medium Enterprises Development

The government has continuously supported the development and promotion of microcottage, and small and medium enterprises concurrent with its goal to attain a balanced development across the country. It has extended aid to the sector in the form of financial, entrepreneurial, technical and marketing assistance coupled with accelerated transformation of selected sites into industrial centers. It has identified the development of sixteen areas into viable industrial location or regional industrial centers outside Metro Manila which was approved by the President in June 1989.

With increasing favor for regional industrial dispersal, measures and programs were effected to bolster the development of industries and investments into the countryside; like, the nonentitlement of new expansion projects to income tax holidays if located in National Capital Region (NCR), and the additional incentives to firms located in less developed areas.

Some approved/prepared projects were the *Kalakalan* 20, which seeks to assist countryside and *barangay* enterprises through the elimination of bureaucratic restrictions and the granting of incentives such as tax exemptions and simplified business requirements; the CALABARZON project that aims to promote integrated regional development in the regions of Cavite, Laguna, Batangas, Rizal and Quezon under the supervision of the BOI assisted by Japan International Cooperation Agency (JICA); the Magna Carta for Small Enterprises, an Administration Bill, that would rationalize, promote and strengthen the microcottage, small and medium enterprises sector through the creation of a Council for Small Enterprises, a Small Credit and Guarantee Corporation; and the establishment of a credit delivery system that would provide liberalized financing measures for small enterprises by lending institutions. In addition, financial assistance to the sector were channeled through the

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Industrial Guarantee and Loan Fund, Export Industry Modernization Program, Guarantee Fund for Small and Medium Enterprises, Philippine Export and Foreign Loan Guarantee Corporation, Urban Livelihood Financing Program, and the *Tulong sa Tao*-Self Employment Loan Assistance Program.

Entrepreneurial, technical and marketing assistance were relayed by means of technology transfer (e.g., Technology Transfer Program, Agro-Industrial Technology Transfer Program); management and productivity awareness through seminars, lectures/dialogues and workshop; and intensive investment promotion by disseminating information to ensure the continuous growth and development of the sector.

Government efforts also included the modernization and rehabilitation of existing industries which is stipulated under the Industry Modernization and Rationalization Program. This program aims to restructure an existing industry to maximize its contribution to the economy through rehabilitation of idle production capacity, closing down of inefficient plants, modernization of plants and equipment, and strategic relocation of plants or industries that would propel further growth particularly outside the NCR.

Furthermore, to support and strenghten industry dispersal, the development of industrial estates that deemed to serve as magnets for investments and promote science and technology was activated. It included science and technology parks, technology incubation centers, and science and technology centers.

13.5.2 Investment Promotion Program

An unhampered investment promotional stand in and out of the country was in effect to support the economic programs. These were the continued decentralization of functions of investment related agencies, simplification of procedures in registering businesses, publication of information about investment potentials of the country, and holding or sending of investment missions.

In 1988, BOI opened its Cebu (Region VII) branch, then on the following year its Cagayan de Oro (Region X) and Davao (Region XI) offices to speed-up registration of firms in these particular regions. This move was in response to the governments' effort to decentralize industrial development in NCR, to enhance industry growth, and to speedily respond to the needs of investors in the outlying regions of the country. Last November 7-10, 1988 the Philippine Investors Forum was held at the Philippine Trade Training Center (PTTC) attracting a total of 500 participants: 244 from 29 countries, 140 local participants, and the rest came from various ministries, institutions and organizations. The forum resulted in 72 Letters of Intent (LOI) with investment value of US$234.99 million, 22 project negotiations with an aggregate cost of US$621.32 million, 800 pre-arranged individual meetings, 150 nonprogrammed interactions, 44 new project proposals were presented and discussed by participating foreign companies, and 184 projects in various industry sectors were studied and considered. It aims to achieve access to foreign markets and long-term marketing arrangements, supply of technology and/or supply of

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manufacturing license, establishment of joint ventures through equity participation, and industrial financing through medium or long-term loans.

In the same year, there were eight outbound investment promotion missions addressing 886 investors and eight incoming investment missions addressing 334 investors. Still, to disseminate the countrys' investment potentials, foreign business journalists were invited to visit the Philippines and write in-depth articles focusing on business and political conditions.

In 1989, the BOI adopted the "rifle approach" on investment promotions which identifies particular firms/sectors in specific countries and link them to specific sectors/projects and location in the country. It entered into a Memorandum of Agreement with government entities and private sectors in promoting investments by sharing scientific literature and information, conducting joint workshops and seminars on mutual areas of concern. It was able to match 48 foreign investors with 88 Filipino entrepreneurs on a one-on-one basis and facilitated possible match-up of 35 Filipinos and 90 foreign firms through holding of various workshops and meetings. It collaborated with JICA to set up Japan Desk in BOI manned by two Japanese investment experts. It entered into a memorandum of undertaking with the Bank of Tokyo to assist the Philippine government in attracting investments by promoting closer links between the Philippines and Japanese firms through the exchange and provision of investment and trade information, cooperating in preparation and conduct of investment trade missions or seminars, keeping in close liaison with the Bank of Tokyo in its effort to attract Japanese investments into the Philippines and assisting each other in the development of cooperative arrangements with various industrial and business organization.

Of the total of 57 investment missions in 1989; three were outbound. The largest was the 117-member Taiwanese delegation composed of top corporate policy-makers representing 100 companies considering the Philippines as a relocation site for their manufacturing facilities. The delegation were briefed on the country's investment climate and investment rules. Another was the top level 40-member mission from KEINDANREN - the biggest private nonprofit economic organization in Japan. They were informed on the Philippine Medium-Term Development Plan for 1987-1992 and the policy framework for the Multilateral Aid Initiative (MAI). There were also three Korean investment delegations that came into the country during the year in review.

Top investors in 1988 were United States, Taiwan, Japan, and Hongkong; while in 1989 these were Japan, Taiwan, Hongkong, and United States, in order of equity investments.

Sources:

13.1	National Statistical Coordination Board.
13.2 - 13.9	National Statistics Office.
13.10 - 13.16	Securities and Exchange Commission.

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Table 13.1 Gross Domestic Product, Gross Value Added, Growth Rate and Percentage Contribution to GDP of the Manufacturing Sector: 1980-1993 (At current prices)

Year	Gross domestic product[1] (million pesos)	Gross value added (million pesos)	Annual growth rate (percent)	Percent contribution to GDP
1980	243,749	62,654	-	25.70
1981	281,596	71,829	14.64	25.51
1982	317,177	79,608	10.83	25.10
1983	369,077	89,472	12.39	24.24
1984	524,481	129,171	44.37	24.63
1985	571,883	143,851	11.36	25.15
1986	608,887	149,958	4.24	24.63
1987[r]	82,764	169,627	13.12	24.84
1988[r]	799,182	204,784	20.73	25.62
1989[r]	925,444	230,163	12.39	24.87
1990[r]	1,073,098	267,485	16.21	24.93
1991[r]	,244,428	315,938	18.11	25.39
1992	1,345,979	325,719	3.10	24.20
1993[p]	1,457,557	348,352	6.95	23.90

[1] All sectors.

Source: National Statistical Coordination Board, Economics and Social Statistics Office.

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Table 13.2 Summary Statistics for Manufacturing Establishments: 1983-1989

Year	Number of establish-ments	Employment (Average for the year)		Total compensation (P1,000)	Value of output (P1,000)	Total costs (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
1983[a]	5,733	700,645	694,879	11,204,426	163,957,498	[r]116,600,494	55,477,502	5,320,595	7,432,887
1984[r]	5,435	645,516	639,607	13,298,132	220,118,798	158,844,164	68,766,417	10,677,071	7,645,600
1985	5,369	623,671	618,335	15,334,790	224,785,634	145,765,165	9,020,469	883,071	5,493,175
1986[r]	5,294	636,219	630,996	17,558,084	247,461,328	168,711,228	97,747,092	2,589,258	9,147,404
1987	5,000	675,206	671,051	21,846,678	297,940,287	192,558,227	105,382,060	14,552,609	9,857,741
1988[a]	11,488	856,951	845,069	31,810,602	385,010,014	[r]300,096,977	133,823,685	13,573,757	15,778,266
1989	10,154	949,488	940,363	40,588,903	463,055,311	352,002,239	160,021,700	11,937,902	14,458,168

[a] Data are for large manufacturing establishments only.

Source: National Statistics Office, Manufacturing Section. *1984-1989 Annual Survey of Establishments, 1983 and 1988 Census of Establishments.*

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Table 13.2a Summary Statistics for All Manufacturing Establishments: 1976-1982

Year	Number of establish-ments	Employment (Average for the year)		Total compensation (P1,000)	Value of shipment (P1,000)	Total cost (P1,00)	Capital expendi-ture during the year (P1,000)	Gross output (P1,000)	Census value added (P1,000)
		Total	Paid employees						
1976	78,476	810,178	702,366	[a]4,074,233	49,506,995	[b]40,252,474	2,944,425	53,859,273	13,607,108
1977	78,683	911,706	803,721	[a]5,363,011	67,819,508	[b]54,449,404	3,280,540	73,267,286	18,817,882
1979	85,105	1,054,575	940,958	8,450,675	100,521,131	85,048,594	6,444,659	110,332,901	35,756,521
1980	85,310	1,078,027	958,842	10,468,397	112,767,402	100,715,500	7,559,988	125,058,285	37,238,428
1981	85,257	1,097,868	982,056	12,071,838	128,166,249	116,835,113	7,757,437	140,330,850	38,727,031
1982	83,292	1,088,254	977,594	13,370,064	148,232,208	128,762,958	7,018,468	158,775,031	47,440,995

Note: Figures presented above are for all manufacturing establishments including those with less than 5 workers.
No annual survey was conducted in 1978.

[a] Excludes employer's contribution to SSS/GSIS and the like.
[b] Excludes nonindustrial services.

Source: National Statistics Office, Manufacturing Section. *1976-1982 Annual Survey of Establishments.*

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Table 13.3 Summary Statistics for Manufacturing Establishments With Average Total Employment of 10 or More Workers by Major Industry Group: 1989

Major industry group	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of material consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
All industries	10,154	949,488	940,363	40,588,903	463,055,311	303,033,610	160,021,700	11,937,902	14,458,168
Food manufacturing	2,493	167,550	164,332	7,155,586	99,921,812	70,714,707	29,207,106	3,132,561	3,224,641
Beverage manufacturing	100	31,031	31,013	2,161,416	31,392,423	11,937,507	19,454,916	271,475	1,034,161
Tobacco manufacturing	33	13,761	13,753	601,714	17,123,353	8,109,118	9,014,235	569,114	153,050
Manufacture of textile	537	101,012	100,763	3,432,160	24,454,822	16,626,670	7,828,152	209,528	1,394,424
Manufacture of wearing apparel except footwear	1,391	192,451	190,730	6,463,915	24,920,129	11,300,904	13,619,225	946,033	913,575
Manufacture of leather and leather products, leather substitutes and fur, except footwear and wearing apparel	109	8,225	8,104	238,649	787,793	366,306	421,487	57,892	11,530
Manufacture of footwear, except rubber, plastic or wood footwear	363	10,124	9,526	167,888	763,427	407,076	356,351	29,758	18,612
Manufacture of wood and wood and cork products, except furniture	661	54,953	54,370	1,720,580	11,189,588	6,834,804	4,354,784	768,475	311,429
Manufacture and repair of furniture and fixtures, except primarily of metal	585	42,530	41,996	1,020,793	4,272,343	2,324,818	1,947,525	59,774	128,556

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Table 13.3 Summary Statistics for Manufacturing Establishments With Average Total Employment of 10 or More Workers by Major Industry Group: 1989 (continued)

Major industry group	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of material consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
Manufacture of paper and paper products	165	15,754	15,701	745,891	11,578,263	7,730,155	3,848,108	174,730	207,603
Printing, publishing and allied industries	554	22,028	21,583	918,900	5,579,726	3,197,466	2,382,260	269,680	337,164
Manufacture of industrial chemicals	133	10,601	10,574	780,300	15,385,577	10,752,761	4,632,816	(224,698)	313,051
Manufacture of other chemical products	306	31,999	31,930	3,227,706	38,033,298	21,230,011	16,803,287	1,168,272	1,375,823
Petroleum refineries	4	2,384	2,384	533,025	42,728,516	36,361,753	6,366,763	(791,337)	234,321
Manufacture of miscellaneous products of petroleum and coal	12	492	492	15,698	274,880	238,937	35,942	22,101	-
Manufacture of rubber products	162	26,659	26,625	1,133,989	7,683,992	4,452,470	3,231,522	110,624	478,859
Manufacture of plastic products, n.e.c.	280	19,989	19,971	699,481	7,829,213	5,900,412	1,928,801	109,511	172,743
Manufacture of pottery, china and earthenware	51	4,680	4,632	224,719	915,200	360,843	554,357	23,130	141,458
Manufacture of glass and glass products	33	7,324	7,292	617,512	3,287,539	1,317,292	1,970,247	41,997	191,955
Manufacture of cement	17	6,038	6,038	414,052	7,230,516	4,137,611	3,092,905	172,775	257,076
Manufacture of other nonmetallic mineral products	316	13,113	12,799	461,839	2,849,275	1,352,465	1,496,810	113,654	123,112

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Table 13.3 Summary Statistics for Manufacturing Establishments With Average Total Employment of 10 or More Workers by Major Industry Group: 1989 (continued)

Major industry group	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of material consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
Iron and steel basic industries	139	17,497	17,479	1,149,386	25,301,963	20,620,479	4,681,484	2,404,660	1,021,288
Nonferrous metal basic industries	33	2,740	2,722	167,034	11,791,383	10,589,287	1,202,096	(977,970)	(247,308)
Manufacture of fabricated metal products, except machinery and equipment and furniture and fixtures primarily of metal	415	25,175	24,937	914,120	7,993,859	5,293,618	2,700,241	1,084,853	80,880
Manufacture of machinery except electrical	460	20,076	19,801	757,547	4,819,054	3,142,273	1,676,781	136,140	223,682
Manufacture of electrical machinery apparatus, appliances and supplies	208	58,078	58,053	3,203,091	32,798,258	21,797,754	11,000,504	599,769	1,574,188
Manufacture of transport equipment	210	17,363	17,267	849,948	18,170,327	13,693,602	4,476,725	1,222,529	596,523
Manufacture of professional and scientific measuring and controlling equipment, n.e.c., of photographic and optical instruments	11	3,146	3,145	140,017	437,719	205,679	232,040	(19,184)	11,290

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Table 13.3 Summary Statistics for Manufacturing Establishments With Average Total Employment of 10 or More Workers by Major Industry Group: 1989 (concluded)

Major industry group	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of material consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
Manufacture and repair of furniture and fixtures primarily of metal	28	1,048	1,030	32,063	176,108	97,928	78,180	13,609	15,027
Other manufacturin g industries	345	21,667	21,321	639,884	3,364,954	1,938,904	1,426,049	238,448	159,451

Note: Details may not add up to totals due to rounding or suppression.

Source: National Statistics Office, Manufacturing Section. 1989 Annual Survey of Establishments.

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Table 13.3a Summary Statistics for Manufacturing Establishments With Average Total Employment of Less Than 10 Workers by Major Industry Group: 1989

Major industry group	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of material consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
All industries	67,651	258,311	155,905	2,439,640	19,873,447	12,125,910	7,747,538	325,254	404,976
Food manufacturing	30,715	130,185	82,933	1,058,733	11,222,888	7,664,777	3,558,112	42,488	182,010
Manufacture of tobacco	3	18	18	236	2,227	1,040	1,187	(200)	-
Beverage manufacturing	879	1,475	126	2,851	17,037	9,847	7,190	(108)	-
Manufacture of text	1,280	3,461	1,538	21,875	186,280	134,270	52,010	13,079	3,809
Manufacture of wearing apparel except footwear	12,546	30,279	12,560	176,502	1,533,379	799,386	733,993	90,496	31,894
Manufacture of leather and leather products, leather substitutes and fur, except footwear and wearing apparel	216	1,355	865	10,896	60,770	34,624	26,146	(7,519)	3,790
Manufacture of footwear, except rubber, plastic or wood footwear	1,788	11,048	7,162	89,655	487,915	299,189	188,726	14,614	360
Manufacture of wood and wood and cork products, except furniture	2,058	7,644	4,319	70,669	619,396	329,474	289,922	(109)	2,249
Manufacture and repair of furniture and fixtures, except primarily of metal	4,090	16,733	10,863	214,225	1,103,550	711,191	392,359	44,554	48,699
Manufacture of paper and paper products	146	716	366	6,643	39,796	17,607	22,189	1,845	2,370

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Table 13.3a Summary Statistics for Manufacturing Establishments With Average Total Employment of Less Than 10 Workers by Major Industry Group: 1989 (continued)

Major industry group	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of material consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
Printing, publishing and allied industries	1,577	9,738	7,653	165,248	1,015,948	580,283	435,665	98,896	81,580
Manufacture of industrial chemicals	31	205	181	6,705	40,814	25,863	14,951	(1,342)	2,056
Manufacture of other chemical products	109	602	422	10,165	89,146	56,731	32,415	9,253	2,593
Petroleum refineries	-	-	-	-	-	-	-	-	-
Manufacture of miscellaneous products of petroleum and coal	3	16	16	481	31,327	30,099	1,228	(247)	(1,827)
Manufacture of rubber products	215	688	294	9,134	80,248	41,600	38,648	1,798	1,166
Manufacture of plastic products, n.e.c.	81	567	522	12,115	50,565	32,703	17,862	6,522	-
Manufacture of pottery, china and earthenware	690	1,731	380	3,366	30,520	11,770	18,750	(935)	-
Manufacture of glass and glass products	26	219	173	2,146	9,508	5,564	3,944	(254)	60
Manufacture of cement	-	-	-	-	-	-	-	-	-
Manufacture of other nonmetallic mineral products	1,866	8,077	5,510	151,256	969,354	389,710	579,644	1,945	6,167
Iron and steel basic industries	40	210	167	3,993	12,481	6,389	6,092	(2,903)	18
Nonferrous metal basic industries	50	225	146	4,110	33,403	25,221	8,182	11	45

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Table 13.3a Summary Statistics for Manufacturing Establishments With Average Total Employment of Less Than 10 Workers by Major Industry Group: 1989 (concluded)

Major industry group	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of material consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
Manufacture of fabricated metal products, except machinery and equipment and furniture and fixtures primarily of metal	6,057	18,851	10,239	243,126	1,336,165	460,599	875,566	(15,600)	19,889
Manufacture of machinery except electrical	1,335	7,480	6,092	114,938	413,469	173,780	239,689	12,073	13,673
Manufacture of electrical machinery apparatus, appliances and supply	55	236	164	3,120	9,492	3,366	6,126	125	600
Manufacture of transport equipment	280	1,585	1,265	28,178	210,080	135,999	74,081	14,732	2,307
Manufacture of professional and scientific and measuring and controlling equipment, n.e.c. and of photographic and optical instruments	5	13	4	88	1,466	1,226	240	(74)	6
Manufacture and repair of furniture and fixtures primarily of metal	29	224	214	2,532	16,154	12,305	3,849	411	-
Other manufacturing industries	1,481	4,730	1,713	26,654	250,069	131,302	118,768	1,705	1,463

Note: Details may not add up to totals due to rounding.

Source: National Statistics Office, Manufacturing Section. *1989 Annual Survey of Establishments.*

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Table 13.4 Summary Statistics for Manufacturing Establishments With Average Total Employment of 10 or More Workers by Major Industry Group: 1988

Major Industry Group	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of materials consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
All Industries	11,488	856,951	845,069	31,810,602	385,010,014	251,186,329	133,823,686	13,573,757	15,778,266
Food manufacturing	3,070	161,127	156,625	5,898,087	83,367,425	57,891,055	25,476,368	1,933,814	3,011,393
Beverage manufacturing	103	30,249	30,220	1,744,492	25,188,911	9,579,499	15,609,412	678,348	780,071
Tobacco manufacturing	32	14,357	14,346	513,003	16,193,766	7,679,175	8,514,591	872,939	41,396
Manufacture of textiles	547	89,499	89,131	2,537,838	19,555,986	13,488,000	6,067,987	837,560	1,998,299
Manufacture of wearing apparel except footwear	1,556	142,160	140,260	4,040,902	15,210,234	7,441,784	7,768,450	472,039	319,617
Manufacture of leather and leather products, leather substitutes and fur, except footwear and wearing apparel	120	5,167	5,043	115,047	531,052	322,658	208,394	43,730	27,798
Manufacture of footwear, except rubber, plastic or wood footwear	441	9,589	8,759	135,490	643,489	389,190	254,298	17,984	12,579
Manufacture of wood, and wood and cork products, except furniture	682	56,433	55,791	1,561,599	10,936,188	1,173,198	3,762,990	626,804	339,616
Manufacture and repair of furniture and fixtures, except primarily of metal	678	41,276	40,528	841,174	3,866,613	2,202,499	1,664,114	111,294	99,062
Manufacture of paper and paper products	176	15,433	15,387	679,804	10,247,430	6,642,570	3,604,860	343,666	179,602
Printing, publishing and allied industries	636	20,311	19,781	697,953	4,166,371	2,484,596	1,681,775	91,632	133,006

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Table 13.4 Summary Statistics for Manufacturing Establishments With Average Total Employment of 10 or More Workers by Major Industry Group: 1988 (continued)

Major Industry Group	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of materials consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
Manufacture of industrial chemicals	115	10,879	10,870	696,678	14,433,336	9,006,080	5,427,256	1,114,336	381,592
Manufacture of other chemical products	301	29,700	29,638	2,625,810	30,559,629	18,215,470	12,344,159	1,015,140	744,894
Petroleum refineries	4	2,431	2,431	459,780	44,481,575	36,406,456	8,075,119	(77,754)	515,366
Manufacture of miscellaneous products of petroleum and coal	16	552	552	23,704	512,413	373,707	138,706	24,073	5,719
Manufacture of rubber products	174	26,126	26,181	1,127,506	8,427,528	5,298,953	3,128,575	(76,039)	477,334
Manufacture of plastic products, n.e.c.	300	17,616	17,549	553,838	6,698,335	4,447,008	2,251,327	556,726	188,571
Manufacture of pottery, china and earthenware	59	5,066	5,002	192,453	785,760	322,874	462,887	76,403	71,806
Manufacture of glass and glass products	35	5,776	5,762	438,619	3,012,531	1,230,422	1,782,109	44,751	183,731
Manufacture of cement	17	5,893	5,893	311,289	5,582,197	3,661,10	1,921,092	85,370	116,071
Manufacture of other nonmetallic mineral products	353	11,219	10,876	305,864	1,990,442	1,020,749	969,694	157,146	113,846
Iron and steel basic industries	127	15,507	15,497	742,635	19,761,567	14,646,448	5,115,119	1,867,786	3,196,882
Nonferrous metal basic industries	35	2,618	2,604	144,432	11,937,419	8,907,914	3,029,505	480,626	208,616
Manufacture of fabricated metal products, except machinery and equipment and furniture and fixtures primarily of metal	483	21,733	21,435	642,738	5,964,750	4,050,209	1,914,541	575,219	179,503
Manufacture of machinery except electrical	552	18,576	18,164	568,200	3,317,745	2,293,484	1,024,261	(91,757)	179,637

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Table 13.4 Summary Statistics for Manufacturing Establishments With Average Total Employment of 10 or More Workers by Major Industry Group: 1988 (concluded)

Major Industry Group	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of materials consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
Manufacture of electrical machinery apparatus, appliances and supplies	214	54,374	54,331	2,860,232	25,628,437	18,067,850	7,560,587	771,429	1,878,636
Manufacture of transport equipment	230	14,053	13,910	584,415	8,895,011	6,384,729	2,510,282	865,250	297,343
Manufacture of professional and scientific and measuring and controlling equipment, n.e.c., and of photographic and optical instruments	11	3,634	3,632	123,416	375,373	148,164	227,209	16,395	14,117
Manufacture and repair of furniture and fixtures primarily of metal	36	1,091	1,059	24,462	108,881	60,155	48,725	8,569	5,541
Other manufacturing industries	385	24,451	23,867	619,141	2,629,620	1,350,326	1,279,293	130,275	76,623

Note: Details may not add up to totals due to rounding or suppression.

Source: National Statistics Office, Manufacturing Section. *1988 Census of Establishments.*

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Table 13.4a Summary Statistics for Manufacturing Establishments With Average Total Employment of Less Than 10 Workers by Major Industry Group: 1988

Major Industry Group	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of materials consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
All Industries	67,147	234,428	123,338	1,409,771	11,293,769	7,217,795	4,075,974	123,922	376,467
Food manufacturing	30,359	109,229	56,428	547,027	5,442,899	3,735,537	1,707,363	52,657	147,348
Beverage manufacturing	884	2,309	695	8,763	31,146	12,159	18,987	(145)	624
Tobacco manufacturing	4	19	17	259	1,353	604	750	(21)	
Manufacture of textiles	1,316	3,613	1,457	14,947	98,234	54,151	44,083	3,698	2,935
Manufacture of wearing apparel except footwear	12,482	31,404	13,799	145,824	885,692	399,091	486,601	19,544	26,925
Manufacture of leather and leather products, leather substitutes and fur, except footwear and wearing apparel	209	909	547	12,235	121,643	82,032	39,612	1,619	547
Manufacture of footwear, except rubber, plastic or wood footwear	1,703	11,024	6,769	72,242	367,846	196,374	171,473	9,162	1,238
Manufacture of wood, and wood and cork products, except furniture	2,043	8,472	4,725	59,862	391,355	241,605	149,750	(8,114)	5,472
Manufacture and repair of furniture and fixtures, except primarily of metal	4,077	15,519	8,652	92,293	558,507	301,704	256,803	2,746	8,927
Manufacture of paper and paper products	145	760	412	5,066	52,916	34,260	18,656	3,030	248
Printing, publishing and allied industries	1,522	8,136	5,962	118,134	1,454,507	1,184,515	269,992	(20,269)	126,188
Manufacture of industrial chemicals	37	180	154	4,208	62,051	35,069	26,982	5,455	597

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Table 13.4a Summary Statistics for Manufacturing Establishments With Average Total Employment of Less Than 10 Workers by Major Industry Group: 1988 (continued)

Major Industry Group	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of materials consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
Manufacture of other chemical products	115	506	315	4,995	47,855	32,974	14,881	4,590	590
Petroleum refineries									
Manufacture of miscellaneous products of petroleum and coal	3	13	8	89	499	348	150	41	81
Manufacture of rubber products	254	1,185	706	10,568	52,616	25,437	27,179	408	811
Manufacture of plastic products, n.e.c.	83	402	320	5,582	39,239	16,645	22,594	14,760	780
Manufacture of pottery, china and earthenware	712	2,009	503	4,176	29,012	11,309	17,703	(1,085)	256
Manufacture of glass and glass products	24	126	92	1,494	7,153	4,937	2,217	186	386
Manufacture of cement	3	14	10	148	467	204	263	13	5
Manufacture of other nonmetallic mineral products	1,830	6,714	3,890	39,597	275,649	163,224	112,425	5,516	5,320
Iron and steel basic industries	60	285	207	3,649	21,254	13,842	7,411	(290)	502
Nonferrous metal basic industries	59	238	104	1,494	6,112	2,312	3,800	197	240
Manufacture of fabricated metal products, except machinery and equipment and furniture and fixtures primarily of metal	6,035	17,406	8,151	110,420	580,418	293,151	287,267	5,967	12,043
Manufacture of machinery except electrical	1,277	6,388	4,775	97,439	443,036	215,039	227,997	14,075	30,067

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Table 13.4a Summary Statistics for Manufacturing Establishments With Average Total Employment of Less Than 10 Workers by Major Industry Group: 1988 (concluded)

Major Industry Group	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of materials consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
Manufacture of electrical machinery apparatus, appliances and supplies	63	232	157	3,018	13,648	6,207	7,440	1,270	232
Manufacture of transport equipment	283	971	603	8,132	56,679	29,150	27,530	3,415	1,470
Manufacture of professional and scientific and measuring and controlling equipment, n.e.c., and of photographic and optical instruments	5	18	13	228	1,495	1,041	454	155	-
Manufacture and repair of furniture and fixtures primarily of metal	34	164	123	1,528	10,305	6,266	4,039	316	485
Other manufacturing industries	1,526	6,183	3,744	36,354	240,181	118,609	121,572	5,023	2,149

Note: Details may not add up to totals due to rounding or suppression.

Source: National Statistics Office, Manufacturing Section. *1988 Census of Establishments.*

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Table 13.5 Value of Output of Top Ten Manufacturing Industries (With ATE of 10 or More Workers): 1986 - 1989 (Thousand Pesos)

Major industry group	1986	1987	1988	1989
All industries	[a]247,461,328	297,940,287	385,010,014	463,055,311
Total	[a]192,157,025	239,822,352	294,380,866	354,844,901
Food manufacturing	59,861,182	69,764,293	83,367,425	99,921,812
Petroleum refineries	38,118,800	44,305,932	44,481,575	42,728,516
Manufacture of other chemical products	16,732,338	20,584,351	30,559,629	38,033,298
Beverage manufacturing	15,877,125	19,603,717	25,188,911	31,392,423
Manufacture of electrical machinery apparatus, appliances and supplies	14,102,432	18,989,416	25,628,437	32,798,258
Tobacco manufacturing	13,994,812	15,523,203	16,193,766	17,123,353
Manufacture of textiles	11,583,593	15,330,189	19,555,986	24,454,822
Iron and steel basic industries	11,553,392	14,550,374	19,761,567	25,301,963
Manufacture of industrial chemicals	10,333,351	11,779,972	14,433,336	b
Manufacture of wearing apparel, except footwear	b	9,390,905	15,210,234	24,920,129
Transport Equipment	b	b	b	18,170,327

[a] Revised figure.
b Not included in top ten industries for the year indicated.

Source: National Statistics Office, Manufacturing Section. *1986-1989 Annual Survey of Establishments and 1988 Census of Establishments.*

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Table 13.6 Summary Statistics for Manufacturing Establishments with Average Total Employment of 10 or More by Region: 1988 and 1989

Year/region	Number of establishments	Employment (Average for the year) Total	Employment (Average for the year) Paid employees	Compensation (P1,000)	Value of output (P1,000)	Cost of materials consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
1989									
Philippines	10,154	949,488	940,363	40,588,903	463,055,311	303,033,610	160,021,700	11,937,902	14,458,168
National Capital Region (NCR)	4,981	539,726	536,789	24,010,019	227,604,920	139,775,552	87,829,368	9,084,564	8,844,964
Cordillera Administrative Region(CAR)	69	7,544	7,463	383,573	4,542,318	3,685,983	856,335	(148,487)	234,564
I. Ilocos	179	7,233	6,991	267,007	3,415,764	2,098,152	1,317,612	47,844	61,462
II. Cagayan Valley	173	6,941	6,739	159,025	1,315,936	797,738	518,198	22,362	44,047
III. Central Luzon	957	66,824	65,602	2,330,896	34,216,631	23,070,123	11,146,508	468,083	676,443
IV. Southern Tagalog	1,192	123,638	122,211	5,528,855	89,657,867	62,556,231	27,101,637	1,644,720	2,021,766
V. Bicol	197	5,188	4,955	155,582	1,507,692	1,094,967	412,726	13,306	50,791
VI. Western Visayas	347	26,502	26,123	1,179,097	12,528,594	8,548,897	3,979,697	43,196	262,020
VII. Central Visayas	862	66,560	65,619	2,004,748	23,484,575	13,269,166	10,215,409	872,572	519,852
VIII. Eastern Visayas	102	5,299	5,102	275,632	15,681,895	13,797,385	1,884,509	(1,626,648)	(172,548)
IX. Western Mindanao	174	10,780	10,574	355,066	5,154,480	3,923,700	1,230,780	401,999	140,301
X. Northern Mindanao	309	32,871	32,525	1,620,729	14,169,712	8,432,895	5,736,817	777,027	636,549
XI. Southern Mindanao	431	36,845	36,354	1,517,100	16,676,557	10,934,912	5,741,645	(357,526)	473,729
XII. Central Mindanao	181	13,537	13,316	801,574	13,098,371	11,047,911	2,050,460	694,889	664,227

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Table 13.6 Summary Statistics for Manufacturing Establishments with Average Total Employment of 10 or More by Region: 1988 and 1989 (concluded)

Year/region	Number of establishments	Employment (Average for the year)		Compensation (P1,000)	Value of output (P1,000)	Cost of materials consumed and industrial services (P1,000)	Census value added (P1,000)	Change in total inventories (P1,000)	Gross additions to fixed assets (P1,000)
		Total	Paid employees						
1988									
Philippines	11,488	856,951	845,069	31,810,603	385,010,014	251,186,329	133,823,686	13,573,757	15,778,266
National Capital Regionn (NCR)	5,449	461,201	457,300	18,090,588	174,658,400	110,986,622	63,671,777	7,154,724	6,549,685
Cordillera Administrative Region (CAR)	78	6,588	6,493	276,652	4,287,911	3,338,031	949,880	(4,892)	323,600
I. Ilocos	253	9,211	8,789	336,854	3,593,835	2,400,873	1,192,962	(75,862)	116,952
II. Cagayan Valley	191	8,447	8,198	166,527	1,366,907	875,666	491,241	373	23,810
III. Central Luzon	1,062	60,622	59,309	1,865,925	28,564,886	19,627,755	8,937,131	393,030	749,913
IV. Southern Tagalog	1,402	114,004	112,135	4,405,455	78,823,361	54,864,617	23,958,744	2,152,550	2,784,100
V. Bicol	250	5,347	4,928	134,501	1,406,094	1,035,191	370,902	25,213	30,992
VI. Western Visayas	420	24,800	24,278	902,333	11,024,302	6,667,007	4,357,295	381,769	271,578
VII. Central Visayas	963	66,327	65,169	1,765,007	18,766,514	10,318,191	8,448,323	297,298	513,373
VIII. Eastern Visayas	137	6,842	6,604	275,599	16,839,065	12,115,094	4,723,972	1,038,847	310,328
IX. Western Mindanao	216	10,244	9,968	275,199	4,531,399	3,329,420	1,201,979	171,688	75,766
X. Northern Mindanao	350	26,436	26,048	1,093,493	11,996,213	6,767,501	5,228,712	442,402	366,073
XI. Southern Mindanao	510	41,416	40,682	1,556,221	14,792,482	9,049,733	5,742,749	747,094	411,528
XII. Central Mindanao	207	15,466	15,168	666,249	14,358,647	9,810,627	4,548,019	849,524	3,250,567

Note: Details may not add up to totals due to rounding.
Source: National Statistics Office, Manufacturing Section. 1989 Annual Survey of Establishments.

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Table 13.7 Monthly Index of Value of Production of Key Manufacturing Enterprises by Industry: 1991 and 1992 (1985 = 100)

Sector	January 1992	January 1991	February 1992	February 1991	March 1992	March 1991	April 1992	April 1991
Manufacturing	234.8	226.1	247.4	221.2	258.5	240.0	237.2	224.6
Food manufacturing	228.9	193.3	231.1	190.4	240.8	183.6	199.0	187.7
Beverage	253.6	232.3	222.6	184.9	245.4	203.5	359.8	240.1
Tobacco	134.9	137.4	123.3	119.4	125.9	99.4	107.6	92.6
Textile	195.5	183.8	228.0	191.4	231.9	182.7	183.9	200.3
Wearing apparel	195.2	199.8	212.2	203.4	207.5	197.8	188.7	186.6
Wood and wood products	112.4	186.1	125.8	189.9	132.9	181.6	124.8	177.9
Furniture and fixtures	181.5	202.5	192.7	269.1	232.8	215.5	231.6	274.8
Paper and paper products	180.4	182.9	176.2	191.8	192.7	186.6	178.9	207.5
Chemicals and chemical products	155.0	143.3	165.5	147.7	186.7	139.6	167.0	152.6
Rubber products	178.9	184.7	196.6	214.1	241.2	203.9	175.5	202.1
Petroleum products	168.6	175.1	173.3	152.2	170.2	181.1	164.2	148.8
Nonmetallic mineral products	270.9	311.4	316.8	284.4	260.9	312.9	245.7	207.0
Basic metals	270.6	317.1	310.7	301.6	313.8	402.1	300.1	353.6
Transport equipment	916.5	748.8	915.7	658.4	1013.8	906.8	1010.7	729.1
Electrical machinery	243.5	236.1	276.6	281.9	305.5	259.4	258.9	278.1
Miscellaneous manufactures	62.6	64.3	66.1	74.9	74.0	83.8	67.9	72.3

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Table 13.7 Monthly Index of Value of Production of Key Manufacturing Enterprises by Industry: 1991 and 1992 (continued)
(1985 = 100)

Sector	May 1992	May 1991	June 1992	June 1991	July 1992	July 1991	August 1992	August 1991
Manufacturing	251.7	234.7	268.4	228.2	268.9	245.6	275.3	241.2
Food manufacturing	213.4	181.8	205.8	178.6	207.8	177.5	204.2	170.8
Beverage	245.6	259.2	261.3	218.8	218.3	225.1	202.1	217.4
Tobacco	122.8	131.9	136.2	127.0	136.6	119.1	126.8	138.0
Textile	191.3	203.2	201.9	224.2	193.9	220.9	230.7	233.7
Wearing apparel	218.5	207.2	248.2	235.6	250.1	230.0	252.7	232.2
Wood and wood products	119.3	205.9	142.3	179.8	136.9	164.6	142.1	172.7
Furniture and fixtures	250.4	213.7	243.7	263.2	267.2	229.5	208.1	205.8
Paper and paper products	163.3	205.6	170.0	180.8	165.6	211.3	176.3	210.6
Chemicals and chemical products	190.5	147.2	185.5	147.9	193.7	164.2	200.4	155.8
Rubber products	180.3	226.6	210.7	186.4	188.2	199.6	210.1	202.4
Petroleum products	172.5	157.1	174.1	116.1	153.1	138.7	177.6	144.3
Nonmetallic mineral products	276.8	224.4	303.0	241.8	160.8	246.2	241.7	209.1
Basic metals	284.4	301.9	289.6	306.9	294.8	381.8	306.7	419.4
Transport equipment	1152.4	915.1	1359.6	936.7	1488.2	1099.6	1501.3	1032.4
Electrical machinery	281.7	298.2	315.4	304.3	320.7	292.7	310.4	267.5
Miscellaneous manufacturers	61.3	63.5	69.1	63.2	56.6	64.9	59.0	72.7

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Table 13.7 Monthly Index of Value of Production of Key Manufacturing Enterprises by Industry: 1991 and 1992 (concluded)
(1985 = 100)

Sector	September 1992	September 1991	October 1992	October 1991	November 1992	November 1991	December 1992	December 1991
Manufacturing	259.1	240.5	263.0	268.1	264.6	264.2	256.4	254.1
Food manufacturing	163.9	170.8	194.3	221.9	221.7	226.2	230.1	241.0
Beverage	207.7	204.6	217.4	228.4	214.2	215.4	233.3	236.0
Tobacco	120.7	118.5	112.1	125.9	118.1	122.6	125.1	112.3
Textile	212.4	226.8	213.6	248.1	194.4	228.7	170.9	207.7
Wearing Apparel	234.8	222.0	265.3	204.8	281.8	215.8	258.1	207.0
Wood and wood products	141.7	192.2	126.4	178.6	141.1	174.6	77.1	149.6
Furniture and fixtures	217.9	224.0	250.9	261.0	247.9	192.6	265.0	249.8
Paper and paper products	172.1	175.6	176.3	157.0	178.2	170.5	163.9	157.4
Chemicals and chemical products	193.0	155.5	182.4	152.0	192.9	168.8	193.6	160.8
Rubber products	252.1	188.8	194.9	200.6	223.3	195.9	156.4	145.9
Petroleum products	153.5	138.7	167.6	182.9	167.1	179.8	165.1	169.9
Non-metallic mineral products	244.7	228.5	258.9	238.9	251.4	232.2	235.7	233.9
Basic metals	321.3	366.8	299.7	336.8	275.8	327.2	258.1	358.8
Transport equipment	1430.8	1122.9	1346.2	1378.1	1317.6	1344.2	1228.8	1146.7
Electrical machinery	319.1	283.6	313.1	279.3	288.3	255.5	308.8	246.7
Miscellaneous manufactures	72.3	72.4	76.3	76.9	95.6	73.1	103.6	59.3

Source: National Statistics Office, Economic Analysis Division. *1991 and 1992 Industry Trends.*

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Figure 13.1 Monthly Index of Value of Production of Key Manufacturing Enterprises: 1990 - 1992

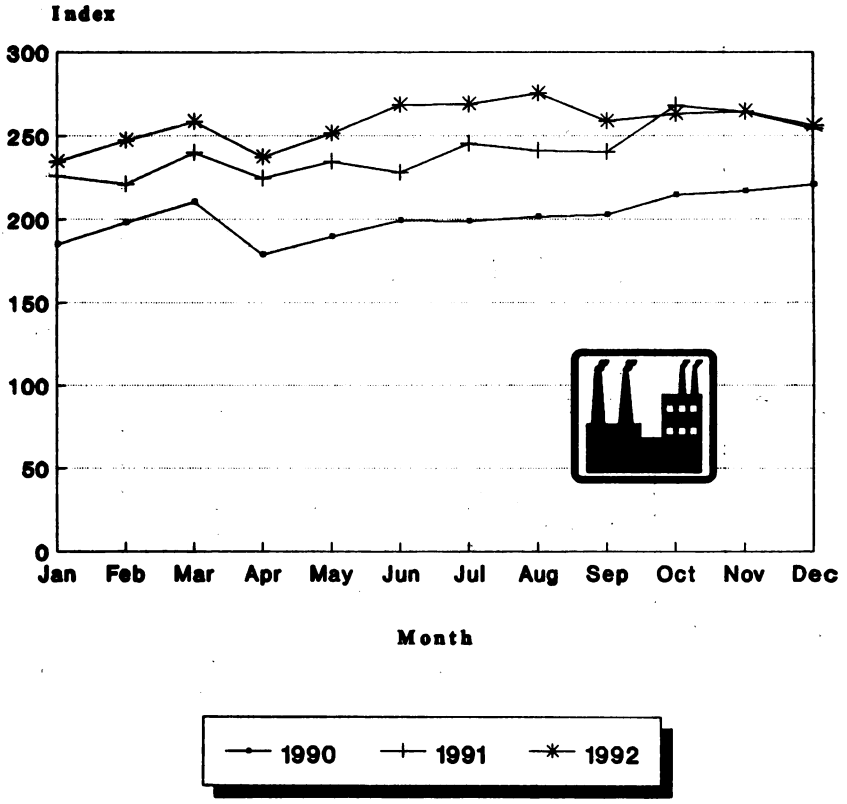

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Table 13.8 Monthly Index of Employment of Key Manufacturing Enterprises by Industry: 1991 and 1992 (1985 = 100)

Sector	January 1992	January 1991	February 1992	February 1991	March 1992	March 1991	April 1992	April 1991
Manufacturing	100.1	108.0	100.0	106.5	99.8	105.5	99.6	105.0
Food manufacturing	115.9	119.3	116.1	117.9	116.2	116.9	115.3	116.8
Beverage	95.4	94.2	94.0	89.0	93.8	92.9	95.8	92.0
Tobacco	76.4	94.2	76.9	91.2	77.0	91.9	76.2	89.6
Textile	94.2	103.2	92.6	98.8	92.9	97.9	92.8	96.0
Wearing apparel	105.4	108.1	105.0	108.7	104.9	108.8	103.8	107.7
Wood and wood products	42.6	58.4	42.8	58.6	41.9	60.0	40.0	60.5
Furniture and fixtures	122.2	143.6	121.8	142.0	119.7	114.5	122.7	113.2
Paper and paper products	99.0	98.9	99.9	99.1	96.7	99.5	95.8	99.5
Chemicals and chemical products	103.6	107.8	103.7	108.2	104.2	108.3	104.3	109.9
Rubber products	73.7	94.7	73.1	93.5	76.2	94.0	71.9	93.8
Petroleum products	95.3	92.9	95.1	92.8	95.5	92.7	95.6	93.9
Nonmetallic mineral products	115.6	127.6	115.4	123.7	116.0	123.3	109.9	123.0
Basic metals	118.0	119.1	118.8	117.5	118.3	116.2	117.6	115.9
Transport equipment	245.5	271.3	247.6	269.0	249.7	268.0	261.5	269.5
Electrical machinery	79.4	85.6	79.8	85.7	79.9	83.8	80.6	81.3
Miscellaneous manufactures	18.4	17.2	18.5	17.2	18.4	17.2	18.3	17.2

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Table 13.8 Monthly Index of Employment of Key Manufacturing Enterprises by Industry: 1991 and 1992 (continued)
(1985 = 100)

Sector	May 1992	May 1991	June 1992	June 1991	July 1992	July 1991	August 1992	August 1991
Manufacturing	101.2	104.9	100.4	103.6	100.6	103.1	100.7	102.6
Food manufacturing	114.8	116.7	113.6	114.9	113.7	116.5	113.3	118.2
Beverage	96.6	94.9	95.4	95.2	92.7	92.1	92.7	92.0
Tobacco	78.1	89.0	78.1	86.4	77.9	77.7	76.0	74.1
Textile	99.4	95.6	92.7	97.0	92.3	97.2	91.3	96.7
Wearing apparel	103.4	106.9	104.9	107.1	105.0	106.8	108.5	106.2
Wood and wood products	43.6	58.4	42.1	57.5	43.5	53.7	43.6	53.7
Furniture and fixtures	121.7	112.4	121.2	106.1	117.6	114.4	119.5	112.1
Paper and paper products	93.6	100.8	93.8	99.5	96.0	99.8	95.8	99.3
Chemicals and chemical products	104.4	108.8	105.1	110.7	105.5	110.5	105.5	108.4
Rubber products	72.0	93.4	71.7	93.4	71.1	91.2	72.3	87.5
Petroleum products	95.8	94.3	95.8	94.2	95.9	94.9	95.4	93.8
Nonmetallic mineral products	113.7	127.7	116.1	128.9	116.4	127.0	120.0	126.0
Basic metals	117.1	116.2	117.2	115.0	116.8	114.1	117.0	114.0
Transport equipment	266.7	269.3	269.9	245.4	273.4	245.7	263.7	245.8
Electrical machinery	81.4	81.3	83.6	80.7	84.3	79.8	84.4	79.4
Miscellaneous manufactures	18.6	16.7	18.7	15.5	19.7	15.6	19.3	15.7

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Table 13.8 Monthly Index of Employment of Key Manufacturing Enterprises by Industry: 1991 and 1992 (concluded) (1985 = 100)

Sector	September 1992	September 1991	October 1992	October 1991	November 1992	November 1991	December 1992	December 1991
Manufacturing	99.9	102.0	99.7	100.8	99.4	100.0	99.5	100.6
Food manufacturing	112.9	115.6	113.7	114.9	115.5	112.6	114.6	115.1
Beverage	92.5	92.0	93.2	90.9	91.6	90.8	92.4	92.0
Tobacco	76.7	73.2	77.0	76.2	77.1	76.1	77.1	76.8
Textile	91.3	96.4	90.3	94.1	83.8	93.7	81.4	93.9
Wearing apparel	108.2	104.0	107.6	102.3	110.7	99.9	112.4	100.6
Wood and wood products	42.8	56.0	42.3	54.8	42.3	54.4	40.7	53.1
Furniture and fixtures	112.1	110.3	111.7	109.8	111.8	110.0	111.7	115.7
Paper and paper products	94.1	100.7	93.6	99.7	93.7	100.9	95.7	99.9
Chemicals and chemical products	105.5	108.9	104.6	106.6	105.2	106.5	105.2	105.2
Rubber products	71.5	79.9	70.9	75.3	71.3	73.8	70.9	74.1
Petroleum products	96.4	94.5	96.4	94.5	98.7	94.8	99.4	94.7
Nonmetallic mineral products	119.0	125.6	120.0	125.6	117.0	124.9	119.2	123.1
Basic metals	116.6	114.9	116.3	114.8	116.7	115.8	117.1	115.7
Transport equipment	262.4	247.1	262.5	244.8	263.2	244.7	266.9	249.1
Electrical machinery	82.0	79.5	82.0	79.6	82.3	79.5	83.2	79.9
Miscellaneous manufactures	19.3	17.6	19.6	17.8	19.4	18.1	19.4	18.3

Source: National Statistics Office, Economic Analysis Division. *1991 and 1992 Industry Trends.*

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Table 13.9 Monthly Index of Compensation of Key Manufacturing Enterprises by Industry: 1991 and 1992 (1985 = 100)

Sector	January 1992	January 1991	February 1992	February 1991	March 1992	March 1991	April 1992	April 1991
Manufacturing	280.2	267.2	281.7	262.1	289.9	261.4	295.9	262.9
Food manufacturing	299.1	286.5	295.1	260.4	309.0	268.7	285.2	264.4
Beverage	314.8	302.0	299.9	274.9	336.2	292.2	342.0	324.4
Tobacco	203.5	226.0	176.7	209.2	190.2	197.4	239.0	200.3
Textile	218.8	237.8	239.5	231.7	248.6	226.8	239.0	220.6
Wearing apparel	236.4	236.9	256.4	238.6	251.9	240.5	266.4	234.0
Wood and wood products	110.1	127.5	112.5	129.6	113.4	133.9	119.3	139.2
Furniture and fixtures	166.1	209.5	176.0	216.4	176.1	190.5	192.0	178.4
Paper and paper products	299.7	244.0	278.3	241.1	274.0	244.5	282.8	235.8
Chemicals and chemical products	274.3	258.0	277.7	259.3	293.6	255.5	293.4	248.3
Rubber products	195.2	185.3	184.8	205.6	195.8	217.8	180.9	211.4
Petroleum products	236.7	187.1	210.1	187.3	235.5	187.9	231.1	211.8
Nonmetallic mineral products	291.5	293.8	287.2	289.3	303.8	305.2	302.3	304.0
Basic metals	393.4	337.8	387.5	349.3	390.7	321.1	451.0	357.1
Transport equipment	709.2	615.8	706.5	618.3	701.2	560.8	746.7	584.5
Electrical machinery	254.7	239.6	276.7	243.5	269.9	261.7	294.4	255.8
Miscellaneous manufactures	48.8	35.7	48.7	41.4	50.2	43.9	52.6	37.8

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Table 13.9 Monthly Index of Compensation of Key Manufacturing Enterprises by Industry: 1991 and 1992 (continued)
(1985 = 100)

Sector	May 1992	May 1991	June 1992	June 1991	July 1992	July 1991	August 1992	August 1991
Manufacturing	312.7	286.2	306.5	271.0	298.1	270.5	299.4	277.8
Food manufacturing	308.7	288.1	265.5	268.2	258.7	259.3	258.7	292.5
Beverage	344.7	311.0	378.4	298.3	347.2	296.5	351.7	288.1
Tobacco	219.8	234.5	235.5	205.7	262.6	195.7	220.1	214.6
Textile	258.6	241.1	253.2	243.7	246.8	238.5	244.6	241.5
Wearing apparel	251.4	277.0	297.9	272.9	278.8	264.9	269.7	262.6
Wood and wood products	116.4	136.6	119.4	141.2	115.3	121.3	119.1	124.3
Furniture and fixtures	185.6	183.2	192.2	173.9	190.2	186.2	190.0	181.9
Paper and paper products	280.1	266.5	297.5	279.4	275.3	276.3	272.1	274.7
Chemicals and chemical products	309.0	260.3	291.7	260.6	304.5	272.1	298.7	272.1
Rubber products	190.7	215.8	197.7	191.6	187.1	188.0	193.7	184.0
Petroleum products	369.6	240.9	246.0	192.6	250.1	217.7	256.6	215.8
Nonmetallic mineral products	291.4	318.2	300.3	315.1	312.8	296.1	329.6	292.5
Basic metals	443.1	411.0	433.9	349.9	430.9	349.5	440.4	355.0
Transport equipment	941.7	698.6	874.6	594.4	797.3	637.6	849.7	695.6
Electrical machinery	287.1	257.7	295.5	245.6	296.0	257.2	288.8	238.3
Miscellaneous manufactures	50.6	50.2	52.5	41.6	53.5	44.6	56.4	46.9

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Table 13.9 Monthly Index of Compensation of Key Manufacturing Enterprises by Industry: 1991 and 1992 (concluded)
(1985 = 100)

Sector	September 1992	September 1991	October 1992	October 1991	November 1992	November 1991	December 1992	December 1991
Manufacturing	303.5	269.1	308.8	285.5	313.2	291.4	380.2	357.7
Food manufacturing	280.5	270.0	271.1	280.6	287.0	287.0	376.3	354.1
Beverage	355.4	287.9	355.4	297.8	361.9	301.6	335.3	436.4
Tobacco	240.7	193.9	261.2	191.0	224.2	189.4	324.8	319.3
Textile	264.9	240.9	251.5	245.7	241.1	242.3	269.7	276.4
Wearing apparel	273.4	239.7	269.2	280.8	271.8	241.3	345.0	342.8
Wood and wood products	122.2	129.4	125.6	131.2	118.8	128.6	165.7	181.6
Furniture and fixtures	181.8	170.4	185.5	186.1	178.8	194.1	189.1	198.3
Paper and paper products	279.8	276.7	280.0	287.3	283.6	269.2	342.8	392.6
Chemicals and chemical products	319.7	267.5	320.3	269.6	337.3	277.6	378.8	323.0
Rubber products	194.4	169.6	190.6	178.8	185.7	178.3	307.1	284.1
Petroleum products	220.3	210.7	349.1	217.9	322.7	261.3	290.1	229.1
Nonmetallic mineral products	317.3	312.0	312.3	303.3	319.3	298.4	308.4	354.9
Basic metals	435.8	358.3	444.9	458.3	524.4	435.8	411.0	442.8
Transport equipment	757.9	627.7	882.2	704.4	805.4	781.0	1282.5	811.9
Electrical machinery	294.9	253.1	282.5	249.8	309.7	319.5	393.5	411.1
Miscellaneous manufactures	53.4	45.7	56.9	48.4	58.1	48.3	60.9	52.2

Source: National Statistics Office, Economic Analysis Division. *1991 and 1992 Industry Trends.*

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Table 13.10 Capital Investments of Registered Business Organizations Engaged in Manufacturing by Type of Organization: 1970-1992 (Million pesos)

Year	Total	Corporation	Partnerships	Single proprietorships
1970	52.7	23.7	7.5	21.5
1971	126.5	38.7	9.8	78.0
1972	92.3	57.2	7.5	27.6
1973	161.1	79.9	16.4	64.8
1974	309.4	208.9	18.6	81.9
1975	210.6	125.3	26.1	59.2
1976	235.1	134.3	13.5	87.3
1977	350.1	229.9	13.9	106.3
1978	539.3	350.5	13.6	175.2
1979	564.8	304.1	15.7	245.0
1980	815.0	252.2	18.9	543.9
1981	741.8	405.3	17.6	318.9
1982	673.6	243.2	14.0	416.4
1983	233.5	219.6	13.9	n.a.
1984	218.6	203.1	15.5	n.a.
1985	455.5	433.4	22.1	n.a.
1986	274.0	257.8	16.2	n.a.
1987	786.4	751.8	34.6	n.a.
1988	1,293.9	1,251.0	42.9	n.a.
1989	1,901.5	1,852.2	49.3	n.a.
1990	1,888.6	1,069.8	81.9	n.a.
1991	1,765.1	1,683.7	81.4	n.a.
1992	1,963.1	1,889.5	73.6	n.a.

Source: Securities and Exchange Commission.

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Table 13.11 Capital Increases and Withdrawals of Corporations and Partnerships Engaged in Manufacturing: 1970-1992 (Amount in million pesos)

Year	Increases		Withdrawals		Net effect
	Number	Amount	Number	Amount	Amount
1970	90	118.5	46	6.4	112.1
1971	118	171.0	57	8.8	162.2
1972	102	220.3	38	33.8	186.5
1973	170	182.6	111	59.5	123.1
1974	207	390.8	70	18.4	372.4
1975	250	546.5	107	16.5	530.0
1976	223	396.8	136	45.1	351.7
1977	126	280.6	61	6.4	274.2
1978	186	964.9	102	28.3	936.6
1979	199	1,105.2	69	90.3	1,014.9
1980	200	990.9	69	7.1	983.8
1981	175	1,991.8	86	275.8	1,716.0
1982	152	1,403.2	62	55.2	1,348.0
1983	122	998.3	64	240.4	757.9
1984	137	316.0	2	11.2	304.8
1985	172	2,007.0	48	1,497.8	509.2
1986	137	1,575.3	21	200.6	1,374.7
1987	193	2,124.9	47	712.1	1,412.8
1988	238	3,522.7	21	982.5	3,540.2
1989	261	6,634.1	26	261.6	6,372.5
1990	277	7,567.5	23	1,868.0	5,699.5
1991	303	14,926.8	54	1,168.1	13,758.7
1992	228	5,943.0	33	1,166.9	4,776.1

Source: Securities and Exchange Commission.

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Table 13.12 Number and Amount of Capital Investments of Corporations and Partnerships Engaged in Manufacturing by Size of Capital Investments: 1987-1992
(Amount in million pesos)

Size	1987		1988		1989		1990		1991		1992	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Total	1,522	786.3	1,709	1,293.9	1,921	1,901.5	1,943	1,888.6	1,953	1,765.2	1,768	1,874.1
Less than P 10,000	75	0.4	51	0.3	75	0.5	43	0.3	27	0.2	41	4.4
P 10,000 - P 49,999	288	7.3	261	6.6	295	7.5	280	7.2	297	7.3	228	9.2
P 50,000 - P 99,999	324	20.4	418	26.1	409	25.5	406	25.5	405	25.5	373	46.6
P 100,000 - P999,999	719	208.1	788	220.4	806	235.7	941	273.8	959	275.3	850	251.3
P1,000,000 and above	116	550.1	191	1,040.5	336	1,632.3	273	1,581.8	265	1,456.9	276	1,562.6

Table 13.13 Foreign Investments in New and Existing Domestic Stocks of Corporations and Partnerships Engaged in Manufacturing by Nationality of Foreign Participants: 1987-1992
(Amount in million pesos)

Nationality	1987		1988		1989		1990		1991		1992	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Total	351	754.0	776	1,980.3	1,212	3,076.9	1,061	3,141.5	642	3,818.9	760	2,072.0
American	65	350.1	88	439.7	93	147.7	81	386.8	87	795.8	76	380.9
Australian	13	14.7	13	1.7	30	22.3	27	14.1	17	17.5	17	3.2
British	44	133.0	66	376.6	51	417.1	63	61.2	35	152.8	44	159.3
Chinese	98	37.0	335	147.3	358	20.4	213	67.8	174	79.7	208	137.0
German	12	35.0	19	15.6	31	82.2	22	4.5	10	186.9	22	78.2
Japanese	26	112.0	99	813.9	269	1,210.8	257	1,355.4	223	1,986.3	226	816.9
Spanish	4	0.8	1	0.7	-	-	-	-	-	-	-	-
Others	89	71.4	155	184.8	381	1,176.4	398	1,251.7	96	599.8	167	496.5

Source: Securities and Exchange Commission.

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Table 13.14 Number and Capital Investments of Corporations and Partnerships Engaged in Manufacturing with Foreign Equity by Percentage of Foreign Equity: 1987-1992
(Amount in million pesos)

Percentage	1987		1988		1989	
	Number	Amount	Number	Amount	Number	Amount
Total	235	346.9	353	701.0	470	1,007.9
Below 30%	64	249.5	68	83.6	58	7.3
30% - 39%	69	23.1	88	272.2	59	11.9
40% - 59%	44	17.6	81	56.8	135	76.3
60% - 89%	37	33.7	79	92.3	125	280.3
90% - 99%	10	9.6	25	162.8	78	559.8
100%	11	13.4	12	33.3	15	72.3

Prcentage	1990		1991		1992	
	Number	Amount	Number	Amount	Number	Amount
Total	446	864.5	348	638.4	425	808.3
Below 30%	69	7.3	63	5.2	69	27.1
30% - 39%	52	25.0	40	40.2	103	66.7
40% - 59%	151	106.5	117	120.2	78	97.8
60% - 89%	115	105.5	80	99.5	105	312.4
90% - 99%	53	526.8	42	344.9	69	295.3
100%	6	93.4	6	28.4	1	9.0

Source: Securities and Exchange Commission.

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Table 13.15 Capital Investments of Corporations and Partnerships Engaged in Manufacturing by Region: 1987-1992 (Amount in million pesos)

Region	1987		1988		1989		1990		1991		1992	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Total	1,522	786.3	1,709	1,293.9	1,921	1,901.5	1,943	1,888.6	1,426	1,262.1	1,704	1,837.7
National Capital Region (NCR)	1,251	516.6	1,465	1,135.0	1,611	1,595.8	1,498	1,542.6	1,098	1,030.9	1,339	1,363.8
I. Ilocos	11	3.7	9	1.5	11	4.2	9	1.5	12	1.8	12	5.1
II. Cagayan Valley	4	0.9	7	3.2	10	2.7	8	3.8	4	2.8	1	1.0
III. Central Luzon	55	14.5	71	34.9	74	46.6	94	53.8	60	49.5	87	82.2
IV. Southern Tagalog	89	213.8	105	64.9	138	101.4	138	94.6	132	128.7	161	325.2
V. Bicol	5	0.6	14	2.2	6	3.1	14	4.7	12	2.4	11	2.3
VI. Western Visayas	28	8.1	9	7.5	10	1.8	17	7.6	8	2.6	18	9.3
VII. Central Visayas	40	11.4	8	25.0	30	118.3	93	147.4	50	17.6	47	41.5
VIII. Eastern Visayas	5	0.7	6	0.7	7	21.6	10	6.3	1	0.1	3	0.1
IX. Western Mindanao	4	10.2	2	0.5	4	1.9	10	3.4	2	0.8	5	1.1
X. Northern Mindanao	12	1.6	6	6.7	5	1.0	17	8.3	14	3.0	8	3.2
XI. Southern Mindanao	11	0.9	1	9.4	10	2.1	28	12.2	26	20.3	6	2.1
XII. Central Mindanao	7	3.3	6	2.4	5	1.0	7	2.4	7	1.6	6	0.1

Source: Securities and Exchange Commission.

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Table 13.16 Capital Investments of Corporations and Partnerships Engaged in Manufacturing by Major Industry Group: 1988-1991 (Million pesos)

Sector	1988	1989	1990	1991
Total	1,293.9	1,901.5	1,888.6	1,863.8
Food manufacturing	189.7	106.6	234.3	388.5
Beverages	38.3	15.2	6.1	70.0
Tobacco manufacturing			37.3	4.8
Textiles	69.5	244.6	96.6	65.5
Wearing apparel	92.2	150.6	116.0	139.7
Leather, its product substitutes and fur	12.0	17.9	11.0	6.8
Footwear (leather)	10.5	20.2	14.1	7.7
Wood and wood and cork products	44.1	15.6	14.2	36.5
Wood furniture and fixtures	22.2	35.8	27.3	34.7
Paper and paper products	37.5	44.4	33.5	34.1
Printing, publishing and allied industries	30.9	28.6	26,0	44.2
Manufacture of industrial chemicals	15.2	59.9	27.5	28.3
Manufacture of other chemical products	125.2	79.1	109.6	62.3
Petroleum refineries	0.5	6.9	0.1	7.8
Manufacture of miscellaneous products of petroleum and coal	0.9	0.3	1.1	3.0
Rubber products	24.0	17.2	35.3	42.7
Plastic products	39.5	29.6	45.4	62.0
Pottery, china and earthenware	6.3	34.5	22.1	9.7
Glass and its products	2.4	149.1	0.3	5.2
Manufacture of cement	0.1	35.3	1.2	5.9
Nonmetallic mineral products	17.7	26.3	52.0	47.2
Metal products (iron and steel)	45.1	84.4	173.1	23.5

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Table 13.16 Capital Investments of Corporations and Partnerships Engaged in Manufacturing by Major Industry Group: 1988-1991 (concluded)
(Million pesos)

Sector	1988	1989	1990	1991
Nonferrous metal basic industries	0.1	0.7	0.2	3.0
Manufacture of other fabricated metal products	40.8	151.3	37.3	171.6
Manufacture of machinery	22.1	79.7	73.2	48.4
Manufacture of electrical machinery, apparatus, appliances and supplies	75.1	250.3	247.4	62.4
Transportation equipment	276.8	34.2	315.6	191.3
Professional scientific equipment	0.8	41.6	70.2	10.7
Metal furniture and fixtures	0.1	1.4	4.6	3.9
Other manufacturing industries	54.3	140.1	56.0	242.1

Source: Securities and Exchange Commission.

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Chapter 14
Construction and Housing

14.1 Construction

Construction industry plays a big role in the delivery of basic services through better fund utilization, efficient operation and maintenance of existing facilities, and effective implementation of new high-priority projects. The effort to encourage active private sector participation in construction development was enhanced as the government formulated policy guidelines for the Build-Operate-Transfer (BOT) scheme.

In 1990, the industry's performance started sluggishly because of economic slowdown brought about by several disturbances that occurred in 1989. Its contribution to the country's level of investment amounted to P69.11 billion or 42.49 percent of the real gross capital formation in 1990 and P69.76 billion or 45.64 percent in 1989.

Despite the decrease in real investment, income from construction activities grew by 3.04 percent from P41.38 billion in 1989 to P42.64 billion during the year.

Private construction, which suffered from the uncertainties due to the Gulf War, declined by 7.57 percent while government construction grew by 15.72 percent in 1990. Most of the government construction activities were directed to the rehabilitation of calamity-stricken areas.

14.1.1 The Government's Infrastructure Program

The infrastructure program of the government aims to provide facilities needed to prop up the productive sector of the economy. It embraces the following: transportation, which covers highways, railways, ports and urban transport; water resources, which consist of water supply, sewerage, sanitation and flood control drainage; social infrastructure, which covers school buildings, health facilities, national buildings and urban community infrastructure; energy, which covers energy resource development, power and rural electrification; and communications, which consists of telecommunications and postal communications.

The government's infrastructure program was greatly affected by the extent of damage to facilities caused by natural and man-made calamities. The program thrusts were geared towards the reconstruction and rehabilitation of areas or facilities affected particularly by the strong earthquake in 1990 and the maintenance of existing facilities that will increase agricultural production, induce industrial and business activities, improve living standards and encourage private sector to actively participate in infrastructure development.

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The government allocated a total of P57.82 billion for its infrastructure program in 1991. However, actual expenditures amounted to P39.33 billion only due to late or nonrelease of funds from the Department of Budget and Management.

14.1.2. Program Accomplishment by Sector

14.1.2.1 Energy

The energy sector accounted for P12.51 billion of the total fund disbursed for infrastructure program (Table 14.1). Activities under the energy resource development program emphasized on exploration and development of petroleum and geothermal power plants, maintenance or rehabilitation of other existing power plants and completion of ongoing projects.

In 1991, a total of 10 oil and gas wells were drilled, five offshore and five onshore, with three offshore wells still being drilled by year-end. Two significant discoveries were the Calauit - 1B and San Antonio - 1A. Twenty-two geothermal wells were drilled, 20 of which had been completed and two are still ongoing as of December, 1991.

The government's nonconventional energy program has succesfully shifted emphasis from research and development activities to commercialization and promotion. The program focused on technology diffusion of a wide variety of energy applications, particularly the small photovoltaic (PV) systems. In 1991, another Affiliated Nonconventional Energy Center (ANEC) was established at the Western Mindanao State University, bringing the total number of ANEC to 15.

On the government's electrification program, transmission network was expanded and reinforced with the construction of additional 5.6 km of 138-KV lines and 194.4 km of 69-KV lines. Hopewell's 210-MW Gas Turbine Plant, the first plant completed under the Build-Operate-Transfer (BOT) scheme, was commissioned to increase the power-generating capacity. Private sector participation in power generation get a boost with the government's approval of the implementation of the 300-MW Combined-Cycle Gas Turbine plant in Limay, Bataan under the Build-Transfer-Operate (BTO) scheme with Marubeni-Asea Brown Boveri consortium and the 700-MW Coal-Fired Thermal Plant in Pagbilao, Quezon under the Build-Operate-Transfer (BOT) scheme with Hopewell. Likewise, the implementation of the 440-MW Leyte Geothermal Project, which also features the interconnection of the Leyte/Samar and Luzon grids through submarine cable, also gained approval.

14.1.2.2 Transportation

Transport sector development programs suffered greatly from calamities that occurred in 1989 and 1990. Because of heavy damage on transport facilities, resources earmarked for development purposes were rechanelled to relief and rehabilitation programs, therefore, causing setbacks in the sector's physical

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accomplishments. Total expenditures of the transportation sector amounted to P15.72 billion in 1991 representing an increase of 101.20 percent over the 1990's expenditure. (See Table 14.1.)

Roads and Highways. Most of the accomplishments in this subsector were accounted for by the locally funded construction and rehabilitation or improvement of roads and highways. For 1991, some 1,685 km of existing roads were either rehabilitated or improved while about 834,000 meters of barangay multipurpose concrete pavements were constructed. In addition, 155,210 km of existing roads were maintained. Major projects in Metro Manila, the implementation of which were fast-tracked, include the EDSA-Ortigas Interchange, the Nagtahan-Ramon Magsayasay Interchange and the 10-lane EDSA Extension to Roxas Boulevard.

Urban Transportation. To provide a long-term solution to congestion problems along major urban routes, a proposal to construct a new light trail transit system along the Aurora-Espana route was finalized, with detailed engineering design scheduled for 1992. LRT Line 1 and PNR Commuter Line are undergoing rehabilitation. LRT line is back to normal operation but more extensive rehabilitation works have to be pursued to sustain its correct level of operation.

Portworks. The improvement of ports in Tagbilaran, Tacloban, Calbayog, Ozamis, Masbate and the rehabilitation of the ports in Bauan, Palawan and Tabaco under the Fourth IBRD Ports Project were completed. The ports in Calbayog and Ormoc posted only 50.4 and 15.4 percent accomplishment, respectively. In addition, the rehabilitation of Pier 2 of the North Harbor was completed at the cost of P58.7 million.

The transfer of the Tertiary/Fishing Ports Project Management Office from DPWH to DOTC formalized the latter's assumption of the overall responsibility for the administration and development of municipal, feeder or tertiary fishing ports. Consequently, DOTC commenced with the coordination of the implementation of Fishing Ports Project Package II and the programming of future feeder ports project.

Airports and Navigation. In 1991, the asphalt overlaying of Tacloban Airport runway and the runway extension or reclamation of Bacolod Airport were completed by the Air Transportation Office of DOTC. In addition, various horizontal, vertical and nav-aids installation projects were undertaken in 43 airport sites.

Railways. The Main Line South Rehabilitation Project has commenced in 1991. To improve its financial position, PNR embarked on a program to dispose or lease selected properties to the private sector.

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14.1.2.3 Water Resources

The water resources sector continued its efforts to bring about the maximum utilization and conservation of the country's water resources and to provide dependable and safe water supply to both domestic and industrial users. In 1991, a total of P7.42 billion was disbursed for the sector to finance water resources or facilities development. (See Table 14.1.)

Flood Control and Drainage. The DPWH completed a total of 1,398 projects consisting of 1,348 river control or drainage facilities and 50 seawall projects.

Irrigation Development. In 1991, a total of 14,246 hectares of new areas was provided with irrigation facilities, bringing the total area irrigated to 1.5 million hectares. Existing irrigation systems with 20,402 hectares of service areas were likewise rehabilitated. To improve its services, the National Irrigation (NIA) Authority continued implementing an institutional development of irrigators associations (IAs) to generate greater farmers' participation in construction, systems operation and maintenance of irrigation systems. In 1991, NIA has organized 1,727 IAs covering 523,792 hectares in the national irrigation system (NIS) and 2,203 IAs covering 339,576 hectares in the communal irrigation system (CIS). Rehabilitation and reconstruction works was 27 percent completed for NIS and 16 percent of CIS destroyed by the Mt. Pinatubo eruptions.

Water Supply/Sewerage/Sanitation. A total of 25,082 wells and springs, 6 communal faucet systems and 57 waterworks projects were completed during the year. In Metro Manila, the MWSS was able to install some additional 42,034 household service connections.

14.1.2.4 Social Infrastructure

The implementation of social infrastructure projects was geared towards a more equitable per capita allocation of public services, facilities and basic infrastructure.

In 1991, the total amount allocated for social infrastructure sector was P3.91 billion, P2.57 billion of which was disbursed. (Refer to Table 14.1.)

School Building Program. Under the Elementary School Building Program, 5,102 additional classrooms and 648 multipurpose workshops were constructed, 583 old or dilapidated classrooms were replaced, 2,917 damaged classrooms were rehabilitated and 283 multipurpose workshops were repaired. Under the Secondary School Building Program, 431 classrooms, 250 science laboratories and 207 workshops were constructed.

In 1991, the implementation of school building projects was transferred from the DPWH to DECS.

Health Infrastructure. Health infrastructure projects were not implemented in 1991 because of National Emergency Memorandum Order No. 24 dated May 17, 1990 which deferred the construction of new buildings and annexes as part

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of the economy measures of government. Only carry-over projects from 1990 involving the construction and upgrading of health facilities were completed. These consisted of 38 hospitals, 80 main health centers and 79 barangay health stations.

Urban Infrastructure. Under the combined Regional Cities Development Project (RCDP) and Metro Manila Infrastructure Utilities and Engineering (MMINUTE) II-Fringe Program as well as the Program for Essential Municipal Infrastructure, Utilities, Maintenance and Engineering Development (PREMIUMED), Phase I, the construction of about 32.6 km of drainage facilities, 47.9 km of roads or streets, 162.9 meters of bridges, about 2 km of shore protection, 15 public markets and three slaughterhouses was completed.

14.1.2.5 Communications

Major developments in the communications sector were contributed by the private sector. Of the 104,500 additional telephone lines targetted to be provided in 1991, a total of 136,510 lines were installed for an outstanding 130 percent accomplishment. A total of 8,240 lines were installed by the government under its RTDP, Phase B Project while the remaining 128,270 lines were installed mostly by PLDT under its X5 and X5-C Projects. The newly installed lines increased telephone density from 1.15 telephone lines per 100 population in 1990 to 1.4 in 1991.

In addition, 126 unserved municipalities were provided with public calling offices (PCOs) pursuant to R.A. 6849. Another major accomplishment was the launching of a submarine fiber optics cable system, linking the country to Brunei and Malaysia, which will expand the country's international toll capacity in the ASEAN region.

14.1.3 Local Government Construction

Data on local government construction were obtained from the 1991 and 1992 Annual Surveys of Construction Projects of Local Governments conducted by the National Statistics Office. Data from these surveys were based on the reports of the provincial, municipal and city engineers. The survey covered 73 provinces, 60 cities and 1,538 municipalities. Tables 14.2 and 14.3 present statistics on local government construction by type and status of projects and by level of government, and the summary statistics of local government construction by type of project and by level of government, respectively.

The overall construction projects of the local government for 1992 reached 41,060 units. Projects completed during the year numbered 35,871 units with total expenditures of P6.25 billion while those not completed (5,189 units) had a total disbursement of P1.77 billion.

Of the total projects, 26,187 or 63.78 percent were new constructions, while the remaining 14,873 were additions, alterations and repairs. (See Table 14.2.)

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The thrust of local government construction shifted on water supply system which accounted for 10,228 or 24.91 percent of the total projects. However, total expenditures incurred in these projects totalled P 248.35 million, way below than the current year's spending level of P2.25 billion for streets and bridges. Municipal water supply system constituted 69.32 percent of the total water supply system constructed during the year.

Construction of water supply system is one of top priority of the LGUs. In 1992, the number of projects posted a hefty increase of 51.06 percent from 6,771 in 1991 to 10,228 this year. These water supply systems were constructed mostly in the municipalities (7,090 or 69.32 percent). The government spent P136.64 million for projects completed and disbursed P44.59 million for those not completed during the year in these municipalities.

Consistent with the government's thrust to provide infrastructure for countryside development, 7,873 or 19.17 percent of total construction projects were for streets and bridges. Of the total, 4,700 or 59.70 percent were constructed in the municipalities. Total expenditures both for completed and not completed projects amounted to P2.89 billion.

Other local government construction projects include public buildings (7,618), educational buildings (3,223), residential buildings (3,728) and other public constructions (7,753) with total expenditures of P4.67 billion (completed and not completed projects).

Hospitals and other health buildings still had the least number of units constructed (637). A total of P111.15 million was spent for hospital buildings (completed) while P18.61 million was disbursed for the projects not completed during the year. (See Table 14.3.)

Moreover, the total floor area of buildings and the length of streets and bridges constructed in 1992 reached 1,273,808 square meters and 1,119,470 linear meters, respectively. (See Tables 14.2 to 14.4 for more details.)

The top three regions which accounted for the most number of local government construction projects in 1992 were Southern Tagalog (8,204), Western Visayas (4,824) and Central Luzon (4,214) while Western Mindanao had the least number of projects (1,160). Table 14.4 presents a more detailed information about local government construction by type of construction and by region.

14.1.4 Private Building Construction

The number of private building construction continues its upward trend as it reached 53,478 units in 1993. This posted an increase of 5.29 percent over last year's figure of 50,793. Residential buildings constituted 72.73 percent or 38,894 units while nonresidential buildings comprised 6,343 units or 11.86 percent of the total private buildings constructed. The number of residential buildings increased by 7.85 percent while the floor area increased by 9.60 percent over the previous year's level. However, nonresidential buildings decreased by 1.28 percent while its total floor area increased by 9.67 percent. Additions, altera-

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tions, and repairs, on the other hand, decreased by 0.77 percent from 8,305 units in 1992 to 8,241 units in 1993. (See Table 14.5 for more details.)

14.1.5 Construction Establishments

The number of establishments engaged in construction activities grew by 12.10 percent from 1,116 in 1989 to 1,251 in 1990. General engineering construction comprised 574 or 45.9 percent of the total construction establishments while general building construction and special trade construction numbered 382 (30.5 percent) and 295 (23.6 percent), respectively. Metropolitan Manila Area accounted for 626 or 50 percent of the total construction establishments. The Cordillera Administrative Region, on the other hand, had the least number with 15 establishments.

These establishments employed a total of 108,104 workers. This figure was 9.2 percent higher than 98,965 reported in 1989. Of the total employment, 49,904 or 46.2 percent worked in general engineering construction, 42,271 or 39.1 percent in general building construction and 15,929 or 14.7 percent in special trade construction. Metropolitan Manila Area accounted for three-quarters of total employment with 81,403 (75.3 percent) workers. The least employment was reported in the Cordillera Administrative Region with only 478 workers or 0.4 percent of total employment.

Total compensation paid to 106,794 employees in 1990 amounted to P4.06 billion or an average annual pay of P38,014 per employee. Compared to the average annual compensation of P31,786 per paid employee in 1989, compensation increased by 19.6 percent in 1990. Summary statistics for all construction establishments for 1989 and 1990 are presented in Table 14.6.

Among industries, special trade construction paid the highest average annual compensation of P40,369 per employee which is 6 percent higher than the average annual compensation for the sector. General engineering construction paid an average annual compensation of P39,039 per employee while general building construction paid the lowest average annual compensation of P35,930 per employee.

The total value of construction output marked a 51.6 percent growth from P14.4 billion in 1989 to P21.8 billion in 1990. Metropolitan Manila Area generated the largest share of value of construction output placed at P17.14 billion or 78.6 percent of the total, followed by Southern Tagalog with P1.5 billion or 6.7 percent and Central Visayas with P738.2 million or 3.4 percent.

Census value added by the construction sector in 1990 amounting to P7.5 billion was 42.3 percent higher than the 1989 level of P5.3 billion. The industry shares were P3.5 billion or 46.6 percent for general engineering construction, P2.9 billion or 38.4 percent for general building construction and P1.1 billion or 15 percent for special trade construction. Metropolitan Manila Area contributed the highest census value added at P6.0 billion or 79.4 percent of the total while the Cordillera Administrative Region had the lowest at P17.7 million or 0.2 percent.

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14.2 Housing

The government's development program for the 90's focused on achieving human life development through the provision of basic services like shelter, livelihood, land tenure and other economic and social services.

The widening gap between income and housing costs which made homeownership difficult prompted the government to continue its program on low-cost housing for the benefit of the low-and middle-income families of the country.

In order to update housing data which are relevant to physical and development planning, the 1989 Census of Buildings and the regular housing censuses, the latest of which was the 1990 Census of Population and Housing, were conducted by the National Statistics Office (NSO) on August 11, 1989 and May 1, 1990, respectively. The source of housing expenditure data presented in this section was the 1988 Family Income and Expenditures Survey (FIES), also conducted by the NSO.

14.2.1 The 1990 Housing Census

The National Statistics Office conducted the Census of Population and Housing (CPH) in May 1990. The last housing census was done in May 1980.

The housing census was designed to take inventory of the existing housing units, their geographic location, structural characteristics, available facilities and other features of housing. The general objective of the CPH is to provide government planners, policy makers and administrators data on which to base their socioeconomic development plans and programs.

The housing items covered in the census include type of building, type of occupancy and predominant use, construction materials of roof and outer walls, year built, source of water supply, type of toilet facilities and other types of household conveniences.

14.2.1.1 Definition of Terms

Building - any structure built, designed or intended for the enclosure, shelter or protection of any person, animal or property comprising of one or more rooms and other spaces, covered by a roof and usually enclosed within external walls or with common dividing walls with adjacent buildings, which usually extend from the foundation of the roof.

Housing unit - a structurally separate and independent place of abode which, by the way it has been constructed, converted or arranged, is intended for habitation by one household. Structures or parts of structures which are not intended for habitation, such as commercial, industrial and cultural buildings, or natural and man-made shelters such as caves, boats, abandoned trucks, culverts, and others, but which are used as living quarters by households, are also considered as housing units.

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Residential buildings - buildings which, by the way they have been designed or constructed, are intended for abode such as single houses, multiunit residential buildings and others.

Nonresidential buildings - buildings which have been designed or constructed for purpose other than as abode. These include commercial, industrial and agricultural buildings such as offices, rice mills, barns, and the like.

Single house - an independent structure intended for one household separated by open space or walls from all other structures. It includes the so-called nipa hut or a small house that is built as a more or less permanent housing unit or a *barong-barong* made of salvaged makeshift or improvised materials.

Duplex - a structure intended for two households, with complete living facilities for each. It is divided vertically or horizontally into two separate housing units which are usually identical.

Multiunit residential building - a building intended for residential use only, consisting of three or more housing units. These houses may consist of one or more storeys in a row of three or more housing units, separated from each other by walls extending from the ground to the roof or a building having floors to accommodate three or more housing units.

Commercial building - a building built for transacting business or for rendering professional services, such as store, office, warehouse, rice mill and the like.

Industrial building - a building built for processing, assembling, fabricating, finishing, manufacturing or packaging operations, such as a factory or a plant.

Agricultural building - any structure built for agricultural purposes, such as barn, stable, poultry house and granary.

Institutional living quarters - buildings intended for persons confined to receive medical, charitable or other care/treatment such as hospitals and orphanages, for persons detained such as jails and penal colonies, and other buildings like convents, school dormitories and others.

14.2.1.2 Housing Statistics

Number of Housing Units. The number of housing units in 1990 totalled 11.40 million, an increase of 30.11 percent from the 1980 figure of 8.76 million. Southern Tagalog region registered the highest number of housing units (1.60 million), 96.70 percent of which or 1.54 million were occupied and the remaining 3.30 percent were vacant. The NCR and Central Luzon were second and third with 1.48 million and 1.16 million housing units, respectively. Compared to other regions of the country, only these three regions reached the millionth mark. (See Table 14.7.)

The national development process starts from the smallest economic unit which is the household. It is the basic cell of the society and is the primary concern of census undertaking.

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In 1990, the number of households enumerated was 11.40 million and the number of occupied housing units was 11.02 million, reflecting a ratio of 1.035 households to occupied housing units. On the other hand, the ratio of household population (60,559,116) to occupied housing units reached 5.496.

In urban areas, the ratio of the number of households to occupied housing units (1.053) in the urban area was higher than in the rural area (1.019) which may be due to the increasing pace of rural-to-urban migration particularly in Metro Manila. In this regard, the government adopted the policy of decentralization to promote balanced economic growth and development, decongest the urban areas and alleviate the problem of urban poverty. Likewise, basic infrastructure and utilities including shelter was provided particularly to the urban poor who usually lived in the slums and squatter colonies. (See Table 14.8.)

Of the total occupied housing units of 11.02 million, 5.32 million or 48.29 percent are situated in urban areas while 5.70 million or 51.71 percent are situated in rural areas. Single housing units constituted 9.99 million or 90.68 percent of the total occupied housing units, 4.38 million units or 43.81 percent of which are located in urban areas while the remaining 56.19 percent or 5.61 million are in rural areas. Multiunit residential buildings accounted for 5.84 percent (643,806), followed by the duplex type, sharing 3.01 percent (332,040) of the total. The rest of the housing units were commercial/industrial/agricultural, institutional living quarters and other housing units which, together, accounted for 0.44 percent (48,230). About 2,970 units were of the unknown type. (See Table 14.9 for more details.)

Number of Households by Type of Building and by Tenure Status of Housing Unit and Lot. The number of households living in a housing unit ranged from one to six or more households.

Housing units occupied by one household accounted for 97.52 percent (10.75 million) of the country's total occupied housing units. By area classification, they accounted for 98.52 percent and 96.45 percent of the rural and urban housing units, respectively. Meanwhile, the number of units with two or more households is generally higher in urban than in rural areas. (See Table 14.9 for details.)

Of the 11.41 million households counted in 1990, 82.99 percent or 9.47 million owned their housing units and majority of these are located in the rural areas (55.03 percent) where housing acquisition cost (with respect to materials used and labor) is relatively lower than in urban areas.

Approximately 94.21 percent (8.92 million) of the total households owned a single housing unit, 2.41 percent, duplex-type house and 3.11 percent multiunit residential type of housing unit.

Households who rented their housing units numbered 917,051, most of whom (93.47 percent) resided in urban areas. Households who occupied rent-free (with consent of owner) housing units numbered 993,292, 85.92 percent of which occupied single houses, 8.40 percent occupied multiunit residential

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buildings and 4.67 percent, duplex-type buildings. More than half of these households occupying rent-free units were in rural areas. (See Table 14.10 for details.)

Of the estimated 9.45 million owner-households, only 5.12 million (54.03 percent) also owned the lot of the housing units they own. Meanwhile, only 8.87 percent pays rental for the lot of the house unit they occupy. (See Table 14.10a.)

Number of Occupied Housing Units by Construction Materials of the Outer Walls and Roof. Data on the construction materials of the roof and walls provide information on the construction, replacement and improvement of housing units.

This information is used as indicator to evaluate housing needs and to estimate investment in this sector. It also determines how many households are housed in structurally acceptable housing units. Structural acceptability of housing units means that these units are built of durable construction materials that will provide household occupants with protection and privacy and safeguard them from adverse climatic events.

Housing units in the country usually have roofs that are made either of strong or light materials. As of 1990, housing units with roofs made of galvanized iron or aluminun and cogon or nipa predominated, with the former numbering 5.54 million or 50.31 percent of the total occupied housing units while the latter, 4.51 million or 40.95 percent.

A total of 4.09 million or 37.08 percent of the housing units in 1990 had walls made of light materials while 6.93 million or 62.87 percent had walls of strong materials (concrete/brick/stone, wood, galvanized iron/aluminum and asbestos). The remaining 6,441 housing units did not report the kind of materials used for walls. (See Table 14.11 for more details.)

Tables 14.12 and 14.13 show the data on floor area and number of occupants in each housing unit as well as the percentage distribution of owner-households who purchased or constructed their housing units.

Housing Expenditures of Families. Housing expenditures include rent/rental value of house and lot and the cost of minor repairs and maintenance of the occupied housing unit. In 1988, total housing expenditures of the 10.53 million families nationwide amounted to P43.86 billion. This amount constituted 12.80 percent of the total expenditures.

Expenses for rent/rental value of house and lot accounted for 90.93 percent of the total housing expenditures and 11.67 percent of total family expenditures. House maintenance and minor repairs accounted for 8.84 percent of housing expenditures and only 1.13 percent of total family expenditures.

Families living in urban areas spent much higher on housing than those living in rural areas. Urban families accounted for 71.10 percent or P31.26 billion of the total housing expenditures. (See Table 14.14 for more details.)

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14.2.2 The 1989 Census of Buildings

The 1989 Census of Buildings is a statistical activity involving the listing of all buildings and recording their characteristics in the urban and other selected areas of the country. It provides information on the number and distribution of buildings by type of structure, predominant use, ownership and other purposes.

The number of buildings listed in selected areas in 1989 totalled 4.30 million. Of this total, 86.90 percent (3.74 million) were single houses, 2.19 percent (94,251) were duplex and 1.80 percent (77,418) were row houses/town houses. Buildings not elsewhere classified numbered 363,316.

The National Capital Region (NCR) had the highest number of buildings listed with 910,578 units, followed by Southern Tagalog Region with 560,165 units. Central Luzon was third with a total of 485,556 buildings. (See Table 14.15.)

By predominant use, residential buildings accounted for 3.37 million units or 78.32 percent of the total buildings while commercial buildings constituted only 134,674 units or 3.13 percent. Buildings used for institutional purposes numbered 94,525 (2.20 percent) and those intended for either residential or commercial purpose reached 186,612 units (4.34 percent). Residential, commercial and residential/commercial buildings were located mostly at the NCR where population is relatively high compared to the other regions. Institutional buildings which consist of schools, hospitals, churches, and others, were mostly found in Southern Tagalog Region which is considered as one of the most populated regions of the country. (See Table 14.16 for more details.)

14.2.3 The National Shelter Program (NSP)

Through deliberate and collective efforts of various government and non-government sectors, the NSP continued to provide a self-sustaining and equitable housing delivery system. Improvements in its overall performance were observed in spite of the economic difficulties the country underwent in late 80's to 1990. In 1992, the NSP provided 123,462 housing units through its four major programs (production, individual mortgages, development financing and community programs), surpassing the previous year's 118,699 units by 4.01 percent. (See Table 14.17.)

14.2.3.1 Housing Production

Housing production program is implemented by the National Housing Authority (NHA) through its programs of sites and services, resettlement, construction of new units and joint venture with the private sector and with local governments. Growth in NHA accomplishments was attributed to the expansion of sites and services and slum upgrading.

Government housing production decreased by 13.05 percent from 26,187 units in 1991 to 22,768 units in 1992. Total housing production expenditures was P477.07 million.

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14.2.3.2 Individual Mortgages

The Unified Home Lending Program (UHLP) which was created by the government was launched on July 1, 1987 and was fully implemented in 1988. The UHLP aims to assist the low- and middle-income families in acquiring housing loans under the regular mortgage program.

The individual mortgage program consists mainly of housing loans under the UHLP. This program is entirely funded through borrowings at fixed cost from the Social Security System (SSS), Government Service Insurance System (GSIS), and Home Development Mutual Fund (HDMF). Complementary individual programs of the three funding institutions such as the Expanded Housing Program of HDMF and the individual programs of SSS and GSIS are also included. Nonmembers of SSS, GSIS and HDMF can avail of this mortgage program through the Social Mortgage Window Program which enables National Home Mortgage Finance Corporation (NHMFC) to purchase residential mortgages originating from the government, private financial institution and developers according to the terms and conditions of the UHLP.

Moreover, assistance through retail guarantees critical in low-cost mortgage generation was provided by the HIGC for individual homebuyers.

In 1992, 41,328 housing units were acquired through individual mortgage programs with total value of P9.52 billion. The figure represented 33.47 percent of total housing units and 76.76 percent of the total financial assistance provided under the National Shelter Program. More than half (58.49 percent) of these housing units were availed of through the Unified Home Lending Program, 18.55 percent through the Expanded Housing Program of the HDMF and the rest were through the HIGC, GSIS and SSS programs on regular mortgages.

On January 24, 1990, the Abot-Kaya Pabahay Fund was established in time with the government's implementation of social housing programs for the benefit of the low-income families. The Fund amounted to P2.50 billion to be instituted for a period of five years through continuing annual appropriation of P500 million from the national government. This Fund shall be used to provide amortization support, financial assistance to developers of low-cost housing projects, expedite development of land into suitable sites for social housing and establish a strong guarantee system for the funding agencies involved in housing.

Moreover, the Housing and Urban Development Coordinating Council (HUDCC) approved the adjustments made in the existing UHLP loan packages and interest rates which were implemented in 1991. For loans not exceeding P150,000.00, interest rate was 9 percent; for over P150,000.00 to P225,000.00, 12 percent; and for loans over P225,000.00 to P375,000.00, 16 percent.

14.2.3.3 Development Loans

The number of housing units through the government housing development loan assistance program increased by 18.11 percent from 33,963 units in 1991 to 40,114 units in 1992. But the total amount of loans extended declined by 1.77 percent from P1.96 billion to P1.93 billion during the year.

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Of all the agencies extending development loans, NHMC, GSIS and SSS registered increases over the previous years. Accomplishments of HGIC and HDMF declined.

Another notable development under this program was the introduction of new financing programs by the HDMF for PAG-IBIG members, namely, the Expanded Home Development Loan Program (EHDLP) and the Retail Financing for House Construction (RFHC). These programs aim to provide financial assistance to PAG-IBIG members for constructing their residential units at reasonable rates and terms. The RFHC specifically answers the need of the members for interim financing. A total of 3,130 units (EADLP - 3,071 and RFHC - 59) were assisted by these programs in 1991.

In 1989, the Department of Agrarian Reform (DAR) issued Administrattive Order No. 15, setting the procedure for the conversion of the untenanted lands to commercial lands located within the nonagricultural zones, as embodied in the land use plans of cities and municipalities. This was followed by the issuance of Administrative Order No. 11, series of 1990 on March 20, 1990, which allows for the conversion of agricultural lands into nonagricultural uses on the following cases: a) when the land is no longer suitable for agricultural purposes or the locality has become highly urbanized and when the land will be more profitable if utilized for other purposes; b) when the land is no longer classified as agricultural under the revised town plans, and c) when the dominant use of the surrounding land is no longer agricultural.

Moreover, Administrative Order No. 2 outlines the procedure governing the processing and approval of applications for land use conversion. It identifies the authorized DAR officials who can approve or disapprove applications depending on the size of the land. This delegation of authority for approval or disapproval of applications for land use conversion has enhanced the issuance of development permits thereby increasing the number of development loans extended by the Housing and Land Use Regulatory Board (HLURB).

Total development permits issued by HLURB numbered 160,511 saleable lots or a growth rate of 39.9 percent over 1990. Licenses to sell issued have increased to 80,383 saleable lots or an increase of 7.70 percent over 1990.

14.2.3.4 Community Mortgage Program (CMP)

This program is addressed to residents of blighted or depressed areas who organized themselves into community associations to own the lots they occupy and eventually improve their housing conditions. In 1992, a total of P477.39 million in collective loans was released under this program, an increase of 7.30 percent over the P444.92 million released in 1991. In 1991, it benefitted 5,427 low-income families, or 60 percent less than the 10,232 families in 1989.

Promotion of Housing for the Poor. New community programs were developed by the HDMF and HIGC in 1991. These are the Group Land Acquisition and Development (GLAD) Program and Rental Housing Construction Loan Program-- both of HDMF-- and the Cooperative Housing Program of HIGC.

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There are also special provisions in the General Appropriations Act regarding the Abot-Kaya Pabahay Fund which are favorable to the CMP. These are: a) guaranty operation of HIGC may be used as loans to community organizations to finance down payment of land acquisition under CMP where such disbursement will be considered pursuant to the Abot-Kaya Pabahay Program; and b) development financing program funds of NHMFC which are not utilized may be used to augment the interest subsidy support for CMP.

14.2.4 The National Housing Authority

The National Housing Authority continued to develop and implement programs to meet the housing needs of marginal and low-income families both in the urban and rural areas through its major programs such as slum upgrading, squatter relocations, development of sites and services and construction of core housing units.

Of the 35,878 units targeted for completion in 1992, 95 percent or 34,084 units were completed consisting of 24,927 units under the regular program; 5,192 units under the emergency housing assistance program; 3,602 units under the community mortgage program; and 363 under the apartment and dormitory housing.

Slum Upgrading Program. This entails the acquisition of land and the onsite improvement of occupied land through the introduction of basic urban services. The program aims to provide an alternative to slum clearance and resettlement and to solve the issue of squatting and slum dwelling. The land tenure issue is resolved through sale of homelots to bonafide occupants and those with squatter status through the award of homelots.

Sites and Services Program. This refers to the acquisition and development of raw lands for low-cost housing for the benefit of the low-income and marginal families and the provision of affordable service lots to accomodate migrants, long-term renters and squatters. Homelots are allocated to the beneficiaries where housing units can be constructed on self-help basis through low- interest housing finance. The concept is to arrest the growth of squatter families by increasing the supply of affordable lots.

Relocation and Resettlement Program. This program aims to provide resettlement site to accomodate families displaced from danger areas and land needed by the government for its programs.

New Construction Program. This program aims to provide a complete house and lot package, a core house, or a dwelling unit in a medium-rise building designed to match the affordability of the target beneficiaries consisting of low-salaried government and private sector employees.

The program is undertaken through joint venture arrangement with private landowners, developers or local government units.

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To improve the socioeconomic condition of its project residents, the NHA, in coordination with other government and private agencies, launched the Livelihood Development Program and Community Organization and Social Services Program.

Livelihood Development Program. This program aims to provide employment opportunities and other income-generating activities to its project beneficiaries to raise their income and to help ease their burden of paying the monthly amortization of the acquired housing units.

Community Organization and Social Services Program. This is carried out by encouraging beneficiaries to participate in project planning and implementation through involvement in community organization, information dissemination and motivation.

14.2.5 Social Housing Act of 1991

To provide additional impetus to the implementation of the NSP, two legislations were passed by the Senate and the House of Representatives during the Fifth Session of the Congress. These two bills, i.e., House Bill No. 34310 known as the "Urban Development and Housing Act of 1991" and Senate Bill No. 234 known as "Urban Development and Social Housing Act" were consolidated by the Joint Conference Committee of Congress. The consolidated version was ratified by two chambers and signed into law by the President on March 24, 1992 as Republic Act 7279 entitled "An Act to Provide for a Comprehensive and Continuing Urban Development and Housing Program, Establishing the Mechanism for its Implementation, and for other Purposes".

The salient features of R.A. 7279 are: (a) identification, registration, acquisition, disposition of lands; (b) imposition of a social housing tax on covered lands; (c) guidelines for actions on professional squatters and housing syndicates as well as procedures on eviction, demolition and resettlement; (d) implementation of a social housing program; and (e) formulation of national urban development and housing framework.

Sources:

14.1	National Statistical Coordination Board.
14.1.1 - 14.1.2	National Economic and Development Authority.
14.2.3 - 14.2.4	National Statistics Office, Construction and Mining and Population and Housing Census Sections.
14.21 - 14.2.2	National Statistics Office, Population and Housing Census Section.
14.2.3	National Economic and Development Authority; National Housing Authority.

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Table 14.1 Disbursements for Government Infrastructure Development Program by Sector: 1991 (Million pesos)

Sector	Budget	Actual Expenditures
Total	57,818	39,332
Power, energy and rural electrification	14,984	12,506
Energy resource development	2,191	1,609
Downstream activities	926	699
Power	10,429	8,584
Rural electrification	1,438	1,614
Transportation	21,047	15,724
Roads and highways	15,170	14,080
Railways	3,213	294
Ports/shore protection/light-houses	1,632	1,094
Urban transport	-	-
Airports and airways	1,032	256
Water resources	13,186	7,417
Irrigation	3,615	3,326
Water supply and sewerage/ sanitation	7,331	2,807
Flood control and drainage	2,240	1,284
Social infrastructure	3,913	2,573
School buildings	2,044	1,909
Health infrastructure	-	-
Urban community infrastructure	1,869	664
Communications	4,688	1,112
Postal communications	224	66
Telecommunications	4,464	1,046

Source: National Economic and Development Authority. *Philippine Development Report.*

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Table 14.2 Local Government Construction by Type and Status of Project and by Level of Government: 1992 (Expenditures and disbursements in thousand pesos)

Projects and level of government	Total		Completed this year		Not completed this year	
	Number	Disbursements and expenditures	Number	Expenditures for completed projects	Number	Disbursements for not completed projects
All construction	41,060	8,024,998	35,871	6,249,323	5,189	1,775,675
Provincial	4,609	1,751,624	3,949	1,329,866	660	421,758
City	7,740	2,130,996	7,179	1,852,581	561	278,415
Municipal	28,711	4,142,378	24,743	3,066,876	3,968	1,075,502
New construction	26,187	6,146,476	22,791	4,653,733	3,396	1,492,743
Provincial	3,052	1,256,971	2,569	946,168	483	310,803
City	5,798	1,481,976	5,498	1,249,141	300	232,835
Municipal	17,337	3,407,529	14,724	2,458,424	2,613	949,105
Started this year	24,367	5,007,102	21,434	3,904,176	2,933	1,102,926
Provincial	2,716	769,833	2,282	637,965	434	131,868
City	5,629	1,335,565	5,342	1,113,624	287	221,941
Municipal	16,022	2,901,704	13,810	2,152,587	2,212	749,117
Started previous years	1,820	1,139,374	1,357	749,557	463	389,817
Provincial	336	487,138	287	308,203	49	178,935
City	169	146,411	156	135,517	13	10,894
Municipal	1,315	505,825	914	305,837	401	199,988
Additions, alterations and repairs	14,873	1,878,522	13,080	1,595,590	1,793	282,932
Provincial	1,557	494,653	1,380	383,698	177	110,955
City	1,942	649,020	1,681	603,440	261	45,580
Municipal	11,374	734,849	10,019	608,452	1,355	126,397
Started this year	13,705	1,626,314	12,220	1,402,056	1,485	224,258
Provincial	1,420	387,385	1,258	288,550	162	98,835
City	1,851	598,617	1,600	567,275	251	31,342
Municipal	10,434	640,312	9,362	546,231	1,072	94,081
Started previous years	1,168	252,208	860	193,534	308	58,674
Provincial	137	107,268	122	95,148	15	12,120
City	91	50,403	81	36,165	10	14,238
Municipal	940	94,537	657	62,221	283	32,316

Source: National Statistics Office, Non-Manufacturing Section.

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Table 14.3 Summary Statistics of Local Government Construction by Type of Project and by Level of Government: 1991 and 1992
(Expenditures and disbursements in thousand pesos; floor area in square meters)

Type of construction	Total				Provincial			
	Number	Floor area	Expenditures for projects completed	Disbursements for projects not completed	Number	Floor area	Expenditures for projects completed	Disbursements for projects not completed
1992								
Total	41,060	1,273,808	6,249,323	1,775,675	4,609	265,893	1,329,866	421,758
Residential buildings	3,728	260,432	801,771	137,659	41	2,754	4,485	-
Public buildings	7,618	693,359	1,668,788	646,404	760	162,071	236,248	71,218
Educational buildings	3,223	284,279	750,856	161,272	336	98,679	285,231	13,777
Hospitals and other health buildings	637	35,738	111,149	18,611	50	2,389	5,838	1,444
Streets and bridges	7,873	[a]1,119,470	2,252,403	642,544	1,747	[a]445,044	653,189	306,372
Water supply system	10,228	-	248,347	79,487	931	-	72,558	23,907
Other public constructions	7,753	-	416,009	89,698	744	-	72,317	5,040
	City				Municipal			
Total	7,740	242,587	1,852,581	278,415	28,711	765,328	3,066,876	1,075,502
Residential buildings	630	67,889	111,922	21	3,057	189,789	685,364	137,638
Public buildings	978	131,717	894,270	140,861	5,880	399,571	538,270	434,325
Educational buildings	459	30,005	85,795	10,017	2,428	155,595	379,830	137,478
Hospitals and other health buildings	85	12,976	55,595	8,563	502	20,373	49,716	8,604
Streets and bridges	1,426	[a]306,742	574,142	67,525	4,700	[a]367,684	1,025,072	268,647
Water supply system	2,207	-	39,150	10,990	7,090	-	136,639	44,590
Other public constructions	1,955	-	91,707	40,438	5,054	-	251,985	44,220

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Table 14.3 Summary Statistics of Local Government Construction by Type of Project and by Level of Government: 1991 and 1992 (concluded)
(Expenditures and disbursements in thousand pesos; floor area in square meters)

Type of construction	Total				Provincial			
	Number	Floor area	Expenditures for projects completed	Disbursements for projects not completed	Number	Floor area	Expenditures for projects completed	Disbursements for projects not completed
1991								
Total	33,228	1,158,656	4,760,827	2,094,822	2,906	103,749	1,019,995	456,448
Residential buildings	3,497	207,068	378,298	215,255	11	1,449	4,987	1,952
Public buildings	6,180	640,644	1,003,334	794,270	482	55,853	155,039	150,351
Educational buildings	2,806	266,873	628,442	218,357	248	45,003	133,691	68,020
Hospitals and other health buildings	563	44,071	94,779	76,289	23	1,444	696	3,688
Streets and bridges	7,545	[a]1,868,813	1,924,251	561,336	1,316	[a]368,411	680,350	178,309
Water supply system	6,771	-	222,588	70,088	487	-	19,987	32,689
Other public constructions	5,866	-	509,135	159,227	339	-	25,245	21,439
	City				Municipal			
Total	5,555	231,506	1,320,909	653,804	24,767	823,401	2,419,923	984,570
Residential buildings	247	61,127	140,018	33,995	3,239	144,492	233,293	179,308
Public buildings	1,154	107,401	238,931	268,935	4,544	477,390	609,364	374,984
Educational buildings	402	52,896	143,466	56,463	2,156	168,974	351,285	93,874
Hospitals and other health buildings	141	10,082	11,658	58,153	399	32,545	82,425	14,448
Streets and bridges	1,595	[a]321,615	532,775	178,089	4,634	[a]856,023	711,126	204,938
Water supply system	872	-	17,053	9,009	5,412	-	185,548	28,390
Other public constructions	1,144	-	237,008	49,160	4,383	-	246,882	88,628

[a] In linear meters. Not included in total.
Source: National Statistics Office, Non-Manufacturing Section.

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Table 14.4 Summary of Local Government Construction by Type of Construction and by Region: 1992
(Expenditures and disbursements in thousand pesos; floor area in square meters)

Region	Total				Residential buildings			
	Number	Floor area	Expenditures for projects completed	Disbursements for projects not completed	Number	Floor area	Expenditures for projects completed	Disbursements for projects not completed
Philippines	41,060	1,273,808	6,249,323	1,775,675	3,728	260,432	801,771	137,659
National Capital Region (NCR)	2,109	245,477	1,712,294	342,176	169	11,399	30,428	8,755
Cordillera Administrative Region (CAR)	2,141	38,259	171,261	68,282	59	1,195	4,588	1,150
I. Ilocos	2,375	46,387	321,817	83,290	118	5,167	13,223	25
II. Cagayan Valley	1,700	34,727	112,235	61,102	176	5,948	4,800	2,968
III. Central Luzon	4,214	137,670	1,012,885	157,348	761	49,235	238,827	18,625
IV. Southern Tagalog	8,204	261,518	1,205,087	277,875	1,383	101,745	387,673	83,921
V. Bicol	2,963	32,445	199,272	54,604	25	1,773	5,808	2,377
VI. Western Visayas	4,824	86,612	365,834	104,766	52	5,190	12,074	5,060
VII. Central Visayas	2,116	36,964	253,961	138,648	49	1,724	1,663	1,628
VIII. Eastern Visayas	1,896	52,925	160,793	57,941	157	9,407	13,235	6,098
IX. Western Mindanao	1,160	31,823	177,292	41,450	15	1,730	2,009	700
X. Northern Mindanao	2,801	58,085	168,517	255,080	237	7,242	6,724	2,571
XI. Southern Mindanao	3,181	108,598	212,526	68,206	53	1,124	4,503	280
XII. Central Mindanao	1,376	102,318	175,549	64,907	474	57,553	76,216	3,501

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Table 14.4 Summary of Local Government Construction by Type of Construction and by Region: 1992 (continued)
(Expenditures and disbursements in thousand pesos; floor area in square meters)

Region	Public buildings				Educational buildings			
	Number	Floor area	Expenditures for projects completed	Disbursements for projects not completed	Number	Floor area	Expenditures for projects completed	Disbursements for projects not completed
Philippines	7,618	693,359	1,668,788	646,404	3,223	284,279	750,856	161,272
National Capital Region (NCR)	201	129,839	791,854	133,900	393	102,042	345,037	114,179
Cordellira Administrative Region (CAR)	302	24,640	23,448	34,220	110	10,682	22,617	495
I. Ilocos	370	30,737	57,020	14,104	209	6,999	13,200	2,705
II. Cagayan Valley	492	23,417	52,868	12,407	112	4,505	10,641	4,354
III. Central Luzon	983	63,938	159,102	74,229	259	19,367	62,393	3,378
IV. Southern Tagalog	1,193	125,399	160,815	108,191	780	30,199	102,092	8,658
V. Bicol	293	20,619	52,938	28,322	45	9,699	28,495	930
VI. Western Visayas	899	53,597	104,978	43,160	357	19,922	49,535	6,178
VII. Central Visayas	429	26,747	31,399	45,663	103	6,919	17,254	6,367
VIII. Eastern Visayas	372	36,569	45,938	14,270	87	5,355	8,283	2,312
IX. Western Mindanao	361	22,969	65,785	14,955	62	6,114	13,365	1,978
X. Northern Mindanao	741	39,596	41,246	28,570	255	9,097	13,315	2,265
XI. Southern Mindanao	804	62,576	50,995	44,665	345	42,079	41,066	6,548
XII. Central Mindanao	178	32,716	30,402	49,748	106	11,300	23,563	925

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Table 14.4 Summary of Local Government Construction by Type of Construction and by Region: 1992 (continued)
(Expenditures and disbursements in thousand pesos; floor area in square meters)

Region	Hospital and health buildings				Streets and bridges			
	Number	Floor area	Expenditures for projects completed	Disbursements for projects not completed	Number	Floor area	Expenditures for projects completed	Disbursements for projects not completed
Philippines	637	35,738	111,149	18,611	7,873	1,119,470	2,252,403	642,544
National Capital Region (NCR)	46	2,197	8,349	2,342	786	126,561	440,909	41,690
Cordillera Administrative Region (CAR)	36	1,742	8,672	21	623	41,199	77,516	28,015
I. Ilocos	37	3,484	17,805	150	773	44,848	197,393	56,620
II. Cagayan Valley	22	857	2,134	111	239	13,886	26,758	39,066
III. Central Luzon	65	5,130	33,522	94	641	161,868	472,826	38,513
IV. Southern Tagalog	110	4,175	6,331	1,491	1,518	241,724	435,002	57,527
V. Bicol	16	354	572	522	472	38,524	82,707	10,877
VI. Western Visayas	72	7,903	8,562	8,142	740	69,999	135,616	32,079
VII. Central Visayas	39	1,574	3,430	523	264	193,668	120,883	70,715
VIII. Eastern Visayas	29	1,594	2,438	3,277	403	17,225	57,336	26,251
IX. Western Mindanao	13	1,010	4,201	100	246	62,501	66,885	16,627
X. Northern Mindanao	53	2,150	6,422	99	448	70,829	48,918	211,498
XI. Southern Mindanao	51	2,819	7,923	209	525	25,340	58,819	8,089
XII. Central Mindanao	48	749	788	1,530	195	11,298	30,835	4,977

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Table 14.4 Summary of Local Government Construction by Type of Construction and by Region: 1992 (concluded)
(Expenditures and disbursements in thousand pesos)

Region	Number	Water supply Expenditures for projects completed	Disbursements for projects not completed	Number	Other projects Expenditures for projects completed	Disbursements for projects not completed
Philippines	10,228	248,347	79,487	7,753	416,009	89,698
National Capital Region (NCR)	131	20,041	13,145	383	75,676	28,165
Cordillera Administrative Region (CAR)	286	9,267	3,840	725	25,153	541
I. Ilocos	418	4,250	5,834	450	18,926	3,852
II. Cagayan Valley	307	6,431	1,385	352	8,603	811
III. Central Luzon	854	8,844	760	651	37,371	21,749
IV. Southern Tagalog	2,148	46,878	13,120	1,072	66,296	4,967
V. Bicol	1,600	15,556	10,226	512	13,196	1,350
VI. Western Visayas	1,243	19,593	2,447	1,461	35,476	7,700
VII. Central Visayas	710	27,816	8,743	522	51,516	5,009
VIII. Eastern Visayas	472	6,923	1,856	376	26,640	3,877
IX. Western Mindanao	351	19,584	3,982	112	5,463	3,108
X. Northern Mindanao	713	32,822	6,062	354	19,070	4,015
XI. Southern Mindanao	705	23,601	4,618	698	25,619	3,797
XII. Central Mindanao	290	6,741	3,469	85	7,004	757

Source: National Statistics Office, Non-Manufacturing Section.

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Table 14.5 Number, Floor Area and Value of Private Building Construction by Type of Building and by Region: 1992 and 1993
(Value in thousand pesos; floor area in square meters)

Region/year	Total			Residential		
	Number	Floor area	Value	Number	Floor area	Value
1993						
Philippines	53,478	8,831,456	39,457,971	38,894	4,232,681	17,024,276
National Capital Region (NCR)	12,741	4,093,724	22,218,959	8,449	1,651,670	8,257,722
Cordillera Administrative Region (CAR)	454	74,048	320,654	317	43,811	155,457
I. Ilocos	2,212	239,076	807,687	1,313	131,636	367,176
II. Cagayan Valley	574	98,730	288,431	383	43,999	122,031
III. Central Luzon	4,269	546,737	1,960,005	3,551	313,350	1,134,589
IV. Southern Tagalog	14,267	1,442,095	5,755,113	12,397	913,478	3,679,759
V. Bicol	1,116	199,241	732,208	791	89,882	321,634
VI. Western Visayas	2,637	411,585	1,636,579	1,851	199,823	665,366
VII. Central Visayas	3,554	501,433	1,667,566	2,361	275,311	783,688
VIII. Eastern Visayas	1,107	116,987	360,772	709	69,336	170,400
IX. Western Mindanao	902	103,940	267,341	550	51,067	112,575
X. Northern Mindanao	3,153	337,728	996,299	1,780	159,108	393,354
XI. Southern Mindanao	5,105	499,346	1,846,726	3,605	215,724	625,489
XII. Central Mindanao	1,387	166,786	599,631	837	74,486	235,036

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Table 14.5 Number, Floor Area and Value of Private Building Construction by Type of Building and by Region: 1992 and 1993 (continued)
(Value in thousand pesos; floor area in square meters)

Region/year	Nonresidential			Additions, alterations and repairs		
	Number	Floor area	Value	Number	Floor area	Value
1993						
Philippines	6,343	4,050,085	18,963,451	8,241	548,690	3,470,244
National Capital Region (NCR)	1,587	2,114,839	11,671,827	2,705	327,215	2,289,410
Cordillera Administrative Region (CAR)	79	27,002	140,232	58	3,235	24,965
I. Ilocos	284	93,799	373,466	615	13,641	67,045
II. Cagayan Valley	141	50,911	144,932	50	3,820	21,468
III. Central Luzon	474	214,260	744,025	244	19,127	81,391
IV. Southern Tagalog	1,055	482,509	1,812,271	815	46,108	263,083
V. Bicol	227	100,385	367,894	98	8,974	42,680
VI. Western Visayas	446	197,966	841,331	340	13,796	129,882
VII. Central Visayas	496	184,264	720,261	697	41,858	163,617
VIII. Eastern Visayas	197	43,447	153,132	201	4,204	37,240
IX. Western Mindanao	149	47,359	130,553	203	5,514	24,213
X. Northern Mindanao	390	160,139	540,832	983	18,481	62,113
XI. Southern Mindanao	596	252,154	999,118	904	31,468	222,119
XII. Central Mindanao	222	81,051	323,577	328	11,249	41,018

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Table 14.5 Number, Floor Area and Value of Private Building Construction by Type of Building and by Region: 1992 and 1993 (continued)
(Value in thousand pesos; floor area in square meters)

Region/year	Total			Residential		
	Number	Floor area	Value	Number	Floor area	Value
1992						
Philippines	50,793	8,149,989	31,119,737	36,063	3,861,950	13,952,549
National Capital Region (NCR)	13,564	3,508,973	14,347,963	9,261	1,621,844	6,671,207
I. Ilocos	2,502	440,413	1,424,261	1,474	177,018	564,181
II. Cagayan Valley	705	117,205	505,996	451	52,598	143,216
III. Central Luzon	4,185	535,121	1,976,538	3,538	248,328	873,034
IV. Southern Tagalog	11,710	1,227,630	5,654,942	9,832	690,833	2,625,225
V. Bicol	1,125	198,043	751,975	776	86,276	318,911
VI. Western Visayas	2,298	332,326	1,103,657	1,538	161,876	496,178
VII. Central Visayas	3,672	590,723	1,831,761	2,411	276,147	838,364
VIII. Eastern Visayas	1,128	130,631	403,921	757	71,814	181,732
IX. Western Mindanao	899	116,969	322,792	571	54,538	115,658
X. Northern Mindanao	3,024	340,494	963,643	1,724	170,737	440,175
XI. Southern Mindanao	4,580	446,870	1,237,510	2,925	184,636	509,360
XII. Central Mindanao	1,401	164,591	594,778	805	65,305	175,308

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Table 14.5 Number, Floor Area and Value of Private Building Construction by Type of Building and by Region: 1992 and 1993 (concluded)
(Value in thousand pesos; floor area in square meters)

Region/year	Nonresidential			Additions, alterations and repairs		
	Number	Floor area	Value	Number	Floor area	Value
1992						
Philippines	6,425	3,692,905	13,439,011	8,305	595,134	3,728,177
National Capital Region (NCR)	1,508	1,513,285	5,253,717	2,795	373,844	2,423,039
I. Ilocos	442	247,947	742,248	586	15,448	117,832
II. Cagayan Valley	184	61,089	287,412	70	3,518	75,368
III. Central Luzon	452	269,348	990,939	195	17,445	112,565
IV. Southern Tagalog	996	486,070	2,723,385	882	50,727	306,332
V. Bicol	260	105,890	402,998	89	5,877	30,066
VI. Western Visayas	382	151,287	490,678	378	19,163	116,801
VII. Central Visayas	497	277,216	858,132	764	37,360	135,265
VIII. Eastern Visayas	179	52,325	185,526	192	6,492	36,663
IX. Western Mindanao	146	56,116	186,421	182	6,315	20,713
X. Northern Mindanao	454	157,023	437,599	846	12,734	85,869
XI. Southern Mindanao	616	223,595	595,969	1,039	38,639	132,181
XII. Central Mindanao	309	91,714	283,987	287	7,572	135,483

Source: National Statistics Office, Non-Manufacturing Section.

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Table 14.6 Summary Statistics of All Construction Establishments by Industry Major Group and by Region: 1989 and 1990

Region	Number of establishments	Average employment for the year: Total	Average employment for the year: Number of paid employees	Total compensation (P1,000)	Value of output (P1,000)	Total cost (P1,000)	Capital expenditures during the year (P1,000)	Census value added (P1,000)
1990								
Philippines	1,251	108,104	106,794	4,059,696	21,814,124	16,189,761	1,492,669	7,536,156
General building construction	382	42,271	41,891	1,505,142	8,674,823	6,285,285	395,261	2,895,960
General engineering construction	574	49,904	49,270	1,923,461	10,664,137	8,227,113	885,279	3,509,112
Special trade construction	295	15,929	15,633	631,093	2,475,165	1,677,362	212,129	1,131,085
National Capital Region (NCR)	626	81,403	80,814	3,308,303	17,140,752	12,698,724	1,284,026	5,982,709
Cordillera Administrative Region (CAR)	15	478	461	14,650	61,894	49,143	2,048	17,691
I. Ilocos	57	941	871	21,196	144,435	106,392	11,846	63,190
II. Cagayan Valley	24	780	748	17,937	83,814	54,622	4,032	34,292
III. Central Luzon	75	3,567	3,494	92,537	611,280	467,869	13,095	191,396
IV. Southern Tagalog	99	7,112	7,013	262,335	1,475,410	1,035,897	73,117	556,756
V. Bicol	57	1,125	1,048	24,362	198,526	150,230	4,739	65,363
VI. Western Visayas	50	1,482	1,421	35,252	212,414	157,659	2,037	68,577
VII. Central Visayas	62	3,949	3,889	111,521	738,197	578,647	56,980	226,394
VIII. Eastern Visayas	22	890	865	18,178	165,181	135,361	4,990	50,696
IX. Western Mindanao	35	1,276	1,224	19,505	142,057	111,140	2,613	39,642
X. Northern Mindanao	38	1,387	1,336	35,909	193,305	159,802	8,586	42,701
XI. Southern Mindanao	65	2,863	2,789	74,123	522,115	396,538	19,743	153,861
XII. Central Mindanao	26	851	821	23,888	124,745	87,737	4,816	42,887

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Table 14.6 Summary Statistics of All Construction Establishments by Industry Major Group and by Region: 1989 and 1990 (concluded)

Region	Number of establishments	Average employment for the year: Total	Average employment for the year: Number of paid employees	Total compensation (P1,000)	Value of output (P1,000)	Total cost (P1,000)	Capital expenditures during the year (P1,000)	Census value added (P1,000)
1989								
Philippines	1,116	98,965	97,843	3,110,025	14,384,000	10,242,632	624,888	5,296,498
General building construction	309	39,525	39,265	1,146,787	5,353,386	3,750,298	162,173	2,015,339
General engineering construction	528	44,914	44,319	1,483,944	7,259,661	5,323,217	399,775	2,480,282
Special trade construction	279	14,526	14,259	479,296	1,770,954	1,169,117	62,940	800,877
National Capital Region (NCR)	594	75,503	75,017	2,550,341	10,852,623	7,903,838	445,992	3,864,941
Cordillera Administrative Region (CAR)	10	445	434	9,461	34,022	42,490	3,227	(4,472)
I. Ilocos	44	774	720	14,243	110,923	76,908	3,809	39,218
II. Cagayan Valley	17	556	535	12,640	53,625	36,443	3,766	22,465
III. Central Luzon	59	2,346	2,279	54,520	457,430	352,678	12,623	112,217
IV. Southern Tagalog	69	6,953	6,880	232,828	1,142,883	744,202	49,260	513,593
V. Bicol	45	907	836	15,197	122,552	89,573	1,390	43,328
VI. Western Visayas	39	1,055	1,006	20,295	150,292	92,676	2,749	61,588
VII. Central Visayas	62	3,545	3,490	63,338	377,155	250,437	19,132	163,803
VIII. Eastern Visayas	24	1,165	1,132	17,958	133,015	100,149	21,352	40,574
IX. Western Mindanao	33	990	944	16,093	140,929	97,933	5,067	50,477
X. Northern Mindanao	37	1,359	1,312	34,152	194,584	141,112	14,590	62,330
XI. Southern Mindanao	61	2,766	2,683	53,495	535,301	257,563	34,236	302,557
XII. Central Mindanao	22	601	575	15,462	78,667	56,632	7,694	23,879

Source: National Statistics Office, Non-Manufacturing Section.

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Table 14.7 Housing Units by Occupancy and by Region: 1960, 1970, 1980 and 1990

Region	1960			1970		
	Total housing units	Occupied	Vacant	Total housing units	Occupied	Vacant
Philippines	4,790,954	4,648,245	142,709	6,099,844	6,010,837	89,007
National Capital Region (NCR)	385,034	381,576	3,458	618,434	601,767	16,667
Cordillera Administrative Region (CAR)	119,015	111,886	7,129	135,175	132,441	2,734
I. Ilocos	374,907	367,744	7,163	424,527	420,106	4,421
II. Cagayan Valley	191,184	185,168	6,016	254,875	252,661	2,214
III. Central Luzon	429,810	418,139	11,671	583,648	575,229	8,419
IV. Southern Tagalog	559,658	542,354	17,304	754,205	745,309	8,896
V. Bicol	396,281	386,330	9,951	483,982	476,694	7,288
VI. Western Visayas	532,786	521,654	11,132	596,293	591,144	5,149
VII. Central Visayas	477,389	456,383	21,006	532,767	526,619	6,148
VIII. Eastern Visayas	383,124	371,043	12,081	417,845	413,300	4,545
IX. Western Mindanao	231,383	224,174	7,209	304,508	300,108	4,400
X. Northern Mindanao	229,957	217,666	12,291	319,424	313,261	6,163
XI. Southern Mindanao	236,653	227,260	9,393	363,704	356,953	6,751
XII. Central Mindanao	243,773	236,868	6,905	310,457	305,245	5,212

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Table 14.7 Housing Units by Occupancy and by Region: 1960, 1970, 1980 and 1990 (concluded)

Region	1980			1990		
	Total housing units	Occupied	Vacant	Total housing units	Occupied	Vacant
Philippines	8,758,015	8,500,826	257,189	11,395,304	11,018,208	377,096
National Capital Region (NCR)	1,082,231	1,062,174	20,057	1,482,874	1,435,365	47,509
Cordillera Administrative Region (CAR)	184,185	172,527	11,658	226,582	212,803	13,779
I. Ilocos	538,327	522,992	15,335	659,139	637,348	21,791
II. Cagayan Valley	353,854	344,081	9,773	446,782	434,812	11,970
III. Central Luzon	850,894	829,699	21,195	1,160,752	1,130,544	30,208
IV. Southern Tagalog	1,133,844	1,099,172	34,672	1,597,715	1,544,986	52,729
V. Bicol	620,841	601,871	18,970	724,930	700,449	24,481
VI. Western Visayas	800,378	781,474	18,904	987,273	962,725	24,548
VII. Central Visayas	718,110	696,533	21,577	891,313	861,222	30,091
VIII. Eastern Visayas	529,832	509,720	20,112	599,624	578,266	21,358
IX. Western Mindanao	444,385	433,928	10,457	576,762	558,778	17,984
X. Northern Mindanao	498,302	476,819	21,483	655,118	624,941	30,177
XI. Southern Mindanao	612,572	588,525	24,047	840,991	805,623	35,368
XII. Central Mindanao	390,260	381,311	8,949	545,449	530,346	15,103

Source: National Statistics Office. 1990 Census of Population and Housing.

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Table 14.8 Occupied Housing Units by Type of Building, Urban-Rural: 1990

Type of building	Occupied housing units	Households
Philippines	11,018,208	11,407,262
Single house	9,991,162	10,271,768
Duplex	332,040	363,116
Multiunit residential	643,806	717,910
Commercial/industrial/ agricultural	36,781	39,148
Institutional living quarters	2,517	2,750
Other housing unit	8,932	9,599
Not reported	2,970	2,971
Urban	5,320,408	5,603,385
Single house	4,377,196	4,561,537
Duplex	279,688	304,924
Multiunit residential	617,603	687,966
Commercial/industrial/ agricultural	33,516	35,723
Institutional living quarters	1,745	1,934
Other housing unit	7,857	8,497
Not reported	2,803	2,804
Rural	5,697,800	5,803,877
Single house	5,613,966	5,710,231
Duplex	52,352	58,192
Multiunit residential	26,203	29,944
Commercial/industrial/ agricultural	3,265	3,425
Institutional living quarters	772	816
Other housing unit	1,075	1,102
Not reported	167	167

Source: National Statistics Office. *1990 Census of Population and Housing.*

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Table 14.9 Occupied Housing Units by Type of Building and by Number of Households in Each Housing Unit, Urban-Rural: 1990

Number of households in each housing unit and area classification	Total occupied housing units	Type of building						
		Single house	Duplex	Multiunit residential (3 units or more)	Commercial/ industrial/ agricultural	Institu-tional living quarters	Other housing units	Not reported
Philippines	11,018,208	9,991,162	332,040	643,806	36,781	2,517	8,932	2,970
One household	10,745,052	9,782,960	307,469	605,250	35,479	2,366	8,559	2,969
Two households	204,106	161,647	20,563	20,703	845	107	240	1
Three households	44,786	31,988	2,669	9,798	236	25	70	-
Four households	14,143	8,991	806	4,206	97	13	30	-
Five households	5,303	3,138	282	1,829	39	3	12	-
Six households or more	4,818	2,438	251	2,020	85	3	21	-
Urban	5,320,408	4,377,196	279,688	617,603	33,516	1,745	7,857	2,803
One household	5,131,396	4,246,286	259,969	580,906	32,307	1,623	7,503	2,802
Two households	135,091	97,719	16,377	19,901	781	87	225	1
Three households	33,684	22,020	2,181	9,175	221	20	67	-
Four households	11,488	6,713	693	3,950	91	11	30	-
Five households	4,469	2,443	244	1,733	36	1	12	-
Six households or more	4,280	2,015	224	1,938	80	3	20	-

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Table 14.9 Occupied Housing Units by Type of Building and by Number of Households in Each Housing Unit, Urban-Rural: 1990 (concluded)

Number of households in each housing unit and area classification	Total occupied housing units	Type of building						
		Single house	Duplex	Multiunit residential (3 units or more)	Commercial/ industrial/ agricultural	Institu- tional living quarters	Other housing units	Not reported
Rural	5,697,800	5,613,966	52,352	26,203	3,265	772	1,075	167
One household	5,613,656	5,536,674	47,500	24,344	3,172	743	1,056	167
Two households	69,015	63,928	4,186	802	64	20	15	-
Three households	11,102	9,968	488	623	15	5	3	-
Four households	2,655	2,278	113	256	6	2	-	-
Five households	834	695	38	96	3	2	-	-
Six households or more	538	423	27	82	5	-	1	-

Source: National Statistics Office. *1990 Census of Population and Housing.*

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Table 14.10 Households by Type of Building and Tenure Status of the Housing Unit, Urban-Rural: 1990

Tenure status of the housing unit and area classification	Total households	Type of building: Single house	Duplex	Multiunit residential (Three units or more)	Commercial/ industrial/ agricultural	Institutional living quarters	Other housing units	Not reported
Philippines	11,407,262	10,271,768	363,116	717,910	39,148	2,750	9,599	2,971
Owned/being amortized	9,466,809	8,918,261	227,721	294,223	18,742	1,241	4,876	1,745
Rented	917,051	473,910	87,932	338,444	13,962	625	1,518	660
Being occupied for free with consent of owner	993,292	853,443	46,392	83,405	6,292	856	2,436	468
Being occupied for free without consent of owner	30,110	26,154	1,071	1,838	152	28	769	98
Urban	5,603,385	4,561,537	304,924	687,966	35,723	1,934	8,497	2,804
Owned/being amortized	4,257,092	3,765,447	186,457	281,979	16,735	716	4,137	1,621
Rented	857,186	422,789	84,544	333,504	13,596	603	1,492	658
Being occupied for free with consent of owner	470,498	358,333	33,002	70,739	5,270	599	2,127	428
Being occupied for free without consent of owner	18,609	14,968	921	1,744	122	16	741	97

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Table 14.10 Households by Type of Building and Tenure Status of the Housing Unit, Urban-Rural: 1990 (concluded)

Tenure status of the housing unit and area classification	Total households	Type of building: Single house	Duplex	Multiunit residential (Three units or more)	Commercial/ industrial/ agricultural	Institutional living quarters	Other housing units	Not reported
Rural	5,803,877	5,710,231	58,192	29,944	3,425	816	1,102	167
Owned/being amortized	5,209,717	5,152,814	41,264	12,244	2,007	525	739	124
Rented	59,865	51,121	3,388	4,940	366	22	26	2
Being occupied for free with consent of owner	522,794	495,110	13,390	12,666	1,022	257	309	40
Being occupied for free without consent of owner	11,501	11,186	150	94	30	12	28	1

Source: National Statistics Office. *1990 Census of Population and Housing.*

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Table 14.10a Owner-Households in Occupied Housing Units by Tenure Status of Lot and by Region, Urban-Rural: 1990

Area classification and region	Total owner households in occupied housing units	Tenure status of lot			
		Owned/ being amortized	Rented	Being occupied for free with the consent of owner	Being occupied for free without the consent of owner
Philippines	9,466,809	5,115,336	839,356	3,241,925	270,192
Urban	4,257,092	2,384,158	575,504	1,086,704	210,726
Rural	5,209,717	2,731,178	263,852	2,155,221	59,466
National Capital Region (NCR)	964,658	553,817	153,335	150,813	106,693
Urban	964,658	553,817	153,335	150,813	106,693
Cordillera Administrative Region (CAR)	186,106	148,766	9,546	25,300	2,494
Urban	50,385	35,028	5,894	7,920	1,543
Rural	135,721	113,738	3,652	17,380	951
I. Ilocos Region	599,502	402,282	23,732	171,121	2,367
Urban	214,623	147,702	11,760	54,190	971
Rural	384,879	254,580	11,972	116,931	1,396
II. Cagayan Valley	413,092	277,240	21,979	109,983	3,890
Urban	90,363	60,919	9,717	18,902	825
Rural	322,729	216,321	12,262	91,081	3,065
III. Central Luzon	1,000,510	573,452	79,952	324,992	22,114
Urban	578,087	354,876	47,410	160,295	15,506
Rural	422,423	218,576	32,542	164,697	6,608
IV. Southern Tagalog	1,315,972	749,355	83,487	457,528	25,602
Urban	635,953	404,629	57,364	155,752	18,208
Rural	680,019	344,726	26,123	301,776	7,394
V. Bicol Region	621,900	288,071	47,193	274,428	12,208
Urban	184,826	95,148	26,617	57,454	5,607
Rural	437,074	192,923	20,576	216,974	6,601

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Table 14.10a Owner-Households in Occupied Housing Units by Tenure Status of Lot and by Region, Urban-Rural: 1990 (concluded)

Area classification and region	Total owner households in occupied housing units	Owned/ being amortized	Tenure status of lot		
			Rented	Being occupied for free with the consent of owner	Being occupied for free without the consent of owner
VI. Western Visayas	847,860	303,515	69,822	456,376	18,147
Urban	292,211	106,677	40,943	130,818	13,773
Rural	555,649	196,838	28,879	325,558	4,374
VII. Central Visayas	796,129	394,429	78,702	309,042	13,956
Urban	299,710	144,456	57,209	86,702	11,343
Rural	496,419	249,973	21,493	222,340	2,613
VIII. Eastern Visayas	520,879	248,593	62,213	204,879	5,194
Urban	153,326	77,408	30,353	42,652	2,913
Rural	367,553	171,185	31,860	162,227	2,281
IX. Western Mindanao	509,180	272,657	50,232	173,833	12,458
Urban	155,073	71,704	31,083	46,521	5,765
Rural	354,107	200,953	19,149	127,312	6,693
X. Nothern Mindanao	544,468	278,701	51,219	201,243	13,305
Urban	222,780	113,144	33,965	66,973	8,698
Rural	321,688	165,557	17,254	134,270	4,607
XI. Southern Mindanao	680,742	354,719	73,879	230,185	21,959
Urban	303,590	159,456	51,647	77,639	14,848
Rural	377,152	195,263	22,232	152,546	7,111
XII. Central Mindanao	465,811	269,739	34,065	152,202	9,805
Urban	111,507	59,194	18,207	30,073	4,033
Rural	354,304	210,545	15,858	122,129	5,772

Source: National Statistics Office. *1990 Census of Population and Housing.*

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Table 14.11 Occupied Housing Units by Construction Materials of the Outer Walls and Roof and by Type of Building: 1990

Construction materials of the outer walls and type of building	Total occupied housing units	Construction materials of the roof							
		Galvanized iron/ aluminum	Tile/ concrete/ clay tile	Half galvanized iron and half concrete	Wood	Makeshift cogon/ nipa/ anahaw	Salvaged/ improvised	Asbestos/ others	Not reported
Total	11,018,208	5,543,775	132,072	358,876	269,838	4,512,180	110,121	90,137	1,209
Concrete/brick/stone	1,797,889	1,662,006	55,267	20,131	2,961	49,027	907	7,579	11
Wood	3,013,058	1,672,451	32,236	41,166	204,461	1,035,435	11,076	16,201	32
Half concrete/brick/ stone and half wood	1,896,265	1,460,137	27,222	263,581	12,346	126,259	1,960	4,747	13
Galvanized iron/aluminum	108,214	83,403	1,279	7,546	9,200	6,189	303	293	1
Bamboo/sawali/cogon/nipa	3,884,797	575,108	14,785	23,378	37,747	3,180,808	14,419	38,492	60
Makeshift/salvaged/improvised	200,351	50,560	-	1,987	2,315	64,676	77,799	1,945	1,069
Asbestos/glass/others	111,193	37,421	911	847	629	47,185	3,493	20,693	14
No walls/not reported	6,441	2,689	372	240	179	2,601	164	187	9
Residential buildings	10,967,008	5,510,788	29,959	356,011	268,294	4,508,260	103,173	89,339	1,184
Concrete/brick/stone	1,780,551	1,647,262	53,608	19,684	2,891	48,943	867	7,285	11
Wood	3,002,469	1,664,512	32,046	40,987	203,384	1,034,572	10,844	16,093	31
Half concrete/brick/ stone and half wood	1,885,673	1,452,159	27,014	261,518	12,231	126,112	1,928	4,699	12
Galvanized iron/aluminum	107,403	82,849	1,265	7,464	9,095	6,164	278	287	1
Bamboo/sawali/cogon/nipa	3,881,047	574,215	14,762	23,340	37,674	3,178,248	14,321	38,427	60
Makeshift/salvaged/improvised	193,079	49,990	-	1,969	2,257	64,531	71,445	1,828	1,059
Asbestos/glass/others	110,648	37,239	899	840	594	47,125	3,380	20,566	5
No walls/not reported	6,138	2,562	365	209	168	2,565	110	154	5

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Table 14.11 Occupied Housing Units by Construction Materials of the Outer Walls and Roof and by Type of Building: 1990 (concluded)

Construction materials of the outer walls and type of building	Total occupied housing units	Construction materials of the roof							
		Galvanized iron/ aluminum	Tile/ concrete/ clay tile	Half galvanized iron and half concrete	Wood	Makeshift cogon/ nipa/ anahaw	Salvaged/ improvised	Asbestos/ others	Not reported
Nonresidential buildings/structures	48,230	32,886	2,107	2,853	1,538	3,838	4,220	777	11
Concrete/brick/stone	17,306	14,718	1,657	447	70	83	40	291	-
Wood	10,525	7,911	189	179	1,072	845	231	97	1
Half concrete/brick/stone and half wood	10,554	7,956	205	2,054	115	144	32	48	-
Galvanized iron/aluminum	806	550	14	81	105	25	25	6	-
Bamboo/sawali/cogon/nipa	3,669	877	23	38	72	2,502	97	60	-
Makeshift/salvaged/improvised	4,541	568	-	18	58	143	3,628	116	10
Asbestos/glass/others	533	181	12	6	35	60	113	126	-
No walls/not reported	296	125	7	30	11	36	54	33	-
Not reported	2,970	101	6	12	6	82	2,728	21	14
Concrete/brick/stone	32	26	2	-	-	1	-	3	-
Wood	64	28	1	-	5	18	1	11	-
Half conrete/brick/stone and half wood	38	22	3	9	-	3	-	-	1
Galvanized iron/aluminum	5	4	-	1	-	-	-	-	-
Bamboo/sawali/cogon/nipa	81	16	-	-	1	58	1	5	-
Makeshift/salvaged/improvised	2,731	2	-	-	-	2	2,726	1	-
Asbestos/glass/others	12	1	-	1	-	-	-	1	9
No walls/not reported	7	2	-	1	-	-	-	-	4

Source: National Statistics Office. *1990 Census of Population and Housing.*

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Table 14.12 Occupied Housing Units by Floor Area and by Number of Occupants in Each Housing Unit, Urban-Rural: 1990

Number of occupants in each housing unit and area classification	Total occupied housing units	Floor area of the housing unit (in square meters)								
		Less than 10	10-19	20-29	30-49	50-69	70-89	90-119	120 and over	Not reported
Philippines	11,018,208	2,350,907	2,960,108	2,004,325	1,563,077	767,697	450,764	327,127	591,420	2,783
One occupant	309,843	102,295	77,499	45,970	34,016	17,428	10,412	7,649	14,485	89
Two occupants	832,101	238,018	227,000	136,810	98,845	47,512	27,943	19,957	35,797	219
Three occupants	1,329,733	351,494	368,150	227,138	166,618	79,351	46,532	33,174	56,922	354
Four occupants	1,766,963	416,478	487,044	313,184	238,930	115,902	66,865	47,830	80,248	482
Five occupants	1,855,157	387,444	500,642	340,316	267,769	132,956	76,867	54,969	93,714	480
Six occupants	1,609,480	309,698	431,464	300,695	239,382	118,390	69,768	50,693	89,003	387
Seven occupants	1,207,546	219,343	324,418	228,613	182,549	89,382	53,037	38,743	71,166	295
Eight occupants	938,548	162,342	251,954	180,372	140,882	69,459	41,445	30,627	61,258	209
Nine occupants	437,870	69,513	117,687	87,461	69,548	33,171	19,192	14,131	27,059	108
Ten occupants or more	730,967	94,282	174,250	143,766	124,538	64,146	38,703	29,354	61,768	160
Mean number of occupants	5.496	4.958	5.418	5.629	5.745	5.796	5.828	5.883	6.064	5.372
Urban	5,320,408	894,787	1,150,950	930,626	865,354	504,203	303,085	234,256	435,292	1,855
One occupant	142,226	37,480	29,987	21,304	18,690	11,395	6,961	5,403	10,943	63
Two occupants	380,703	89,528	87,087	62,552	53,437	30,445	18,076	13,854	25,580	144
Three occupants	636,841	136,052	147,327	109,706	94,928	52,904	31,084	23,455	41,145	240
Four occupants	874,726	162,958	198,966	154,222	139,554	78,830	46,013	34,845	59,001	337
Five occupants	930,468	151,916	203,442	165,822	155,047	90,523	53,245	40,385	69,749	339

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Table 14.12 Occupied Housing Units by Floor Area and by Number of Occupants in Each Housing Unit, Urban-Rural: 1990 (concluded)

Number of occupants in each housing unit and area classification	Total occupied housing units	Floor area of the housing unit (in square meters)								
		Less than 10	10-19	20-29	30-49	50-69	70-89	90-119	120 and over	Not reported
Six occupants	791,911	118,768	168,786	140,130	134,351	79,002	47,753	36,873	65,977	271
Seven occupants	570,492	79,657	119,680	101,020	97,257	57,526	35,447	27,673	52,042	190
Eight occupants	429,606	55,853	87,656	75,765	72,642	43,551	26,995	21,612	45,417	115
Nine occupants	193,889	23,969	40,339	35,602	33,724	19,904	12,046	9,484	18,763	58
Ten occupants or more	369,546	38,606	67,680	64,503	65,724	40,123	25,465	20,672	46,675	98
Mean number of occupants	5.533	4.972	5.381	5.568	5.685	5.747	5.811	5.872	6.094	5.287
Rural	5,697,800	1,456,120	1,809,158	1,073,699	697,723	263,494	147,679	92,871	156,128	928
One occupant	167,617	64,815	47,512	24,666	15,326	6,033	3,451	2,246	3,542	26
Two occupants	451,398	148,490	139,913	74,258	45,408	17,067	9,867	6,103	10,217	75
Three occupants	692,892	215,442	220,823	117,432	71,690	26,447	15,448	9,719	15,777	114
Four occupants	892,237	253,520	288,078	158,962	99,376	37,072	20,852	12,985	21,247	145
Five occupants	924,689	235,528	297,200	174,494	112,722	42,433	23,622	14,584	23,965	141
Six occupants	817,569	190,930	262,678	160,565	105,031	39,388	22,015	13,820	23,026	116
Seven occupants	637,054	139,686	204,738	127,593	85,292	31,856	17,590	11,070	19,124	105
Eight occupants	508,942	106,489	164,298	104,607	68,240	25,908	14,450	9,015	15,841	94
Nine occupants	243,981	45,544	77,348	51,859	35,824	13,267	7,146	4,647	8,296	50
Ten occupants or more	361,421	55,676	106,570	79,263	58,814	24,023	13,238	8,682	15,093	62
Mean number of occupants	5.462	4.949	5.442	5.683	5.819	5.891	5.863	5.911	5.982	5.541

Source: National Statistics Office. *1990 Census of Population and Housing.*

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Table 14.13 Percentage Distribution of Owner-Households Who Had Purchased/Constructed Their Housing Units by Reported Sources of Financing and by Region: 1990

Region	Total Owner-house-holds who had purchased/ their housing units	Reported sources of financing: Own resources interest-free loans from relatives/ friends	Government assistance: PAG-IBIG GSIS, SSS DBP, etc.	Private banks/ foundations/ cooperatives	Employer assistance	Private persons	Other sources	Not reported
Philippines	9,066,183	93.0	2.3	0.4	0.6	2.0	0.9	0.9
Urban	4,029,009	89.7	4.5	0.6	0.9	2.0	0.9	1.4
Rural	5,035,247	95.5	0.6	0.2	0.3	2.0	0.9	0.4
National Capital Region (NCR)	876,347	81.2	7.9	1.4	1.2	3.2	1.0	4.2
Cordillera Administrative Region (CAR)	169,851	93.5	0.8	0.3	0.5	2.2	1.7	0.9
I. Ilocos Region	574,515	96.0	0.8	0.3	0.3	1.6	0.7	0.3
II. Cagayan Valley	397,725	95.4	0.8	0.2	0.2	1.8	0.9	0.7
III. Central Luzon	956,572	93.4	2.4	0.4	0.5	2.0	0.7	0.6
IV. Southern Tagalog	1,268,070	92.9	3.1	0.4	0.6	1.8	0.8	0.4
V. Bicol Region	600,096	96.4	1.0	0.2	0.2	1.7	0.5	0.1
VI. Western Visayas	825,014	95.0	1.6	0.2	1.0	1.5	0.6	0.2
VII. Central Visayas	760,456	93.9	1.2	0.3	0.7	1.6	1.0	1.3
VIII. Eastern Visayas	501,530	95.4	1.1	0.2	0.2	2.4	0.4	0.3
IX. Western Mindanao	493,535	94.4	1.0	0.2	0.4	1.7	1.5	0.8
X. Northern Mindanao	530,082	94.2	1.3	0.3	0.5	2.0	1.2	0.6
XI. Southern Mindanao	660,720	91.8	3.0	0.3	0.8	1.9	1.3	0.9
XII. Central Mindanao	448,129	93.2	1.1	0.3	0.5	3.4	1.1	0.4

Source: National Statistics Office. 1990 Census of Population and Housing.

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Table 14.14 Number of Families and Total Housing Expenditures and by Region, Urban and Rural: 1988 (Expenditures in thousand pesos)

Area/region	Total number of families	Total family expendi-tures	Total housing expenditures		Rent/rental value of house and lot		House maintenance and minor repairs	
			Amount	Percent	Amount	Percent	Amount	Percent
Philippines	10,533,927	342,578,100	43,863,614	12.80	39,975,963	11.67	3,887,650	1.13
Urban	3,985,145	188,493,475	31,257,191	16.58	29444935	15.62	1,812,255	0.96
Rural	6,548,782	154,084,625	12,606,423	8.18	10,531,028	6.83	2,075,395	1.35
National Capital Region (NCR)	1,435,436	86,626,002	18,458,211	21.31	17,923,332	20.69	534,879	0.62
Cordillera Administrative Region (CAR)	213,593	6,134,761	802,914	13.09	691,134	11.27	111,779	1.82
I. Ilocos	624,707	17,285,520	1,661,662	9.61	1,406,633	8.14	255,030	1.48
II. Cagayan Valley	437,907	10,764,549	946,819	8.80	829,257	7.70	117,563	1.09
III. Central Luzon	1,038,222	40,137,959	4,944,490	12.32	4,363,200	10.87	581,289	1.45
IV. Southern Tagalog	1,284,464	41,177,008	4,884,187	11.86	4,464,990	10.84	419,196	1.02
V. Bicol	737,972	17,160,100	1,558,287	9.08	1,227,275	7.15	331,011	1.93
VI. Western Visayas	936,611	25,983,024	2,673,188	10.29	2,190,782	8.43	482,406	1.86
VII. Central Visayas	829,546	18,379,951	1,814,066	9.87	1,610,183	8.76	203,883	1.11
VIII. Eastern Visayas	598,521	12,289,665	938,753	7.64	788,303	6.41	150,450	1.22
IX. Western Mindanao	593,252	13,278,619	1,058,662	7.79	928,311	6.99	130,351	0.98
X. Northern Mindanao	606,786	17,541,678	1,369,025	7.82	1,161,353	6.63	207,672	1.19
XI. Southern Mindanao	737,782	22,178,447	1,728,711	7.79	1,467,607	6.62	261,104	1.18
XII. Central Mindanao	493,131	13,657,818	1,024,639	7.50	923,602	6.76	101,038	0.74

Source: National Statistics Office. *1988 Family Income and Expenditure Survey.*

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Table 14.15 Number of Buildings in Urban and Selected Areas by Type of Structure and by Region: 1989

Region	Total	Single house	Duplex	Row house/ town house	Other buildings	Other non-building structure	Not reported
Philippines	4,301,901	3,738,223	94,251	77,418	363,316	14,266	14,427
National Capital Region (NCR)	910,578	755,408	48,549	54,539	42,226	4,351	5,505
Cordillera Administrative Region (CAR)	44,279	39,211	1,593	264	3,014	73	124
I. Ilocos	178,737	143,217	960	365	33,484	319	392
II. Cagayan Valley	85,273	73,281	593	631	10,631	54	83
III. Central Luzon	485,556	423,214	7,703	6,972	45,218	958	1,491
IV. Southern Tagalog	560,165	492,850	13,602	6,063	42,143	3,760	1,747
V. Bicol	176,047	157,915	1,299	844	15,399	292	298
VI. Western Visayas	279,410	247,223	1,905	750	28,335	612	585
VII. Central Visayas	308,010	268,416	4,247	1,641	32,204	797	705
VIII. Eastern Visayas	143,997	133,936	986	426	8,058	86	505
IX. Western Mindanao	314,451	290,164	2,192	834	20,316	169	776
X. Northern Mindanao	261,790	232,420	3,292	1,172	22,652	1,331	923
XI. Southern Mindanao	363,754	316,803	4,726	1,712	38,897	660	956
XII. Central Mindanao	189,854	164,165	2,604	1,205	20,739	804	337

Source: National Statistics Office. *1989 Census of Buildings.*

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Table 14.16 Number of Buildings by Predominant Use and by Region: 1989

Area/region	Number of buildings	Residential	Commercial	Institutional	User/construction/other use	Residential/commercial	Vacant	Others
Philippines	4,301,901	3,369,265	134,674	94,525	171,225	186,612	216,740	128,860
National Capital Region (NCR)	910,578	765,689	27,156	8,817	18,383	36,485	33,500	20,548
Cordillera Administrative Region (CAR)	44,279	32,071	1,152	1,168	2,557	2,427	3,162	1,742
I. Ilocos	178,737	128,189	5,647	4,992	19,067	4,050	8,542	8,250
II. Cagayan Valley	85,273	63,483	2,690	2,593	4,285	4,029	4,122	4,071
III. Central Luzon	485,556	392,702	13,741	9,072	16,713	17,154	21,779	14,395
IV. Southern Tagalog	560,165	442,787	16,377	11,410	19,350	21,320	34,125	14,796
V. Bicol	176,047	135,732	6,045	5,524	4,118	10,318	8,773	5,537
VI. Western Visayas	279,410	228,626	10,714	7,620	9,104	4,594	10,121	8,631
VII. Central Visayas	308,010	217,822	11,167	7,962	19,647	16,714	20,620	14,078
VIII. Eastern Visayas	143,997	107,950	3,721	4,424	2,977	12,796	7,407	4,722
IX. Western Mindanao	314,451	245,180	8,525	7,829	16,283	9,598	16,332	10,704
X. Northern Mindanao	261,790	189,887	8,707	7,727	12,887	19,667	15,483	7,432
XI. Southern Mindanao	363,754	279,321	13,307	9,169	16,780	14,111	22,778	8,288
XII. Central Mindanao	189,854	139,826	5,725	6,218	9,074	13,349	9,996	5,666

Source: National Statistics Office. *1989 Census of Buildings.*

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Table 14.17 The National Shelter Program Summary by Agency: 1991-1992 (Value in million pesos)

Agency/program	1992 Units	1992 Value	1991 Units	1991 Value
Total	123,462	12,176.51	118,699	10,870.46
NHA	30,150	352.76	30,956	788.97
Complete housing units	5,321	59.31	7,215	92.60
Medium rise housing	0	18.10	1,600	151.91
Sites and services	4,384	32.65	1,805	77.47
Resettlement	11,357	210.01	14,119	415.52
Slum upgrading	5,486	32.69	2,367	51.47
CMP deliveries	3,602	-	3,850	-
NHMFC	53,426	5,466.0	43,407	4,637.3
Regular UHLP	24,174	4,834.3	26,777	4,367.8
Development loan fund	24,466	504.9	10,951	149.1
NHA mortgages	-	-	-	-
CM program	4,786	126.8	5,679	120.4
HIGC	17,279	3,171.0	17,094	2,448.0
Acquired assets	1,448	71.0	6,503	352.0
Retail guarantee	6,675	2,634.0	4,383	1,542.0
Development guarantee	2,900	88.0	2,487	231.0
CM originator	5,875	304.0	3,583	298.0
Cooperative housing	381	74.0	138	25.0
HDMF	14,279	1,551.55	22,170	1,944.59
EHLP (Pag-ibig I & II, FILOW)	7,667	1,171.01	9,753	1,085.21
Direct development loan/ joint venture	3,373	147.53	7,200	461.12
Development loans (thru banks)	1,987	77.63	4,024	192.96
Retail financing for house construction	65	10.49	59	6.30
GLAD/rental housing program	1,187	144.88	1,134	199.00
SSS	2,791	491.4	1,393	352.4
Individual program	975	214.7	772	153.8
Pari-Passu	64	19.2	50	13.4
Corporate/social housing	534	126.6	159	33.5
Repair/improvement	274	26.7	246	36.1
Other development loans	944	104.2	166	115.6
GSIS	5,537	1,143.8	3,679	699.2
Individual housing	1,405	382.7	1,346	308.4
Mass housing program	4,132	761.1	2,333	390.8

NHA - National Housing Authority
NHMFC - National Home Mortgage Finance Corporation
UHLP - Unified Home Lending Program
SSS - Social Security System
GSIS - Government Service Insurance System
HIGC - Home Insurance Guaranty Corporation

Source: National Economic and Development Authority.

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Table 14.18 Summary of NHA Accomplishments: 1975-1992

Program/project	Total	Pre-NHA Years	1975-1985	1986	1987	1988	1989	1990	1991	1992
Philippines	348,985	50,612	135,016	10,210	11,273	21,230	14,992	39,760	31,808	34,084
Regular program	263,856	-	135,016	10,039	11,175	20,735	14,665	27,590	19,709	24,927
Slum upgrading	80,183	-	41,801	1,581	3,209	11,420	5,245	9,074	2,367	5,486
Sites/services	40,841	-	21,466	171	2,610	1,880	5,421	3,104	1,805	4,384
Completed housing	43,599	-	6,656	74	92	1,836	1,980	13,100	10,969	8,892
Medium rise housing	6,173	-	3,300	-	373	560	-	340	1,600	-
Resettlement	93,060	-	61,793	8,213	4,891	5,039	2,019	1,972	2,968	6,165
Emergency housing assistance program	22,803	-	-	-	-	-	-	9,528	8,083	5,192
1990 earthquake	12,106	-	-	-	-	-	-	9,528	1,725	853
Mt. Pinatubo	10,697	-	-	-	-	-	-	-	6,358	4,339
Community mortgage program	11,185	-	-	171	98	495	327	2,642	3,850	3,602
Apartment and dormitory housing	529	-	-	-	-	-	-	-	166	363
Pre-NHA years	50,612	50,612	-	-	-	-	-	-	-	-

Source: National Housing Authority.

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Chapter 15
Labor

15.1 Development of Labor Force Surveys

Labor force statistics in the Philippines is derived from the Integrated Survey of Households (ISH) conducted by the National Statistics Office (NSO) on a nationwide sample basis. This survey evolved from a series of previously conducted labor force surveys such as the Philippine Statistical Survey of Households (May 1956-May 1964), Bureau of the Census and Statistics Survey of Households (May 1965-November 1973), and National Sample Survey of Households (February 1974-August 1976).

The current household survey started as a joint project between the Philippine government and the U.S. government through its International Cooperation Agency (now the United States Agency for International Development). Principal government agencies involved were the Office of the Statistical Coordination and Standards (OSCAS) of the National Economic Council (NEC) as the coordinating agency, the Bureau of the Census and Statistics (BCS) as the primary operating agency and other related offices as cooperating agencies. Local and foreign experts provided technical assistance to the project. Local expertise was provided by the faculty of the University of the Philippines Statistical Center and a team of five experts from the U.S. Bureau of the Census and Bureau of the Budget.

The first Philippine Statistical Survey of Households (PSSH) was conducted in May 1956. The survey covered employment, labor force participation of the population 10 years old and over, demographic information and other socioeconomic activities of the population based on "past week" reference period. A multistage sampling design was adopted. All estimates were published at the national level only.

Succeeding surveys were conducted semiannually until 1969. However, only one survey was undertaken for the years 1959, 1964 and 1969.

In May 1965, the PSSH survey series was renamed the Bureau of the Census and Statistics Survey of Households (BCSSH). It adopted a stratified two-stage sampling design which enabled the publication of estimates at the national level with urban and rural classification.

No survey was conducted in 1970 because it was a censal year. On the basis of the results of the 1970 Census, the sampling design was again revised starting with the March 1971 survey round. This time, estimates were published at the regional level. The survey was undertaken on a quarterly basis with contents remaining the same as far as labor force characteristics were concerned.

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In 1974, the Bureau of the Census and Statistics was restructured to become the National Census and Statistics Office (NCSO) under the administrative supervision of the National Economic and Development Authority (NEDA). As a consequence, the BCSSH series was renamed National Sample Survey of Households (NSSH). The August 1976 survey round published in the NSSH Bulletin series was the last survey conducted using the 1971 design.

In November 1976, the regular quarterly labor force survey of NCSO and the semiannual agricultural survey of the Bureau of Agricultural Economics (BAEcon) were integrated into one survey, called the Integrated Survey of Households (ISH). Starting with the 1976 fourth quarter survey, the labor force was modified to cover the population 15 years old and over instead of 10 years old and over in conformity with the Labor Code of the Philippines.

A two-stage sampling method was used. The new survey design considered the barangays (smallest political subdivision) and households as the primary and secondary sampling units, respectively. The basic frame from which the sample barangays were drawn was the 1975 Integrated Census of Population and Its Economic Activities (ICPEA) Phase I. Moreover, the "past week" reference period was changed to "past quarter." Starting with the 1981 fourth quarter survey, the projected population 15 years old and over was based on the 1980 Census of Population and Housing.

With the adoption of modified objectives of the ISH which are to gather, process and analyze data on the labor force, the employed and unemployed including their attributes and other socioeconomic characteristics of households, a modular approach to household survey was implemented in 1984 with the labor force section as the core module of the ISH questionnaire. During selected survey rounds, special topics such as overseas employment and family income and expenditures were included in a rider questionnaire. Moreover, in line with the modular approach in conducting the ISH, a new sampling design was prepared and implemented in the same year.

The ISH developed and adopted concepts more applicable to Philippine situations. Although previous labor force surveys were basically the same in terms of purpose and scope, their reference periods were revised. In the second quarter of 1987, the reference period was shifted from the "past quarter" to the "past week" to present a more realistic view of the country's economic status. However, employment status based on a "past quarter" reference period was also asked of all persons 10 years old and over to link the old series with the present one.

Concepts and Definitions

Household - an aggregate of persons, generally but not necessarily bound by kinship, who live together under the same roof and eat together or share in common the household food. A person who lives alone is considered as one household.

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Population - the population estimate refers to the noninstitutional population and excludes the population found in diplomatic and consular residences, ships, asylums, penitentiaries, army barracks, hotels and similar institutions.

In the labor force (economically active population) - refers to population 15 years old and over who contribute to the production of goods and services in the country.

Employed persons - include all those who, during the reference period, are 15 years old and over as of their last birthday and are reported either at work, even for an hour, or with a job but not at work because of temporary illness, vacation, strike or other reasons. Persons who are supposed to report for work or start the operation of a farm or business enterprise within two weeks from the date of the interview are also classified as with a job but not at work.

Unemployed persons - include all those who, during the reference period, are 15 years old and over as of their last birthday and are reported to be looking for work. Also included are those who are not looking for work because of the belief that no work is available or because of temporary illness or disability, bad weather and other valid reasons.

Underemployed persons - employed persons who expressed the desire to have additional hours of work in their present job or in an additional job, or to have a new job with longer working hours.

Persons not in the labor force - include those who are not at work or without jobs and are not looking for work for reasons other than those previously mentioned. These include housewives, students, disabled or retired persons and seasonal workers who are not working and not looking for work during the survey period.

Work - something that a person does during the reference period, for pay in cash and/or in kind, for any establishment, office, farm, private home, or for profit or without pay on a family farm or enterprise. It also includes what a farm operator or a member of the family, to which the farm operator belongs, does on the farm operated by another household on exchanged labor arrangement. In addition, any activity that a person does during the reference period in relation to minor activities such as home gardening; raising of crops, fruits, and others; raising hogs or poultry; and fishing for home consumption and manufacturing for own use is also considered work. However, during the reference period, there must be some harvest in the case of home gardening; raising of crops, fruits and nuts and gathering of wild vegetables; animals disposed of (sold, consumed, bartered or given away) or some catch in fishing in order for these activities to be considered as work. These activities are considered work inasmuch as earnings are derived from them.

Occupation and industry - the data on occupation and industry relate to the job held during the reference period. Persons employed in two or more jobs are reported in the job which is permanent, whether full time or part time. If there are two permanent jobs held, the one in which they work the greater number of hours during the quarter is reported.

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Labor force participation rate - ratio of total persons in the labor force to total population 15 years old and over.

Employment rate - the proportion of total employed to total labor force.

Unemployment rate - the proportion of persons totally unemployed to total labor force.

Underemployment rate - the proportion of fully and partially employed wanting additional hours of work to total employed persons.

15.2 Philippine Labor Force

The country's household population 15 years old and over in October1993 was reported to be 41.453 million, showing an increase of 2.95 percent from the previous year's 40.265 million. From 1987 to 1993, it grew by an annual average of 2.94 percent.

Of the total household population 15 years old and over, 26.822 million or 64.7 percent were in the labor force in 1993 while the remaining 14.631 million or 35.3 percent were not in the labor force. Employed persons totalled 24.443 million and those unemployed numbered 2.379 million. (See Table 15.1.)

Since a larger portion of the country's population resided in rural areas, 13.849 million or 51.6 percent of the total labor force were in these areas. Urban areas absorbed 12.973 million or 48.4 percent of the country's labor force.

Females outnumbered the males, registering 50.30 percent of the total household population 15 years and over. However, of the total labor force, males (62.83 percent) predominated females. In addition, there were more males employed (63.28 percent) than females. By age group, persons 25 to 34 years old comprised the largest group (21.28 percent or 8.09 million) of household population, followed by 15 to 19 years of age (18.61 percent or 7.07 million). (Refer to Tables 15.1a and 15.1b for details.)

Among the regions, the National Capital Region (NCR) had the biggest household population at 5.781 million, followed by Southern Tagalog at 5.546 million. The least was reported by Cordillera Administrative Region (CAR), 773 thousand.

Southern Tagalog accounted for the most number of persons in the labor force at 3.603 million (13.43 percent), 3.296 milion of which were employed. Second was NCR with 3.442 million (12.83 percent), 2.89 million of which were employed. CAR had the smallest labor force population with 0.529 million.

Employment in agricultural industries numbered 11.194 million workers (45.80 percent of total employed), while those engaged in nonagricultural industries reached 13.250 million (54.21 percent). Almost three-fourths (73.82 percent) of those engaged in agricultural work were males. On the other hand, male workers in nonagricultural industries comprised 54.38 percent.

By region, Western Visayas reported the highest employment in agricultural industries, accounting for 11.01 percent, followed by Southern Tagalog with a share of 10.73 percent. NCR accounted for 21.49 percent of employed

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persons in nonagricultural industries, followed by Southern Tagalog with 15.83 percent. (See Table 15.1c for details.)

Labor Force Participation Rate (LFPR). The LFPR for 1993 was registered at 64.7 percent, a slight decrease of 0.3 percentage point from the 1992 rate of 65.0 percent. By age group, persons 45 to 54 years old and 35 to 44 years old posted the highest LFPR of 77.4 and 76.8 percent, respectively. LFPR for males was highest in age group 35 to 44 years at 98.8 percent while for females, workers aged 45 to 54 years recorded the highest at 58.3 percent. (See Table 15.2.)

The labor force participation by area showed that the overall LFPR in rural areas was higher than in urban areas. In 1993, rural areas recorded a higher LFPR of 67.8 percent compared with the 61.7 percent in urban areas. (See Table 15.2a.)

By region, Cagayan Valley recorded the highest LFPR of 72.2 percent, followed by Northern Mindanao with 69.3 percent. On the other hand, ARMM recorded the lowest LFPR of 57.4 percent. (See Table 15.2b.)

15.3 Employment

The national employment rate for 1993 was estimated at 91.1 percent, slightly lower than the rate recorded a year ago. ARMM registered the highest employment rate of 96.9 percent in both 1992 and 1993. On the other hand, NCR registered the lowest at 83.9 percent, even lower by 0.4 percentage point compared to the previous year's estimate (See Table 15.2b.) Unemployment rate was a little higher at 8.9 percent. The country's employment and unemployment rates for 1992 and 1993 are presented in Table 15.2b.

Employment by Sex and Area. Of the 24.443 million persons employed in October of 1993, 63.28 percent or 15.468 million were males and 36.72 percent or 8.975 million were females. Of the total employed persons, 53.2 percent (13.0 million) are in the rural areas while 46.8 percent (11.443 million) are in the urban areas. Details on number of employed persons by sex and area are presented in Table 15.3.

Employed Persons by Major Industry Group. Most of the country's employed persons were engaged in agriculture, fishery and forestry. This sector absorbed some 11.194 million workers or 45.80 percent of the total employment. Employment in community, social and personal services sector ranked second with 4.174 million workers or 17.08 percent, followed by wholesale and retail trade with 3.415 million or 13.97 percent. (Refer to Table 15.3a for the number of employed persons by industry group from 1976 to 1993.)

Employed Persons by Major Occupation Group. Agricultural, animal husbandry and forestry workers had the largest employment among major occupation groups with 11.11 million workers or 45.4 percent. Production and related workers, transport equipment operators and laborers came second with 5.13

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million workers or 21.0 percent. Sales workers were third with 3.28 million or 13.41 percent. Only 5.72 percent (1.40 million) of employed persons were professional, technical and related workers, 4.30 percent (1.05 million) were clerical workers and 1.33 percent (0.33 million) were administrative, executive and related workers. (See Table 15.3b for more details.)

Employed Persons by Class of Worker. Wage and salary workers totalled 10.88 million, majority (82.76 percent) of whom worked for private households, establishments or family-owned enterprises, while a small percentage (17.24 percent) were government workers. Own account workers, which include self-employed workers and employers, numbered 9.82 million and the remaining 3.74 million were unpaid family workers. (See Table 15.3c.)

Employed Persons by Highest Grade Completed. Of the 24.44 million persons employed in 1993, 52.97 percent finished elementary, high school or college education while 43.44 percent were undergraduates. Workers with no grade completed accounted for 3.44 percent, while 0.15 percent did not report their educational attainment. The bulk of elementary graduates were agricultural, animal husbandry and forestry workers, fishermen and hunters (56.19 percent), followed by production and related workers, transport equipment operators and laborers (21.26 percent). On the other hand, most high school graduates were production and related workers, transport equipment operators and laborers accounting for 33.00 percent, while among college graduates, professional, technical and related workers comprised 42.14 percent. (Refer to Table 15.3d.)

15.3.1 Overseas Employment and Emigration

There are two mainstreams of manpower outflow. The first is permanent migration, wherein workers leave on a more or less permanent basis and the second, contract or temporary migration, a case of contractual employment for a definite period of time with the workers intending to return to their home country after contract termination.

Movement in the first category can be traced in the early 1900s when Hawaii experienced a severe shortage in plantation manpower. The Philippines, then an American colony, was the source of cheap labor. The United States was the primary market for Filipino overseas workers and, by the late 1930s, Filipinos comprised about 70 percent of Hawaii's plantation labor as well as a significant percentage of California's grape, apple and orange-picking population.

The next wave of contract migration came after World War II when Filipino contractors and laborers participated in the rehabilitation and reconstruction of American strongholds such as Guam, Okinawa and Wake Island. The outbreak of the Korean and Vietnam wars later institutionalized Filipino participation in many U.S. defense and war-related civilian projects.

At the same time, manpower markets started opening up in Borneo, Thailand, Malaysia and Indonesia. Canada also provided an alternative destina-

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tion for professional, mainly medical personnel who sought permanent migration to the North American continent.

In the 70s, contract migration to the Middle East began. Fueled by the development boom resulting from increased oil prices, oil-producing Arab countries started requiring skilled manpower more than their indigenous population could supply. Thus, from only 3,694 workers deployed in 1969, 598,769 Filipino workers were processed for overseas jobs in 1990, most of them bound for the Middle East.

Since the movement of Filipinos out of the Philippines has been closely monitored only in 1975, an attempt was made to ascertain the total number of Filipinos overseas prior to this year. Materials gathered on the estimated total number of overseas workers were based on the reports from labor attaches, labor missions overseas, Central Bank, embassies and consulates of the different host countries of Filipino migrants, and from different government agencies monitoring overseas Filipinos.

In 1990, there were 661,977 Filipinos who left the country either as emigrants or contract workers. This registered an increase of 14.39 percent from 1989. (See Table 15.4.)

A total of 63,208 emigrants in 1990 were registered by the Commission on Filipinos Overseas (CFO), 13.47 percent more than the 55,703 emigrants reported in 1989. Table 15.4a shows the number of Filipino emigrants by occupational grouping from 1980 to 1990.

Processed contracts of overseas workers in 1990 numbered 598,769 or an increase of 14.49 percent from the 1989 figure of 522,984. More than three-fourths (78.26 percent) of this total were land-based workers posting a 14.86 percent increase from the 1989 level of 407,974. On the other hand, sea-based workers went up by 13.19 percent, from 115,010 in 1989 to 130,178 the following year. (For details, see Table 15.4b.)

Primary market for Philippine labor in 1990 was still the Middle East (Saudi Arabia, Kuwait, United Arab Emirates), accounting for 65.13 percent of land-based workers. Asian countries came second with 27.10 percent workers. Africa and Oceania absorbed the least number of contract workers, accounting for only 0.38 percent (1,273) and 0.28 percent (942), respectively. (See Table 15.4c.)

Foreign exchange remittances of overseas contract workers increased by 21.38 percent, from $973.02 million in 1989 to $1.18 billion in 1990. Of these earnings, land-based workers shared 75.64 percent or $893.40 million, while the remaining 24.36 percent or $287.67 million was accounted for by sea-based workers. Remittances of sea-based workers increased by 32.06 percent from $217.83 million in 1989, while those of land-based workers increased by 18.30 percent. Table 15.4d shows the remittances of overseas contract workers by month from 1985 to 1990.

Government Regulation and Supervision. Government regulation on the recruitment of Filipino workers for overseas employment started on February 5, 1915 with the passage of Republic Act 2486. However, it was characterized

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by minimal government supervision and exclusive private sector participation. It remained the only reference legislation for overseas employment until the promulgation of the Philippine Labor Code in 1974.

Presidential Decree 442, also known as the Labor Code of the Philippines which was signed into law on May 1, 1974, created the Overseas Employment Development Board and the National Seamen Board to undertake the systematic overseas employment of land-based workers and seamen, respectively, in excess of domestic needs. It provided for government control of the overseas employment industry and the eventual phaseout of private sector participation.

However, in 1978, P.D. 1412 amended the Labor Code and reinstated private sector participation in overseas employment, since the demand of the booming overseas market was more than the government machinery could handle.

In 1980, P.D. 1691 further amended the Labor Code and limited the Overseas Employment Development Board to recruit and place workers for overseas employment on a government-to-government arrangement and in such other sectors as policy may dictate.

In 1982, Executive Order 797 consolidated the Overseas Employment Development Board, the National Seamen Board and the overseas functions of the Bureau of Employment Services into the Philippine Overseas Employment Administration (POEA). The administration supervises and regulates the private sector's participation in the overseas employment program.

To ensure the protection of Filipino overseas workers from the recruitment process, the POEA rationalized and regulated the industry through its licensing system, enforcement of established rules and regulations and an improved system of private agency performance appraisal. As of year-end 1990, there were 638 participating licensed agencies of which 303 were private employment agencies, 66 were service contractors, 35, construction contractors and 234, manning agencies. With the stricter enforcement of rules and regulations on overseas hiring, 39 agencies were closed and 31 persons were apprehended for alleged involvement in illegal recruitment cases.

15.4 Labor Administration

The Department of Labor and Employment (DOLE) is the primary government agency tasked with the formulation and administration of all labor policies and programs. It was reorganized on January 30, 1987 under Executive Order 126 (repealing E.O. 797, series 1982 as amended by E.O. 251, series 1987). Its three major thrusts are the promotion of gainful employment opportunities and the optimization of the development and utilization of the country's manpower resources; advancement of workers' welfare by providing for just and humane working conditions and terms of employment; and maintenance of industrial peace by promoting harmonious, equitable, and stable employment relations that assure equal protection for the rights of all concerned parties.

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15.4.1 Labor Policies

The framework for the pursuit of government policies and programs on labor is provided for in the 1987 Constitution which recognizes the significant role of labor in national development. Article II, Section 9 declares as a policy that "The state shall promote a just and dynamic social order that will ensure the prosperity and independence of the nation and free the people from poverty through policies that provide adequate social services, promote full employment, a rising standard of living and an improved quality of life for all."

In addition, Article II, Section 18 provides that "The state affirms labor as a primary social and economic force. It shall protect the rights of workers and promote their welfare". Recognizing that the labor sector is a critical component of society, Article XIII, Section 3 likewise mandates that "The state shall afford full protection to labor, local and overseas, organized and unorganized, and promote full employment and quality of employment opportunities."

The Labor Code of the Philippines, specifically Article 211, provides that it is the policy of the state to promote full collective bargaining, including voluntary arbitration as a mode of settling labor or industrial disputes; to promote free trade unionism as an agent of democracy, social justice and development; to nationalize and restructure the labor movement in order to eradicate interunion conflicts; to promote the enlightenment of workers concerning their rights and obligations as union members and as employers; to provide adequate administrative machinery for the expeditious settlement of labor or industrial disputes; and to ensure a stable but dynamic and just industrial peace.

15.4.2 Promotion of Employment and Manpower Development

The Department of Labor and Employment (DOLE) through its agencies developed policies and programs relative to employment promotion and administration as well as monitoring the enforcement of laws relating to recruitment and placement services. It also formulated plans and programs that will ensure efficiency and proper allocation, development, as well as optimum utilization of the nation's manpower resources.

Domestic Employment. The Community Employment Center (CEC) program was created in 1986 under the Public Employment Service Office (PESO) in order to boost the employment promotion functions in municipalities. The CEC gives data on available job vacancies and manpower in their respective areas and even in other employment offices of the DOLE. It also gives information on self-employment and livelihood opportunities and list of funding institutions for people interested to venture into entrepreneurial projects.

In 1990, a total of 105,512 workers were assisted by DOLE's local placement program. Of the total, 49,780 workers were placed through Job Exchange Centers; 14,347, through local recruitment agencies; 19,053, through CEC; and 15,712 through National Manpower and Youth Council (NMYC).

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Likewise, the government is currently setting up a Social Investment Program through which private companies could participate in creating more jobs and income-augmenting opportunities. It also continues to implement Project Mindanao which includes a livelihood program component that mobilizes and integrates the efforts of nongovernment organizations (NGOs).

Overseas Employment. The increasing contraction of the overseas labor market and the more aggressive placement policies of other Asian developing nations gave Filipino workers keener competition in overseas placement.

This development required the adoption of innovative approaches to sustain the Filipino workers' competitive posture in the international labor market. As a result, marketing strategies were undertaken where Filipino expertise and know-how fit with the particular demand. Special emphasis was given in countries where Filipinos comprise a small share of expatriate labor force but where conditions are conducive for work growth. European countries, Canada and countries in the Arabian peninsula were specific targets.

To improve the level of overseas deployment, the government through the DOLE, rationalized and intensified its efforts in tapping and developing overseas labor market for Filipino workers; regulating the recruitment and placement activities of private fee-charging employment agencies; promoting the welfare and well-being of Filipino workers overseas; and securing the best terms and conditions of employment of contract workers abroad.

Simultaneous with the administration's marketing efforts were its drive against illegal recruiters and protection of workers from the excessive fees imposed by private employment agencies. The print and broadcast media such as publications and television and radio advertisements were utilized for an effective information campaign. Seminars were also conducted through linkages with other organized groups and the POEA regional extension units. Lists of licensed agencies are published quarterly which include suspended or cancelled agencies which are penalized for violations of rules and regulations governing overseas employment. These lists also contain names of persons banned from participating in the overseas employment program and those wanted by law for illegal recruitment activities. These efforts are included in the administration's Anti-Illegal Recruitment (AIR) Program.

Manpower Development. To enhance employability, productivity and self-reliance, DOLE undertakes several manpower development programs. On Apprenticeship and Learnership Program, a total of 19,410 were registered as of December 1990. Of this, 10,286 or 52.99 percent graduated and 8,424 or 43.40 percent were placed for employment.

Persons trained by NMYC programs totalled 218,656 with 21,235 persons placed through Placer Program. One of the special programs of NMYC in 1990 was the Employment Assistance and Rehabilitation Network (EARN). The program helped earthquake victims participate in the recovery and reconstruction processes of their communities. Earthquake victims underwent free skills

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training consisting of 40 different construction skills training courses, 160 different livelihood or job skills training courses, and three general microbusiness planning courses. The EARN training courses were directed towards the development of the construction industry and small businesses in the areas affected by the earthquake particularly Regions I, II, III and CAR.

15.4.3 Workers' Protection and Welfare

The protection of Filipino workers in all occupational areas is a policy embodied in the Labor Code and in the Constitution of the Philippines. To achieve this aim, programs and projects have been undertaken in terms of labor standard formulation, wage legislation, complaints and technical safety inspection, assistance to working women and minors as well as to rural workers, and employees' compensation.

Wage Setting and Enforcement. The National Wages Council (NWC), now known as National Wages and Productivity Commission (NWPC), is primarily tasked to review and formulate wage policies for implementation in the national, regional, sectoral and industry levels to ensure adequate family income and decent living for the worker and his family while maintaining the viability of business and industry.

The legislated wage rates in the private sector were on the uptrend for both the agricultural and nonagricultural sectors. The increases were: P8.00 in 1970 to P31.82 in 1982 for nonagricultural workers in the NCR and P30.74 outside NCR; and P4.75 to P26.18 for plantation workers and P19.65 for nonplantation groups of the agricultural sector. In 1983, the legislated daily wages of the agricultural sector in plantation and nonplantation areas were raised to P27.97 and P20.95, respectively. The minimum daily wages of the nonagricultural sector within and outside NCR were raised to P34.22 and P33.14, respectively.

Wage Order No. 6 which took effect in November 1984 raised the legislated daily wage of the agricultural sector in plantation and nonplantation areas to P46.67 and P35.67, respectively. Daily wages for the nonagriculture sector were raised to P57.08 and P56.00 in NCR and in areas outside NCR, respectively.

On May 1, 1987, Executive Order (EO) 178 mandated the two-step integration of the cost of living allowance (COLA) into the basic pay. The first integration of the COLA under Wage Order 1 and 2 took effect on May 1, integrating P9.00 out of the P17.00 COLA into the minimum wage. The remaining P8.00 was integrated on October 1 under Wage Order 5 and 6. With full integration, the effective minimum wage rates increased to P69.33 for nonagricultural workers within and outside NCR, and P58.50 and P47.12 for agricultural plantation and nonplantation workers, respectively.

Republic Act 6640 was signed into law in November 1987. In effect, the minimum wage of workers and employees receiving not more than P100.00 daily in the public and private sectors, including agricultural workers, was increased

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by P10.00 across the board. Meanwhile, nonagricultural workers outside NCR received an P11.00 increase in daily wage rate.

In 1989, RA 6727 or the Wage Rationalization Act was made into law to rationalize minimum wage fixing, promote improvement and gain sharing measures to guarantee the rights of labor to a just share in the fruits of production; enhance employment generation in the countryside through industry dispersal; and afford business and industry with reasonable investment, expansion and growth.

Workers within and outside NCR in the nonagricultural sector received P82.88 in 1988. In the agricultural sector, plantation and nonplantation workers received P72.04 and P55.25, respectively.

In 1990, minimum wage in the nonagricultural sector within and outside NCR were both placed at P96.42. On the other hand, minimum wage for agricultural plantation workers was P85.88 and for agricultural nonplantation, P63.38. (See Table 15.5.)

Enforcement of Labor Standards. The Bureau of Working Conditions is responsible for developing policies and programs relative to the terms and conditions of work. It has formulated the national program for the improvement of working conditions and environment including the strengthening of the labor inspectorate.

To achieve this objective, amendments to the Occupational Safety and Health Standards (OSHS) were formulated to strengthen the capabilities of labor inspectors in the performance of their tasks on occupational health and safety promotion.

In 1990, there were 25,037 inspections made on the administration of general labor standards. Of the total, 15,284 were found with violations. Plant site corrections on 4,259 establishments benefitted 71,250 workers.

Of the 16,524 units inspected on technical safety standards, 3,308 or 20.02 percent were found with violations. Units with violations corrected totalled 1,365, benefitting 569,836 workers.

Employees' Compensation Program. The employees' compensation program enables workers and their dependents to promptly secure adequate income benefits, medical or related services and rehabilitation in the event of employment-related injury, sickness, disability or death.

In 1990, total membership under the Social Security System (SSS) of the private sector and Government Service Insurance System (GSIS) of the public sector totalled 13.35 million workers. Total contributions for social security, medicare and employees' compensation amounted to P10.13 billion. Benefits paid to SSS and GSIS members totalled P6.26 billion.

The Employees' Compensation Commission formulates and rationalizes its various welfare programs on employees' disability compensation. It also reviews or decides appealed cases from the GSIS and the SSS.

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Workers' Welfare. The government maintained and strengthened its various welfare programs available to special groups of workers considered as vulnerable to exploitation by unscrupulous groups as well as to adverse conditions attendant to poverty, illiteracy, and other social problems.

Agencies involved in the workers' welfare program are the Bureau of Rural Workers (BRW), Bureau of Working Women and Young Workers (BWWYW) and Overseas Workers Welfare Administration (OWWA).

The BRW is responsible for developing policies and programs relative to the administration and enforcement of laws relating to rural workers.

The rural workers program consists of rural research and development communication, amelioration and welfare, rural employment and manpower development, organizational and cadre development and fund management.

Several projects were undertaken by DOLE to provide livelihood opportunities to rural workers. The Fund for Rural Employment and Enterprise Development Program (FREED) gives priority to rural workers who have minimal or no access to production resources. With this program, credit assistance are extended through accredited conduits such as nongovernment organizations.

The Social Amelioration Fund (SAF) is a unique income distribution and profit-sharing scheme which levies a certain amount per picul of sugar sold for cash bonuses and socioeconomic projects of sugar workers.

BWWYW aims to enlighten women and young workers on legislations, policies, standards and issues affecting them; improve their socioeconomic conditions; and enhance their well- being.

On women's welfare, the government conducted trainings and seminars to increase awareness or conciousness of critical issues affecting working women and supervisory development and skills for organized woman workers nationwide. Some of these training programs are Women in Trades and Technology and Garment Industry Training Project.

The Working Youth Center (WYC) serves as facility center for making accessible to the working youth various programs and services of different government and nongovernment organizations. WYC was piloted in Sapang Palay, Bulacan in 1985 and is now operating in nine selected areas in Regions II to XII. It continues to alleviate the socioeconomic conditions of the working youth through its four major program components, namely, employment promotion and income generation, information dissemination, education and training, and welfare services.

Other projects were also undertaken to maximize the welfare program for the youth and the community in general. These projects included the Alternative Employment and Livelihood Project for the Muro-Ami children and their families, a program banning child labor in the Muro-Ami fishing sector and promoting income-generating and livelihood opportunities for displaced fishermen and their families; and the Smokey Mountain project, a pilot project initiated to get child scavengers out of working conditions extremely dangerous

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to health and safety and highly offensive to the dignity of the individual, and to provide livelihood and employment alternatives and options to young adults and parents.

In connection with the Gulf crisis, thousands of Filipino overseas contract workers came home, prompting POEA to activate the job exchange program that will provide alternative jobs to the OCWs. Another program, the Entrepreneurship in Migrant Earnings (EME), provides assistance in chanelling workers' savings into viable and sustainable business enterprise. The Reentry Program through Entrepreneurship Mediation (REPROEM) assists worker-returnees who want to engage in livelihood activities through project identification, technical or managerial training, and project consultation.

15.4.4 Labor Relations

The Bureau of Labor Relations (BLR) is a staff agency which primarily undertakes policy and program development and advises the administration in the enforcement of laws pertaining to labor-management relations. Programs and projects were implemented to activate trade union movement and promote the widespread practice of collective bargaining; establish closer labor-management cooperation; and enhance tripartite and multisectoral participation in labor policy deliberations and ensure expeditious, just and peaceful settlement of labor disputes particularly through voluntary modes such as preventive mediation, conciliation, and voluntary arbitration.

Promotion of Trade Unionism. Trade unionism in the country has come a long way since its early beginning in the 20th century. Trade union movement plays a pivotal role in the economic recovery effort of the present administration.

In 1990, 575 unions with 51,407 members were newly registered. The total number of active unions as of December 1990 totalled 4,445 with 2.96 million members.

The increase in registered unions was due to R.A. 6715 which gives the BLR concurrent authority with the DOLE regional offices in union registration.

Collective Bargaining Agreements (CBAs) existing as of December 1990 numbered 4,982, covering 497,000 workers. (See Table 15.6.)

Labor Dispute Settlement. The National Conciliation and Mediation Board (NCMB) created in 1987 is tasked to promote three vital programs, namely, Conciliation-Mediation, Voluntary Arbitration and Labor Management Cooperation.

A total of 1,565 notices were filed with the DOLE in 1990, an increase of 3.10 percent from 1989 level of 1,518. Of the total, 183 materialized into actual strikes which involved 69,594 workers resulting to a loss of 1,345 man-days. (See Tables 15.7 and 15.7a.)

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Sources:

15.1	National Statistics Office, Dr. Marcelo M. Orense and Ms. Nelia R. Marquez. *Household Surveys in the Philippines, Second National Convention on Statistics' Book 2,* Metro Manila, 1980; Household Surveys Section.
15.2 - 15.3	National Statistics Office, Household Surveys Section.
15.3.2	Philippine Overseas Employment Administration; Commission on Filipinos Overseas.
15.4	Department of Labor and Employment.

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Table 15.1 Household Population 15 Years Old and Over by Employment Status and Area: 1987-1993 (Thousands)

Year	Household population	Total in the labor force	Total (fully and partially)	In the labor force: Employed: In agricultural industries	In the labor force: Employed: In nonagricultural industries	In the labor force: Unemployed	Not in the labor force
Philippines							
1987	34,840	22,880	20,795	9,940	10,855	2,085	11,960
1988	35,865	23,451	21,497	9,920	11,577	1,954	12,413
1989	36,916	23,858	21,849	9,852	11,998	2,009	13,058
1990	37,999	24,525	22,532	10,185	12,347	1,993	13,474
1991	39,114	25,246	22,979	10,403	12,577	2,267	13,868
1992	40,265	26,180	23,917	10,869	13,047	2,263	14,085
1993	41,453	26,822	24,443	11,194	13,250	2,379	14,631
Urban							
1987	13,870	8,633	7,463	1,081	6,381	1,170	5,237
1988	14,255	8,821	7,732	1,035	6,697	1,089	5,434
1989	14,788	9,060	7,998	1,042	6,956	1,062	5,728
1990	15,270	9,339	8,258	1,028	7,231	1,081	5,931
1991	19,806	12,334	10,864	2,423	8,439	1,470	7,472
1992	20,344	12,692	11,248	2,512	8,734	1,444	7,652
1993	21,031	12,973	11,443	2,583	8,861	1,530	8,058

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Table 15.1 Household Population 15 Years Old and Over by Employment Status and Area: 1987-1993 (continued)
(Thousands)

Year	Household population	Total in the labor force	In the labor force				Not in the labor force
			Total (fully and partially)	Employed		Unemployed	
				In agricultural industries	In nonagricultural industries		
Rural							
1987	20,970	14,247	13,333	8,859	4,474	914	6,723
1988	21,610	14,631	13,766	8,885	4,880	865	6,979
1989	22,128	14,799	13,851	8,810	5,041	948	7,330
1990	22,729	15,185	14,273	9,157	5,115	912	7,543
1991	19,308	12,913	12,116	7,980	4,137	797	6,396
1992	19,921	13,487	12,669	8,358	4,314	818	6,433
1993	20,422	13,849	13,000	8,611	4,389	849	6,573

Source: National Statistics Office, Income and Employment Statistics Division.

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Table 15.1a Household Population 15 Years Old and Over by Employment Status, Sex, and Industry: October 1987-October 1993 (Thousands)

Employment status/sex/industry	1987	1988	1989	1990	1991	1992	1993
Total 15 years old and over	34,840	35,865	36,916	37,999	39,114	40,265	41,453
Male	17,308	17,775	18,252	18,894	19,318	19,921	20,598
Female	17,532	18,090	18,665	19,105	19,796	20,344	20,855
In the labor force	22,880	23,451	23,858	24,525	25,246	26,180	26,822
Male	14,417	14,785	15,023	15,446	15,932	16,450	16,852
Female	8,464	8,666	8,835	9,078	9,314	9,729	9,970
Employed	20,795	21,497	21,849	22,532	22,979	23,917	24,443
Male	13,254	13,654	13,922	14,347	14,642	15,147	15,468
Female	7,542	7,843	7,927	8,185	8,337	8,770	8,975
In Agriculture	9,940	9,920	9,852	10,185	10,403	10,869	11,194
Male	7,473	7,413	7,401	7,620	7,896	8,086	8,263
Female	2,467	2,507	2,451	2,565	2,506	2,784	2,931
In Nonagriculture	10,855	11,577	11,998	12,347	12,577	13,047	13,250
Male	5,780	6,242	6,522	6,728	6,745	7,060	7,206
Female	5,075	5,337	5,475	5,620	5,831	5,987	6,044
Unemployed	2,085	1,954	2,009	1,993	2,267	2,263	2,379
Male	1,163	1,131	1,101	1,099	1,290	1,303	1,384
Female	922	823	908	893	977	959	995
Not in the labor force	11,960	12,413	13,058	13,474	13,868	14,085	14,631
Male	2,891	2,990	3,228	3,447	3,386	3,470	3,745
Female	9,068	9,423	9,829	10,027	10,482	10,615	10,886

Note: Details may not add up to totals due to rounding.
Source: National Statistics Office, Income and Employment Statistics Division.

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Figure 15.1 Household Population 15 Years Old and Over By Employment Status: 1987-1993

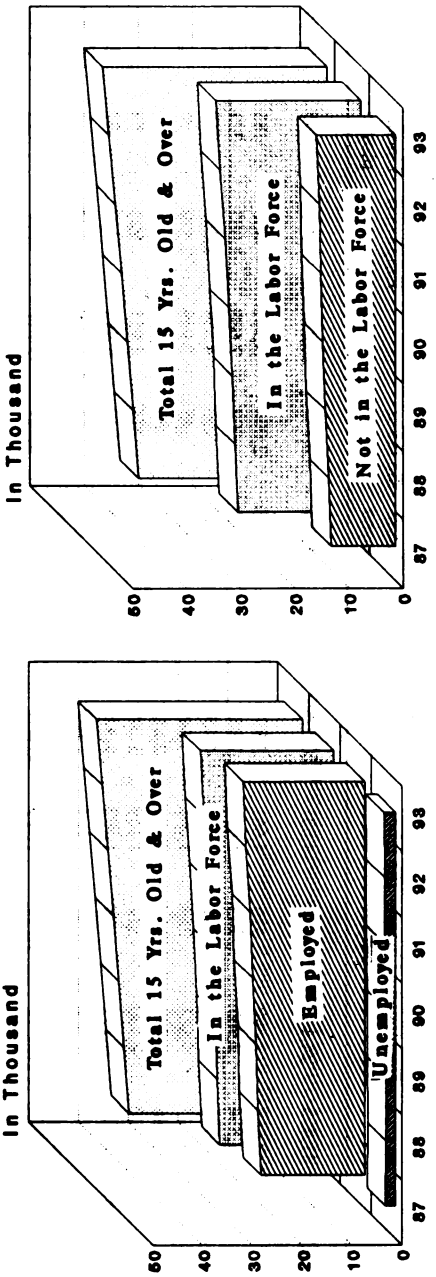

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Table 15.1b Household Population 15 Years Old and Over by Employment Status, Age Group and Sex, and Area: October 1993
(Thousands)

Age group and area	Both sexes				Male				Female			
	Total	In the labor force		Not in the labor force	Total	In the labor force		Not in the labor force	Total	In the labor force		Not in the labor force
		Employed	Unemployed			Employed	Unemployed			Employed	Unemployed	
Philippines	41,453	24,443	2,379	14,631	20,598	15,468	1,384	3,745	20,855	8,975	995	10,886
15 to 19	7,467	2,390	416	4,661	3,887	1,558	235	2,094	3,581	832	181	2,568
20 to 24	5,554	2,967	703	1,884	2,865	1,882	381	602	2,688	1,085	321	1,281
25 to 34	8,991	5,987	629	2,375	4,437	3,918	368	150	4,554	2,069	260	2,225
35 to 44	7,597	5,582	253	1,761	3,649	3,444	160	45	3,949	2,139	94	1,716
45 to 54	5,286	3,932	159	1,195	2,612	2,425	106	81	2,674	1,507	53	1,114
55 to 64	3,730	2,430	141	1,159	1,819	1,506	88	224	1,911	924	53	935
65 years and over	2,819	1,149	78	1,592	1,325	732	46	548	1,494	417	32	1,045
Age not reported	9	6	-	3	4	3	-	1	5	3	-	2
Urban	21,031	11,443	1,530	8,058	10,206	6,977	939	2,290	10,825	4,467	590	5,768
15 to 19	3,773	912	243	2,618	1,886	523	139	1,223	1,887	389	104	1,394
20 to 24	3,022	1,475	474	1,072	1,510	853	266	391	1,512	622	209	681
25 to 34	4,695	3,040	430	1,225	2,276	1,917	265	95	2,419	1,123	165	1,131
35 to 44	3,862	2,750	169	944	1,826	1,681	117	29	2,036	1,069	52	916
45 to 54	2,635	1,855	108	672	1,286	1,149	79	58	1,349	706	29	614
55 to 64	1,768	1,016	76	676	835	616	54	165	933	401	21	512
65 years and over	1,271	392	30	849	586	237	20	330	685	155	10	520
Age not reported	5	4	-	1	2	2	-	-	3	2	-	1

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Table 15.1b Household Population 15 Years Old and Over by Employment Status, Age Group and Sex, and Area: October 1993 (concluded)
(Thousands)

Age group and area	Both sexes				Male				Female			
	Total	In the labor force		Not in the labor force	Total	In the labor force		Not in the labor force	Total	In the labor force		Not in the labor force
		Employed	Unemployed			Employed	Unemployed			Employed	Unemployed	
Rural	20,422	3,000	849	6,573	10,391	8,492	444	1,455	10,030	4,508	405	5,118
15 to 19	3,695	1,478	173	2,044	2,001	1,034	96	870	1,694	444	77	1,173
20 to 24	2,532	1,492	228	811	1,356	1,029	115	211	1,176	464	113	600
25 to 34	4,295	2,947	199	1,150	2,161	2,001	104	56	2,135	946	95	1,094
35 to 44	3,735	2,833	85	817	1,822	1,763	42	17	1,913	1,070	42	800
45 to 54	2,651	2,077	51	523	1,327	1,277	27	23	1,324	800	24	500
55 to 64	1,962	1,414	65	483	984	891	34	59	978	523	31	424
65 years and over	1,548	757	48	743	740	496	26	218	809	262	22	525
Age not reported	4	2	-	2	2	1	-	1	2	1	-	2

Note: Details may not add up to totals due to rounding.

Source: National Statistics Office, Income and Employment Statistics Division.

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Table 15.1c Household Population 15 Years Old and Over by Employment Status, Sex, Industry and Region: October 1993 (Thousands)

Employment status/sex/industry	Total	NCR	CAR	Ilocos	Cagayan Valley	Central Luzon	Southern Tagalog	Bicol
Total 15 years old and over	41,453	5,781	773	2,358	1,641	4,222	5,546	2,800
Male	20,598	2,744	392	1,185	829	2,128	2,733	1,397
Female	20,855	3,037	381	1,173	812	2,094	2,813	1,402
In the labor force	26,822	3,442	529	1,471	1,185	2,510	3,603	1,918
Male	16,852	2,048	314	969	721	1,698	2,228	1,186
Female	9,970	1,395	215	502	464	812	1,375	732
Employed	24,443	2,888	501	1,340	1,138	2,202	3,296	1,817
Male	15,468	1,695	299	885	699	1,496	2,053	1,132
Female	8,975	1,193	202	455	439	706	1,243	685
In Agriculture	11,194	39	329	709	778	773	1,201	1,014
Male	8,263	33	199	537	510	672	929	739
Female	2,931	6	129	173	268	101	271	275
In Nonagriculture	13,250	2,848	173	631	362	1,427	2,097	802
Male	7,206	1,661	99	349	190	824	1,122	392
Female	6,044	1,187	73	283	172	606	972	410
Unemployed	2,379	554	28	131	47	308	307	101
Male	1,384	353	15	84	22	202	175	54
Female	995	202	13	47	25	106	132	47

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Table 15.1c Household Population 15 Years Old and Over by Employment Status, Sex, Industry and Region: October 1993 (continued)
(Thousands)

Employment status/sex/industry	Total	NCR	CAR	Ilocos	Cagayan Valley	Central Luzon	Southern Tagalog	Bicol
Not in the labor force	14,631	2,339	244	887	456	1,712	1,943	882
Male	3,745	697	79	216	108	430	506	211
Female	10,886	1,643	165	670	348	1,282	1,438	670

Employment status/ sex industry	Western Visayas	Central Visayas	Eastern Visayas	Western Mindanao	Northern Mindanao	Southern Mindanao	Central Mindanao	ARMM
Total 15 years old and over	3,684	3,103	2,171	1,636	2,432	2,908	1,283	1,113
Male	1,840	1,531	1,113	810	1,228	1,481	634	551
Female	1,845	1,572	1,059	827	1,204	1,427	649	562
In the labor force	2,415	2,086	1,461	1,018	1,685	2,012	846	640
Male	1,484	1,262	939	685	1,046	1,268	530	473
Female	932	825	522	332	639	744	316	165
Employed	2,230	1,907	1,377	951	1,545	1,838	792	620
Male	1,375	1,170	898	649	973	1,172	505	467
Female	856	737	480	301	572	666	287	152
In Agriculture	1,233	889	866	534	906	1,000	477	445
Male	877	604	635	415	633	761	348	370
Female	357	286	232	118	274	239	129	75

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Table 15.1c Household Population 15 Years Old and Over by Employment Status, Sex, Industry and Region: October 1993 (concluded)
(Thousands)

Employment status/sex/industry	Western Visayas	Central Visayas	Eastern Visayas	Western Mindanao	Northern Mindanao	Southern Mindanao	Central Mindanao	ARMM
In Nonagriculture	997	1,019	510	418	637	841	316	174
Male	498	568	263	234	340	411	159	97
Female	499	450	249	182	299	427	157	77
Unemployed	185	179	84	67	140	174	54	20
Male	109	92	41	36	73	96	25	6
Female	76	88	42	31	67	78	29	13
Not in the labor force	1,269	1,016	710	618	747	896	437	473
Male	356	269	174	124	182	213	104	77
Female	914	747	537	494	565	683	334	396

Note: Details may not add up to totals due to rounding.

Source: National Statistics Office, Income and Employment Statistics Division.

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Table 15.2 Labor Force Participation Rates by Age Group and Sex: October 1987-1993

Age group	1987	1988	1989	1990	1991	1992	1993
Both sexes							
15 years and over	65.7	65.4	64.6	64.5	64.5	65.0	64.7
15 - 24 years	52.3	51.4	49.4	50.0	49.9	50.4	49.7
25 - 34 years	74.1	73.5	73.0	73.2	72.9	73.1	73.6
35 - 44 years	77.8	78.6	77.2	76.6	77.4	77.4	76.8
45 - 54 years	77.8	78.2	77.6	77,8	77.4	77.8	77.4
55 - 64 years	70.2	69.6	69.2	69.8	68.4	70.0	68.9
65 years and over	44.8	42.2	43.5	42.6	42.5	43.6	43.5
Not Reported	33.3	21.4	50.0	25.0	55.6	-	66.7
Male							
15 years and over	83.3	83.2	82.3	81.2	82.5	82.6	81.8
15 - 24 years	63.6	63.8	60.5	60.4	61.1	60.8	60.1
25 - 34 years	97.5	97.4	97.2	96.5	97.1	97.2	96.6
35 - 44 years	99.2	98.9	98.7	98.6	98.7	98.9	98.8
45 - 54 years	98.6	97.7	97.4	97.4	97.2	97.3	96.9
55 - 64 years	90.2	89.8	88.8	89.3	88.2	88.1	87.6
65 years and over	62.3	57.8	59.0	59.3	58.8	61.8	58.7
Not Reported	66.7	20.0	-	100.0	100.0	-	75.0
Female							
15 years and over	48.3	47.9	47.3	47.5	47.0	47.8	47.8
15 - 24 years	40.3	38.3	37.8	38.8	38.3	39.5	38.6
25 - 34 years	51.6	50.9	50.5	51.0	49.9	50.3	51.1
35 - 44 years	57.3	58.9	56.8	56.3	56.7	56.6	56.5
45 - 54 years	58.7	60.1	58.2	58.4	58.4	59.2	58.3
55 - 64 years	51.0	50.3	50.7	51.2	48.9	51.7	51.1
65 years and over	28.8	28.3	29.4	27.2	28.6	28.3	30.1
Not reported	20.0	33.3	100.0	33.3	33.3	-	60.0

Source: National Statistics Office, Income and Employment Statistics Division.

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Table 15.2a Labor Force Participation Rates by Age Group and Area: October 1987-1993

Age group	1987	1988	1989	1990	1991	1992	1993
Urban							
15 years and over	62.2	61.9	61.3	61.2	62.3	62.4	61.7
15 - 24 years	46.8	46.5	44.8	44.6	47.1	47.1	45.7
25 - 34 years	76.1	75.4	74.4	74.7	74.0	73.8	73.9
35 - 44 years	77.6	77.7	76.5	76.4	76.2	76.3	75.6
45 - 54 years	74.8	73.3	74.8	74.8	75.0	75.1	74.5
55 - 64 years	61.6	60.4	59.3	61.7	62.0	63.6	61.8
65 years and over	32.5	29.8	29.7	29.8	34.0	34.1	33.2
Not Reported	50.0	33.3	-	100.0	60.0	-	80.0
Rural							
15 years and over	67.9	67.7	66.9	66.8	66.9	67.7	67.8
15 - 24 years	56.3	55.0	52.8	53.9	53.1	54.0	54.1
25 - 34 years	72.8	72.1	72.0	72.2	71.6	72.2	73.2
35 - 44 years	78.0	79.2	77.7	76.7	78.5	78.4	78.1
45 - 54 years	79.6	81.0	79.3	79.7	79.7	80.4	80.3
55 - 64 years	75.5	74.7	75.1	74.5	74.1	75.8	75.4
65 years and over	51.6	49.0	50.7	49.7	50.0	51.8	52.0
Not Reported	-	-	50.0	33.3	50.0	-	50.0

Source: National Statistics Office, Income and Employment Statistics Division.

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Table 15.2b Labor Force Participation, Employment, and Unemployment Rates by Region: October 1992 and 1993

Region	1993				1992			
	Total 15 years old and over (000)	LFPR	Employment rate	Unemployment rate	Total 15 years old and over (000)	LFPR	Employment rate	Unemployment rate
Philippines	41,453	64.7	91.1	8.9	40,265	65.0	91.4	8.6
National Capital Region (NCR)	5,781	59.5	83.9	16.1	5,609	61.5	84.3	15.7
Cordillera Administrative Region (CAR)	773	68.4	94.7	5.3	753	69.6	95.0	5.0
Autonomous Region for Muslim Mindanao (ARMM)	1,113	57.4	96.9	3.1	1,083	57.5	98.2	1.9
I. Ilocos	2,358	62.4	91.1	8.9	2,304	61.6	93.1	6.9
II. Cagayan Valley	1,641	72.2	96.0	4.0	1,592	70.3	94.2	5.8
III. Central Luzon	4,222	59.5	87.7	12.3	4,097	61.5	87.9	12.1
IV. Southern Tagalog	5,546	65.0	91.5	8.5	5,363	64.5	91.6	8.4
V. Bicol	2,800	68.5	94.7	5.3	2,718	69.1	94.4	5.6
VI. Western Visayas	3,684	65.6	92.3	7.7	3,590	66.1	92.0	8.0
VII. Central Visayas	3,103	67.3	91.4	8.6	3,025	65.6	92.1	7.9
VIII. Eastern Visayas	2,171	67.3	94.2	5.7	2,121	67.3	93.3	6.7
IX. Western Mindanao	1,636	62.2	93.4	6.6	1,587	61.8	94.2	5.8
X. Northern Mindanao	2,432	69.3	91.7	8.3	2,357	68.4	94.1	5.9
XI. Southern Mindanao	2,908	69.2	91.3	8.6	2,822	68.3	90.5	9.5
XII. Central Mindanao	1,283	65.9	93.6	6.4	1,244	71.4	95.2	4.8

Source: National Statistics Office, Income and Employment Statistics Division.

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Table 15.3 Number of Employed Persons by Sex and Area: 1976-1993 (Thousands)

Year	Philippines			Urban			Rural		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
1976	14,238	9,630	4,608	4,548	2,794	1,754	9,690	6,836	2,853
1977	14,334	9,890	4,444	4,595	2,853	1,742	9,739	7,037	2,702
1978	16,101	10,464	5,637	5,081	3,053	2,028	11,020	7,411	3,609
1979	16,544	-	-	-	-	-	-	-	-
1980	16,434	10,827	5,606	4,820	2,889	1,930	11,614	7,938	3,676
1981	17,452	11,249	6,203	5,112	3,103	2,100	12,340	8,236	4,103
1982	17,371	11,270	6,101	5,160	2,981	2,179	12,211	8,289	3,922
1983	19,212	11,926	7,286	5,502	3,127	2,375	13,710	8,799	4,910
1984	19,632	12,319	7,313	6,879	4,006	2,873	12,753	8,313	4,440
1985	19,801	12,519	7,282	6,960	4,088	2,871	12,841	8,431	4,411
1986	20,595	12,905	7,690	7,115	4,143	2,971	13,480	8,761	4,719
1987	20,795	13,254	7,542	7,463	4,414	3,048	13,333	8,839	4,494
1988	21,497	13,654	7,843	7,732	4,561	3,171	13,766	9,093	4,673
1989	21,849	13,922	7,927	7,998	4,746	3,252	13,851	9,176	4,675
1990	22,532	14,347	8,185	8,258	4,878	3,381	14,273	9,470	4,804
1991	22,979	14,642	8,337	10,864	6,548	4,316	12,116	8,094	4,022
1992	23,917	15,147	8,770	11,248	6,810	4,438	12,669	8,337	4,332
1993	24,443	15,468	8,975	11,443	6,977	4,467	13,000	8,492	4,508

Note: Details may not add up to totals due to rounding.

Source: National Statistics Office, Income and Employment Statistics Division.

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Table 15.3a Employed Persons by Major Industry Group: October 1976-1993
(Thousands)

Year	Total	Agriculture, fishery and forestry	Mining and quarrying	Manufacturing	Electricity, gas and water	Construction	Wholesale and retail trade	Transportation, storage and communication	Financing, insurance, real estate business services	Community, social and personal services	Industry not adequately defined
1976	15,427	8,126	56	1,680	46	491	1,864	550	1,501	1,069	44
1977	14,334	7,474	52	1,515	42	484	1,355	681	338	2,298	96
1978	16,101	8,403	61	1,743	50	516	1,626	696	355	2,620	30
1979	a	a	a	a	a	a	a	a	a	a	a
1980	16,434	8,453	94	1,814	58	588	1,660	732	336	2,693	6
1981	17,452	8,928	80	1,807	66	592	1,956	734	324	2,960	4
1982	17,371	8,919	75	1,741	53	604	1,916	758	383	2,922	-
1983	19,212	9,880	102	1,887	78	697	2,197	831	356	3,184	-
1984	19,632	9,740	138	1,931	81	759	2,437	874	368	3,304	-
1985	19,801	9,698	128	1,922	73	689	2,611	931	342	3,408	-
1986	20,595	10,289	150	1,905	62	629	2,814	841	390	3,516	-
1987	20,795	9,940	146	2,059	81	759	2,857	946	386	3,621	-
1988	21,497	9,920	157	2,238	95	858	2,972	1,049	379	3,827	2
1989	21,849	9,852	154	2,298	83	911	3,074	1,095	398	3,972	13
1990	22,532	10,185	133	2,188	91	974	3,145	1,137	444	4,220	15
1991	22,979	10,403	150	2,391	99	1,046	3,172	1,143	451	4,116	9
1992	23,917	10,869	143	2,546	92	1,035	3,283	1,221	452	4,254	21
1993	24,443	11,194	130	2,455	106	1,102	3,415	1,359	496	4,174	13

a No breakdown by industry.

Note: Details may not add up to totals due to rounding.

Source: National Statistics Office, Income and Employment Statistics Division.

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Table 15.3b Employed Persons by Major Occupation Group: 1987-1993 (Thousands)

Year	Total	Professional, technical and related workers	Administrative, executive and related workers	Clerical workers	Sales workers	Service workers	Agricultural, animal husbandry and forestry worker	Production and related workers, transport equipment operators and laborers	Occupation not adequately defined
1976	15,427	862	142	576	1,623	1,305	8,069	2,811	38
1977	14,334	888	106	650	1,372	1,094	7,429	2,747	48
1978	16,101	990	154	710	1,624	1,228	8,345	3,017	31
1979	a	a	a	a	a	a	a	a	a
1980	16,434	1,049	162	747	1,676	1,243	8,391	3,161	5
1981	17,452	1,078	185	769	1,948	1,331	8,862	3,275	5
1982	17,371	1,094	193	822	1,911	1,317	8,879	3,149	5
1983	19,212	1,139	176	871	2,171	1,505	9,805	3,535	11
1984	19,632	1,175	197	854	2,397	1,609	9,627	3,772	-
1985	19,801	1,179	187	831	2,558	1,643	9,580	3,817	5
1986	20,595	1,144	182	845	2,756	1,615	10,179	3,873	1
1987	20,795	1,167	181	896	2,757	1,783	9,858	4,152	2
1988	21,497	1,199	171	899	2,867	1,944	9,798	4,619	1
1989	21,849	1,301	207	943	2,999	1,943	9,720	4,691	46
1990	22,532	1,401	264	987	3,025	2,084	10,037	4,634	99
1991	22,979	1,344	277	944	3,109	2,099	10,274	4,903	28
1992	23,917	1,392	284	979	3,195	2,210	10,745	5,067	44
1993	24,443	1,398	326	1,052	3,277	2,119	11,106	5,128	38

Note: Details may not add up to totals due to rounding.

Source: National Statistics Office, Income and Empployment Statistics Division.

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Table 15.3c Employed Persons by Class of Worker and Sex: October 1987-1993 (Thousands)

Sex and year	Grand total	Total	Wage and salary workers: Worked for private household/ establishment/family	Wage and salary workers: Worked for government/ government corporation	Own account workers (self-employed workers and employers)	Unpaid family workers	Not reported
Both sexes							
1987	20,795	9,166	7,471	1,695	8,157	3,473	-
1988	21,497	9,843	8,093	1,750	8,260	3,395	-
1989	21,849	9,876	7,989	1,887	8,665	3,307	-
1990	22,532	10,298	8,380	1,918	8,625	3,608	-
1991	22,979	10,440	8,594	1,846	9,218	3,321	-
1992	23,917	10,605	8,680	1,925	9,671	3,642	-
1993	24,443	10,880	9,004	1,876	9,819	3,745	-
Male							
1987	13,254	5,814	4,888	926	5,788	1,652	-
1988	13,654	6,317	5,345	972	5,752	1,585	-
1989	13,922	6,344	5,305	1,039	6,087	1,491	-
1990	14,347	6,556	5,514	1,042	6,078	1,713	-
1991	14,642	6,656	5,652	1,004	6,419	1,567	-
1992	15,147	6,735	5,704	1,031	6,728	1,683	-
1993	15,468	6,922	5,959	963	6,856	1,692	-

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Table 15.3c Employed Persons by Class of Worker and Sex: October 1987-1993 (concluded)
(Thousands)

Sex and year	Grand total	Total	Wage and salary workers		Own account workers (self-employed workers and employers)	Unpaid family workers	Not reported
			Worked for private household/ establishment/family	Worked for government/ government corporation			
Female							
1987	7,542	3,353	2,583	770	2,368	1,821	-
1988	7,843	3,526	2,748	778	2,507	1,810	-
1989	7,927	3,534	2,685	849	2,577	1,816	-
1990	8,185	3,742	2,867	875	2,548	1,895	-
1991	8,337	3,785	2,943	842	2,799	1,754	-
1992	8,770	3,869	2,976	893	2,943	1,959	-
1993	8,975	3,958	3,045	913	2,964	2,053	-

Note: Details may not add up to totals due to rounding.

Source: National Statistics Office, Income and Employment Statistics Division.

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Table 15.3d Number of Employed Persons by Highest Grade Completed and Major Occupation Group: October 1992 and 1993

Major occupation	Total	No grade completed	Elementary		High school		College		Not reported
			1st to 5th grade	Grad-uate	1st to 3rd year	Grad-uate	Under-graduate	Grad-uate	
1992									
Philippines	23,917	914	4,993	5,500	3,046	4,550	2,269	2,609	38
Professional, technical and related workers	1,392	2	15	20	16	59	138	1,136	6
Administrative, executive and managerial workers	284	-	11	20	15	39	44	152	2
Clerical and related workers	979	2	17	28	37	121	266	496	12
Sales workers	3,195	46	449	716	390	813	431	345	6
Service workers	2,210	38	301	503	345	603	298	115	6
Agricultural, animal husbandry and forestry workers; fishermen and hunters	10,745	768	3,550	3,066	1,373	1,354	465	168	2
Production and related workers, transport equipment operators and laborers	5,067	59	648	1,141	866	1,550	614	184	4
Occupation not adequately defined	44	-	2	4	3	10	12	11	1

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Table 15.3d Number of Employed Persons by Highest Grade Completed and Major Occupation Group: October 1992 and 1993 (concluded)

Major occupation	Total	No grade completed	Elementary		High school		College		Not reported
			1st to 5th grade	Grad-uate	1st to 3rd year	Grad-uate	Under-graduate	Grad-uate	
1993									
Philippines	24,443	842	5,220	5,640	3,180	4,636	2,217	2,672	36
Professional, technical and related workers	1,398	3	19	22	23	74	123	1,126	8
Administrative, executive and managerial workers	326	1	15	27	21	42	62	156	1
Clerical and related workers	1,052	1	16	34	39	136	276	543	7
Sales workers	3,277	58	450	731	423	800	457	352	6
Service workers	2,119	32	278	456	314	625	285	127	2
Agricultural, animal husbandry and forestry workers, fishermen and hunters	11,106	686	3,770	3,169	1,501	1,421	403	151	4
Production and related workers, transport equipment operators and laborers	5,128	61	668	1,199	855	1,530	603	204	7
Occupation not adequately defined	38	1	3	3	4	7	8	12	-

Note: Details may not add up to totals due to rounding.

Source: National Statistics Office, Income and Employment Statistics Division.

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Table 15.4 Processed Overseas Contract Workers and Emigrants: 1975-1994

CY	Total	Contract workers Landbased	Seabased	Emigrants
1975	50,527	12,501	23,534	14,492
1976	85,525	19,221	28,614	37,690
1977	109,826	36,676	33,699	39,451
1978	126,586	50,961	37,280	38,345
1979	177,787	92,519	44,818	40,450
1980	260,090	157,394	57,196	45,500
1981	315,110	210,936	55,307	48,867
1982	368,237	250,115	64,169	53,953
1983	476,688	380,263	53,944	42,481
1984	466,632	371,065	54,016	41,551
1985	434,469	337,754	51,446	45,269
1986	463,799	357,687	56,774	49,338
1987	553,204	425,881	70,973	56,350
1988	535,830	381,892	95,872	58,066
1989	578,687	407,974	115,010	55,703
1990	661,977	468,591	130,178	63,208
1991	701,762	554,476	147,286	-
1992	723,594	564,947	158,647	-
1993	738,958	572,096	166,862	-
1994[P]	682,774	522,227	160,547	-

Source: Philippine Overseas Employment Administration; Commission on Filipino Overseas.

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Table 15.4a Number of Registered Filipino Emigrants by Occupational Grouping: 1983-1993

Occupational grouping	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total	42,481	41,551	45,269	49,338	56,350	58,066	55,703	63,208	62,671	64,712	66,413
Professional, technical and related workers	3,928	3,791	3,869	4,147	4,899	7,529	6,700	7,693	7,534	7,184	7,033
Managerial, executive and administrative workers	270	263	309	369	420	578	444	410	449	533	804
Clerical workers	2,796	3,131	2,972	3,394	4,605	2,452	1,913	2,030	2,264	2,172	2,301
Sales workers	1,614	1,326	1,819	2,109	2,825	2,903	2,931	3,575	3,396	3,418	3,381
Service workers	1,414	1,075	1,037	1,038	874	936	997	1,299	1,933	1,723	1,672
Agricultural, animal husbandry, and forestry workers, fishermen and related workers [1]	1,787	1,475	1,483	1,389	1,105	1,207	1,049	1,457	1,401	1,164	1,378
Production process workers, transport equipment operators, laborers and related workers [2]	1,846	1,901	1,742	1,822	1,754	2,242	2,206	2,309	3,102	2,529	2,862
Members of armed forces	96	57	36	32	73	337	360	281	296	158	75
Others	28,730	28,535	32,002	35,038	39,795	39,882	39,103	44,154	42,296	45,291	46,907
Housewives	9,025	8,730	9,247	8,695	9,315	9,550	9,748	11,277	12,070	14,846	15,383
Retirees	1,327	1,022	1,103	1,399	1,691	1,390	1,677	1,828	2,081	1,919	2,176
Students	9,773	8,872	9,575	11,439	13,409	14,568	13,223	13,439	13,556	15,151	17,142
Minors	3,826	3,919	4,348	4,750	5,382	5,581	5,008	4,971	4,775	4,853	4,751

[1] Includes farmers, loggers and related workers.
[2] Includes miners, quarrymen and related workers, aircraft, communication and construction workers.

Source: Commission on Filipinos Overseas.

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Table 15.4b Processed Overseas Contract Workers by Major Occupational Category: 1982-1990

Occupational grouping	1982	1983	1984	1985	1986	1987	1988[a]	1989[a]	1990[a]
Total	314,284	434,207	425,081	389,200	414,461	496,854	477,764	522,984	598,769
Landbased workers	250,115	380,263	371,065	337,754	357,687	425,881	381,892	407,974	468,591
Professional, technical and related workers	15,010	39,814	51,403	57,617	60,753	74,348	-	-	-
Entertainers	13,425	13,117	13,998	18,342	26,816	37,888	-	-	-
Managerial, executive and administrative workers	1,462	1,870	1,222	1,202	1,317	1,675	-	-	-
Clerical workers	8,519	14,189	15,117	15,141	15,261	15,929	-	-	-
Sales workers	1,394	2,259	2,295	2,780	3,562	4,268	-	-	-
Service workers	43,248	58,151	77,564	91,381	117,127	144,542	-	-	-
Agricultural, animal husbandry, forestry workers and fishermen	1,158	1,641	1,578	1,217	1,557	2,690	-	-	-
Production process workers, transport equipment operators and laborers	165,899	249,222	207,888	150,074	131,294	144,541	-	-	-
Seabased workers	64,169	53,944	54,016	51,446	56,774	70,973	95,872	115,010	130,178
Licensed officers	15,284	13,587	14,213	13,974	15,325	18,095	-	-	-
Other officers	141	142	102	57	65	30	-	-	-
Apprentices	1,611	1,468	1,584	1,363	1,584	2,451	-	-	-
Senior ratings	26,418	22,108	22,641	21,473	23,240	29,825	-	-	-
Entry ratings	15,510	12,179	11,614	10,654	11,582	13,946	-	-	-
Others	5,205	4,329	3,862	3,925	4,978	6,626	-	-	-
Not specified	-	131	-	-	-	-	-	-	-

[a] No breakdown available.
Source: Philippine Overseas and Employment Administration.

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Table 15.4c Deployed Landbased Contract Workers by Area of Destination: 1985-1994

Area of destination	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994[P]
All countries	320,494	323,517	382,249	385,117	355,346	334,883	486,321	548,372	550,872	499,204
Africa	1,977	1,847	1,856	1,958	1,741	1,273	-	-	-	-
Asia	52,838	72,536	90,434	92,648	86,196	90,768	131,381	132,250	164,658	130,904
Europe	4,067	3,693	5,643	7,614	7,830	6,853	8,038	9,251	9,367	6,652
Middle East	253,867	236,434	272,038	267,035	241,081	218,110	300,442	337,994	300,934	234,790
Oceania	953	1,080	1,271	1,397	1,247	942	-	-	-	-
Americas	3,744	4,035	5,614	7,902	9,962	9,557	21,674	20,129	15,503	22,985
Trust Territories	3,048	3,892	5,393	6,563	7,289	7,380	-	-	-	-
Other Countries	-	-	-	-	-	-	24,786	48,748	59,608	103,873

Source: Philippine Overseas Employment Administration.

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Table 15.4d Overseas Contract Workers' Remittances : 1985-1994
(Million U.S. dollars)

CY	Total	Landbased	Seabased
1985	687.20	597.89	89.31
1986	680.44	571.75	108.69
1987	791.91	671.43	120.48
1988	858.81	683.31	173.50
1989	973.02	755.19	217.83
1990	1,181.07	893.40	287.67
1991	1,500.29	1,125.06	375.23
1992	2,202.38	1,757.36	445.02
1993	2,229.58	1,840.30	389.29
1994[p]	2,097.25	1,807.56	289.68

Source: Philippine Overseas Employment Administration.

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Table 15.5 Average Monthly Wage Rates of Selected Occupations in Nonagricultural Establishments Employing 5 and over Philippines: 1990-1993
(In Pesos)

Selected Occupation	1993 Philippines	1993 National Capital Region	1993 Regions Outside NCR	1992 Philippines	1992 National Capital Region	1992 Regions Outside NCR
Average	3,629	3,996	3,208	3,389	3,721	2,964
Professional Workers						
Nurses	3,657	3,766	3,405	3,390	3,629	2,960
Elementary and secondary education teachers	4,506	5,783	3,780	3,768	5,214	3,115
Clerical and related workers						
Bookkeepers/Accounting clerks	4,754	4,729	4,618	4,388	4,621	4,019
Messengers	4,148	4,203	3,245	3,943	3,942	3,250
Clerks except clerical supervisors	4,566	4,203	4,115	4,098	4,361	3,590
Sales Workers						
Salesmen/salesladies and shop assistants	3,243	4,841	2,497	3,121	3,784	2,482
Service Workers						
Waiters, bartenders and related workers	2,584	3,252	1,736	2,568	3,152	1,613
Janitors	3,195	3,196	3,124	3,043	3,085	2,814
Security Guards	3,379	2,472	3,073	3,200	3,421	2,843
Production and Related Works						
Miners and quarrymen	3,107	-	2,729	3,704	2,199	3,728
Weavers	3,354	3,331	3,491	3,198	3,439	3,114
Sugar processors and refiners	4,327	4,466	4,457	3,632	3,905	3,632
Bakers, pastry cooks, chocolate and confectionery workers	3,608	3,534	3,536	2,356	2,884	1,939

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Table 15.5 Average Monthly Wage Rates of Selected Occupations in Nonagricultural Establishments Employing 5 and over Philippines: 1990-1993 (continued)
(In Pesos)

Selected Occupation	Philippines	1993 National Capital Region	Regions Outside NCR	Philippines	1992 National Capital Region	Regions Outside NCR
Sewers and embroiders	3,686	3,901	3,397	3,484	3,630	3,373
Machine tool operators	3,852	4,143	3,992	4,040	4,423	4,238
Motor vehicle mechanics	3,773	3,929	3,406	3,639	3,908	3,238
Electricians and repairers	5,587	4,882	4,499	5,060	4,065	5,202
Plumbers and pipe fitters	3,551	3,272	3,847	3,431	3,302	3,455
Carpenters, joiners and parquetry workers	3,481	3,601	3,138	3,104	3,194	2,901
Dockers and freight handlers	3,348	3,444	3,274	3,069	2,937	3,113
Motor vehicle drivers	3,740	3,866	3,390	3,599	3,793	3,222
Laborers	3,418	3,599	3,265	3,234	3,550	2,914

Selected Occupation	Philippines	1991 National Capital Region	Regions Outside NCR	Philippines	1990 National Capital Region	Regions Outside NCR
Average	3,165	3,480	2,791	2,711	2,850	2,614
Professional Workers						
Nurses*	2,985	3,203	2,709	2,898	3,976	2,562
Elementary and secondary education teachers*	3,308	4,400	2,824	3,046	3,828	2,978

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Table 15.5 Average Monthly Wage Rates of Selected Occupations in Nonagricultural Establishments Employing 5 and over Philippines: 1990-1993 (continued)
(In Pesos)

Selected Occupation	1991 Philippines	1991 National Capital Region	1991 Regions Outside NCR	1990 Philippines	1990 National Capital Region	1990 Regions Outside NCR
Clerical and related workers						
Bookkeepers/Accounting clerks	3,941	4,181	3,605	3,505	3,815	3,255
Messengers	3,779	3,810	3,107	2,952	2,951	n.a.
Clerks except clerical supervisors	3,791	4,076	3,280	2,929	3,016	3,035
Sales Workers						
Salesmen/salesladies and shop assistants	2,797	3,314	2,385	2,429	2,976	2,216
Service Workers						
Waiters, bartenders and related workers	2,269	2,703	1,653	2,281	2,406	2,104
Janitors	2,879	2,910	2,197	2,187	2,191	n.a.
Security Guards	3,092	3,263	2,765	2,459	2,594	1,949
Production and Related Works						
Miners and quarrymen	3,238	2,342	3,243	3,035	1,709	3,042
Weavers	3,204	3,186	3,201	2,735	2,676	2,788
Sugar processors and refiners	3,421	3,773	3,416	2,759	2,950	2,551
Bakers, pastry cooks, chocolate and confectionery workers	2,204	2,542	1,879	2,601	2,709	1,881
Sewers and embroiders	3,297	3,466	2,969	2,632	2,781	3,235
Machine tool operators	3,999	4,545	3,578	3,037	3,092	2,242
Motor vehicle mechanics	3,620	3,855	3,297	2,778	2,919	2,529
Electricians and repairers	4,069	4,000	3,895	3,428	3,319	3,259

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Table 15.5 Average Monthly Wage Rates of Selected Occupations in Nonagricultural Establishments Employing 5 and over Philippines: 1990-1993 (concluded)
(In Pesos)

Selected Occupation	Philippines	1991 National Capital Region	Regions Outside NCR	Philippines	1990 National Capital Region	Regions Outside NCR
Plumbers and pipe fitters	3,239	3,232	3,163	2,870	2,863	2,957
Carpenters, joiners and parquetry workers	3,071	3,140	2,857	2,835	2,825	2,655
Dockers and freight handlers	2,928	2,850	2,987	2,329	2,524	2,078
Motor vehicle drivers	3,367	3,455	3,272	2,803	3,011	2,284
Laborers	3,067	3,397	2,746	2,604	2,677	2,534

* Private Sector.

Wage rate - the basic pay including cost of living allowances and other guaranteed or regularly paid allowances but exclude overtime payments, bonuses and gratuities, family allowances and other social security payments made by employers, as well as extra-gratia payments in kind, supplementary to normal wage rates.

Source: Department of Labor and Employment, Bureau of Labor and Employment Statistics.

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Table 15.6 Registration and Membership of Labor Unions and Collective Bargaining Agreements: 1988-1994

Indicator	1988	1989	1990	1991	1992	1993	1994[p]
A Number of existing labor unions	3,389	3,945	4,445	4,998	5,415	5,995	6,831
Membership (000)	2,129	2,900	2,959	3,005	3,029	3,074	3,151
Number of newly registered labor unions	404	567	575	537	427	598	488
Membership	57,816	56,561	51,407	48,946	40,129	49,399	41,868
B. Number of existing Collective Bargaining Agreements	3,644	4,098	4,982	4,409	4,541	4,966	4,635
Membership (000)	377	375	497	538	583	621	562
Number of newly filed and approved CBA's	1,434	1,874	2,481	1,457	950	1,084	748

Source: Bureau of Labor Relations.

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Table 15.7 Number of Strike Notices Filed and Actual Strikes : 1985-1994

Year	Strikes notices filed	Number of actual strikes
1985	1,175	371
1986	1,572	581
1987	1,715	436
1988	1,359	256
1989	1,518	197
1990	1,565	183
1991	1,345	182
1992	1,209	136
1993	1,146	122
1994[P]	1,002	89

Source: Department of Labor and Employment.

Table 15.7a Number of Actual Strikes Declared and Disposed, Man-days Lost and Workers Involved: 1989 - 1994

Year	Actual strikes declared	Disposed	Workers Involved ('000)	Man-days lost
1989	197	194	56.5	955
1990	183	190	69.6	1,345
1991	182	182	55.0	1,140
1992	136	138	48.0	724
1993	122	119	35	710
1994[P]	89	89	34	478

Source: Department of Labor and Employment.

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Chapter 16
income and Prices

This chapter presents data on family income and expenditures as gathered through periodic surveys. Data derived from Family Income and Expenditures Survey (FIES) provide information on levels of living and disparities in income among various groups of families. They also give a general idea of spending patterns of families belonging to different income groups. The 1991 FIES is the most recent collection of comprehensive data on the levels and distribution of income and expenditures among Filipino families.

Data on prices such as the consumer price index (CPI), wholesale price index (WPI), retail price index (RPI) and stock price index (SPI) are also presented and discussed in the last portion of this chapter.

16.1 Family Income and Expenditures Survey

The first survey conducted on family income and expenditures was in March 1957. Since then, the survey has been continuously undertaken. These surveys were the 1961, 1965, 1971, 1985, 1988 and 1991 Family Income and Expenditures Surveys (FIES), and the 1975 Family Expenditures Survey (FES) which was linked with the Integrated Census of the Population and its Economic Activities (ICPEA-Phase II) conducted during the same year.

Consistent with its main objectives, all of these surveys were geared to gather data on family income and living expenditures, and other related information affecting income and expenditure levels of families in the Philippines. These surveys were also undertaken to determine the pattern of income distribution and the degree of inequality among families, sources of income, levels of living and spending pattern. Meanwhile, the primary objective of the 1975 ICPEA was to measure productivity of the household and the income and employment generated by household activities.

The March 1957 surveys, which covered all income levels in the urban and rural areas of the country collected data on cash and noncash income received and expenditures incurred by families in 1956. Five years later, a survey of the same nature was conducted with 1961 as the reference period. As samples, this survey considered 3,541 and 3,436 families from urban and rural areas of the country, respectively.

In the 1965 FIES, a total of 4,747 families located in 37 cities and 489 municipalities were enumerated and interviewed. The 1971 FIES, on the other hand, had 11,659 samples, 4,199 of which were systematically selected from urban areas and 7,460 from the rural areas. Unlike the 1957 and 1966 surveys

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whose reference periods were the respective calendar years 1956 and 1965, the 1971 survey covered the period May 1970 to April 1971. However, estimates for food, beverages and tobacco expenditures were based on the previous week before the interview. For the first time since 1956, estimates of family savings and deficits were made.

Unlike the data gathered through the said surveys, the 1975 income-expenditure data were obtained from two separate activities. Family living expenditures were taken from the 1975 FIES, while family income was from Phase II of the 1975 ICPEA. The total number of households covered in FES, however, was only a portion of ICPEA. That is, out of 454,844 households covered in ICPEA, 15,832 were taken as sub-samples for FES. Similar to the 1971 survey, reference period considered by FES on food, beverages and tobacco expenditures was also the calendar week before the visit of the census field workers.

For the 1985 FIES, a total of 17,000 sample households were interviewed, which was considered sufficient to provide reliable estimates of income and expenditures. The survey was conducted in two separate operations using the same questionnaire. The first visit was in July 1985 with the first six months of the year as the reference period, and the second visit in January 1986 with July-December 1985 as reference period. For purposes of estimating annual data, the results of the first visit survey were combined with that of the second visit.

Starting in 1985, the FIES became a regular module of the Integrated Survey of Households (ISH) conducted every three years. Basically, the same questionnaire design, procedures and processing systems utilized in 1985 were adopted in the succeeding FIES.

The 1988 FIES was also a two-round sample survey, conducted nationwide in July 1988 and January 1989. The sample size was increased to 20,000 households. However, the 1988 estimates as presented in this chapter do not include the data for the province of Rizal. Fire gutted the accomplished questionnaires for the province after the second visit operation and due to cost and time constraints, re-interviews were not made. Moreover, the results of the 1988 FIES served as benchmark information in updating weights used in the estimation of the 1988-based consumer price index (CPI).

As in the 1985 and 1988 FIES, the 1991 FIES adopted the "shuttle type" of data collection wherein the sample households were interviewed in two separate operations. The scheme envisioned to improve the quality of data gathered since it minimized memory bias of respondents and at the same time captured the seasonality of income and expenditure patterns.

For the 1991 survey, the first visit operation was carried out nationwide in July 1991 and covered about 25,500 sample households. The second operation took place in January 1992.

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16.2 Family Income

A family is referred to as group of persons usually living together and composed of the head and other persons related to the head by blood, marriage or adoption. An individual living alone is also considered a separate family. Throughout the survey, the concept of "extended family" was followed.

A household includes nonrelatives of the head who live in the same dwelling unit and share the same food.

Family income refers to primary income and receipts from other sources received by all family members during the calendar year as participants in any economic activity or as recipients of transfers, pensions, grants and others.

Sources of primary income are salaries and wages, commissions, bonuses, tips, family and clothing allowances, transportation and representation allowances, honoraria and other forms of compensation, and income from other entrepreneurial activities such as net receipts of profits derived from the operation of family enterprise and the practice of a profession or trade.

Income relates to money received from all sources before tax and other deductions for retirement, social security, union dues, insurance premiums and all other contributions as reflected in the payroll. It also includes gifts of food and nonfood items received in kind in the form of support, assistance or relief. Food items only include those received and consumed by the family during the reference period. These may be from other households, charitable institutions, the government or from persons abroad, free of charge.

16.2.1 Income Distribution Trend

The structure of the country's income distribution underwent very slight changes within a span of 30 years (1961-1991). Data show that the bulk of the nation's wealth remains to be concentrated in the hands of the few families in the higher income groups.

Table below shows the percentage share of income by broad groups of income recipients from 1965 to 1991:

	Percent share of the total income					
Income recipient	1965	1971	1975	1985	1988	1991
Top 10 percent	40.1	37.1	38.8	36.4	35.8	37.8
Top 20 percent	55.5	54.0	53.3	52.1	51.8	53.9
Top 50 percent	82.7	82.4	79.5	79.7	79.7	81.1
Lowest 50 percent	17.3	17.6	20.5	20.3	20.3	18.9
Lowest 20 percent	3.5	3.6	5.5	5.2	5.2	4.7
Lowest 10 percent	1.1	1.2	2.1	2.0	2.0	1.8

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The FIES generally showed encouraging results during the 70s. Specifically, the share of income of the top 10 percent income recipients went down by 3.0 percentage points from 40.1 percent in 1965 to 37.1 percent in 1971. In 1975, it rose again by 1.7 percentage points but the income share of the lowest 50 percent reached its highest level at 20.5 percent.

The worsening economic situation in the 80s was reflected in the income distribution structure based from the 1985 and 1988 FIES results. In 1985, the 0.2 percentage points lost by the lowest 50 percent was absorbed by the upper half of income recipients. Although the share of the top 20 percent continued its downward trend in 1988, the share of the rest of income earners except for the top 10 percent remained the same.

It is apparent that nothing was achieved in reducing the wide income gaps among families in the country. Families in the top 10 percent increased their share by 2.0 percentage points from 1988 to 1991. Whereas, the income share to the total of the lowest 20 percent families decreased by half a percent.

A graphical presentation of income distribution is shown in Figure 16.1-Lorenz Curve of Income Distribution from 1985 to 1991. While the Lorenz Curve in 1988 gets closer to the line of perfect equality, which indicates an improvement in income distribution over time, Lorenz Curve traced in 1991 slightly thrust farther from the line. A Lorenz curve close to diagonal line signifies a more equal income distribution than a curve which is farther from that line.

16.2.2 Income Distribution

In 1991, total number of families in the country was recorded at 11.98 million with an aggregate income of P780.63 billion. Over the period of three years, total number of families and incomes grew at 4.37 percent and 22.40 percent annually, respectively.

The biggest proportion of families (18.62 percent) were on the P40,000 to P59,999 income bracket. Only 2.56 percent of families had income below P10,000 while 15.93 percent had income P100,000 and over. See Table 16.1.

Urban families, comprising a little less half (49.59 percent) of the total families, accounted for 68.14 percent of total incomes. Rural families accounting for more than one half (50.41 percent) of total families only shared 31.86 percent of the total income.

In the urban areas, families belonging to the highest income class P100,000 and over comprised the largest group, or 26.25 percent of total urban families. In the rural areas, it is the income group of P20,000 to P29,999 which composed the largest number or 24.88 percent of families. See Table 16.4.

Table 16.5 shows that among the regions, families in the National Capital Region (NCR) were more financially advantaged than families in other regions. Most of Metro Manila families (45.66 percent) belonged to the highest income groups of P100,000 and over. As for the rest of the regions in Luzon except for Bicol, majority of the families have incomes belonging to the P40,000 - P59,999

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income class. In the Visayas, families have income concentrated on the P20,000 - 29,999 income class.

16.2.3 Mean and Median Income

Mean family income in the country in 1991 was recorded at P65,186, an increase of 61.32 percent over the 1988 level of P40,408. Urban families reported a higher mean income of P89,571 which was more than twice the P41,199 received by average rural families.

Median income, which gives a better measure of average income because it is not affected by extreme values, was registered at P41,040. This means that the lower 50 percent of families had income of P41,040 and below while the other half had income above it. Higher income in urban families is again reflected in their median income of P59,270, which was almost twice the P30,330 recorded for rural families. Refer to Table 16.7 for more details.

16.2.4 Main Source of Income

Main source of income refers to the source from which most of the family's income is obtained. If there are two or more sources, the main source that would be considered is the source where the bulk of the income is derived. Sources of income are classified into three categories: wages and salaries from employment, net receipts from entrepreneurial activities, and other sources of income.

Wages and salaries from employment include all forms of compensation whether in cash or in kind received by family members who are either regular or occasional/seasonal workers in agricultural and non-agricultural industries.

Net receipts from entrepreneurial activities of family-operated activities refer to receipts derived from the operation of any economic activity, business or enterprise, engaged by any member of the family as operator or as self-employed. Also included in this category are receipts derived from the practice of a profession or trade.

Other sources of income category include the following: net share of crops, fruits and vegetables, and livestock and poultry from other households; cash receipts, gifts, and other forms of assistance such as relief goods from domestic sources and abroad; rentals from non-agricultural lands, building spaces and other properties; interests from deposits and loans; pensions and retirement pays, compensations and other social security benefits; imputed rental values of owner-occupied dwelling units; net receipts from family sustenance activities; dividends from investments, goods and services received as gifts; and other sources of income, not elsewhere classified.

In 1991, 44.07 percent of the total families obtained income mainly from wages and salaries, while some 38.94 percent derived income mainly from entrepreneurial activities. Only 17.00 percent derived income mainly from other sources. The same condition holds true for urban and rural areas where 54.20 percent and 34.10 percent, respectively, of the families got their income from wages and salaries. See Table 16.8 for more details.

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16.3 Family Expenditures

Family expenditures refer to the expenses or disbursements made by the family mainly for personal consumption during a calendar year. These include gifts, support, assistance or relief in goods and services received by the family from friends, relatives, and others., as well as value consumed from net share of crops, fruits and vegetables produced or livestock raised by other households, family sustenance and other entrepreneurial activities.

Excluded are all expenses in relation to farm or business operations, investment ventures, purchase of real property and other disbursements which do not involve personal consumption.

16.3.1 Family Expenditure Pattern in 1991

In 1991, total family expenditures reached P622.62 billion, an increase of 81.74 percent over the 1988 level of P342.58 billion. On the other hand, average family expenditures grew at a rate of 16.93 percent, from P32.52 billion in 1985 to P51.99 billion in 1988 (Table 16.11).

Expenditures on food, which represent the largest group in the family expenses, went down from a share of 50.7 percent to total expenditures in 1988 to 48.5 in 1991. Rent/rental value of occupied dwelling unit, the second largest group, likewise increased to 12.4 percent of the total expenditures in 1991 as compared to 11.7 percent in 1988. In the rural areas, however, the proportion increased from 6.8 percent to 7.1 percent while in the urban areas, it dropped from 15.6 percent to 14.9 percent. See Table 16.9a for details.

Area-wise, expenditures of urban families totalled P418.97 billion or 67.29 percent of the total expenditures while expenses of families in the rural areas summed up P203.64 billion or 32.71 percent. In terms of expenditure pattern, rural families spent more for food (55.72 percent) than the urban families (45.02 percent). On the other hand, urban families spent more than twice for rent/rental value of occupied dwelling units than their rural counterparts (14.93 percent for urban as against 7.10 percent for rural).

As to average family expenditure by major expenditure group, food remained to be the first in the list. In 1991, average family expenditure on food amounted to P25,227. This was followed by durable furniture and equipment average expenditure amounting to P7,184. Refer to Table 16.9.

Among the regions, NCR recorded the biggest share of total expenditures at 27.92 percent. It registered the highest percentage for rent/rental value of occupied dwelling unit (19.63 percent) but the lowest percentage for food expenditures (41.49 percent).

Southern Tagalog (Region IV) came next comprising 14.23 percent of the total expenditures while the lowest expense was posted by CAR at P9.98 billion or 1.60 percent. On the other hand, the highest expenditure for food was registered by the Autonomous Region for Muslim Mindanao (ARMM) with 56.92 percent of the total expenditures. See Table 16.10 for details.

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16.3.2 Regional Family Expenditures

From 1988 to 1991, total expenditures in all regions increased except in Central Mindanao where a decrease of P7 million was noted. This may be due to the inclusion/transfer of two of its provinces namely Lanao del Sur (excluding Marawi City) and Maguindanao (excluding Cotabato City) to ARMM. Meanwhile, NCR registered the highest increase in total expenditures from P86.64 billion in 1988 to P173.86 billion in 1991. Southern Tagalog followed with P41.18 billion total expenditures in 1988, then Central Luzon with P40.14 billion. Mean expenditures for these regions were P32.06 million and P38.66 million, respectively.

For more details in the country's total expenditures by region in 1985 and 1988, refer to Table 16.11.

16.4 Prices

Prices, as stated in monetary terms, link all kinds of economic activities in a system of free private enterprise. Hence, the analysis of price mechanism is essential for most economic problems.

Assuming that the value of money remains constant, prices of individual commodities are analyzed on the basis of demand and supply. Meanwhile, changes in price level, as directed by the changes in the value of money or purchasing power of the peso, are measured by price indices.

Price level changes are closely monitored in an economy because they are used to measure inflation. Moreover, they alter the income and wealth distributions and affect the levels of income, output and employment.

16.4.1 Price Indices

Statistics on prices play an important role not only in the study and analysis of economic activities but also in the formulation of economic policies. The movements of prices, for example, are used as bases for redirecting fiscal and monetary policies, trade and exchange rate policies, and others. Specifically, increasing price statistics are used to adjust contracts, wage rates, pensions, taxes and a variety of other transaction flows. As mentioned in the preceding discussion, these changes are indicated by price indices.

Price indices are measures designed to show the relative changes in prices of a single commodity or group of commodities in relation to prices of similar commodity or group of commodities in a designated base period and geographical area.

At present, the only available price statistics in the country include indices on consumer price, producer price, import and export prices, wholesale price, retail price and stock price. This section, however, presents and discusses only the following measures of price changes: consumer price index (CPI), retail price index (RPI), wholesale price index (WPI) and stock price index (SPI).

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The first three indices are produced by the National Statistics Office (NSO) while the last one is produced by the Central Bank of the Philippines (CBP). Although generated in two different institutions, computations of both are in accordance with the estimation procedures, methodologies and concepts recommended by the Inter-Agency Committee on Price Statistics (IACPS) as approved by the National Statistical Coordination Board (NSCB).

16.4.1.1 Terms and Concepts

Retail price - actual price at which retailers sell a commodity on the spot or at earliest delivery, usually in small quantities for consumption and not for resale. It is confined to transactions on cash basis in the free market and excludes blackmarket prices and prices of commodities that are on sale as in summer sales, anniversary sales, Christmas sales and others. Retail prices of commodities used in the construction of retail and consumer price indices are taken from retail stores and not from the buyers or consumers.

Wholesale price - actual "spot" transaction price imposed by wholesalers or distributors. It is the sum of the producer's price, wholesale trade margin, tax markups, and the distribution costs of the wholesaler.

With regard to imports, the wholesale price is the sum of CIF (cost in freight) price, custom duties, arrastre and wharfage fees, trade margins, cost of transporting the commodity from the port to the place of importer/wholesaler and distribution costs of the wholesaler. The wholesale price of export commodities is its FOB (freight on board) price which is the price received by the exporter.

Market basket - total number of goods and services in constant amounts and quantities which are included in the construction of the index.

Base year - identifies the base period with which the index relates. The index for the base year is 100.

Weights - values attached to a commodity or group of commodities depending on the magnitude of contribution of the commodity or group of commodities to the index number. Weights show the relative importance of each component of the index.

16.4.1.2 Index Calculation

In computing the index, the weighted average of price relatives, Laspeyre's formula, with fixed base and weights is basically used.

$$Index = \frac{\sum \frac{P_n}{P_0} (P_0 Q_0)}{\sum (P_0 Q_0)} x\ 100$$

Where:

P_n = *current price*

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P_0 = *base year price or base price*
$P_0 Q_0$ = *base year weight*

16.4.2 The Consumer Price Index

The consumer price index (CPI) provides a general measure of the changes in average retail prices of commodities bought by specific group of consumers in a given area and in a given period of time. It mainly measures the composite change in the retail prices of various commodities over time.

16.4.2.1 Historical Background of the NSO CPI Series

The Bureau of the Census and Statistics (BCS) was authorized by Commonwealth Act No. 591 to gather among others, information on prices. Upon its creation on January 1, 1941, the Bureau assumed the responsibility of undertaking the functions transferred to it by the Labor Statistics Division of the Department of Labor. One of these functions was the computation of the cost-of-living index.

In 1945, the office constructed the cost-of-living index for Manila with 1941 as base year. Its market basket contained 66 commodities representing goods and services commonly purchased by a family whose pattern of living was considered that of a minimum subsistence level. This series lasted for 18 years from 1945 to 1963.

The first revision of the cost-of-living index in Manila was made in 1964 with the average of prices from 1960 to 1962 as the base. The weights were based on the results of the 1961 Survey of Incomes and Expenditures. It was then known as the Consumer Price Index for Low Income Families in Manila (families with annual income of not more than P2,400). A total of 244 items was used in the construction of the index.

It was not the cost-of-living index because it did not measure the changes in the kinds and amounts of goods and services which this specific group of people bought, or the changes in their taste, income or manner of living or the total amount spent for living. The index was rather intended to measure the monthly average change in the retail prices of goods and services customarily purchased by the average-income families.

The base period 1960-1962 lasted for only a year because in 1965 the base year was changed to 1961.

More alterations were done in the CPI in 1970. The base year, for instance was shifted from 1961 to 1966, while the index itself became more than an index for low income families in Manila. The 1966-based CPI covered the low, middle and all-income groups in all provinces including Manila and suburbs and the high income group in Manila and suburbs alone. The market basket consisted of 249 items for low income, 368 for the middle income, 242 for high income and 479 for all-income groups.

The next rebasing was done in 1976 when the 1966-based CPI became less meaningful and less relevant to the existing conditions. Unlike the previous

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index series, the 1972-based CPI was constructed solely for all-income households in the Philippines, by province and by region including the National Capital Region (NCR). This time, the market basket contained 459 items. Years after the 1976 rebasing, the country had undergone various changes which diversely affected prices and family expenditures. Some of these were population growth, technical innovations and inflation.

One particular event which led to serious repercussions in the country's economy was the 1974 price-hike in petroleum products. After this event, another rebasing was deemed necessary. Thus in January 1982, the reference period of the index was shifted to a more recent base year, 1978. The series which covered all-income households was computed for the Philippines, by region and by province. A separate CPI was produced for the National Capital Region (NCR) or the Metro Manila Area. The market basket which contained a total of 407 items was determined by a committee made to study on the consumer goods and services available in the market and popular with the consumers. The weights were based on the items of expenditures obtained in the 1975 Family Income and Expenditures Survey (FIES). On the provincial level, the weights were also based on results of the 1975 FIES adjusted to 1978 prices.

Starting in 1992, the CPI was rebased from 1978 to 1988. The new series featured the use of 13 separate regional market baskets and a new set of weights at the provincial level. The individual regional baskets have taken into account the area and brand preferences for commmodities typically consumed by households. Likewise, the weights attached to these commodities have been updated to reflect the household expenditure patterns in 1988. Changes in these two components have resulted in differences between the inflation rates in the 1978 and 1988 CPI series.

In the process of gathering price data for the CPI computations, NSO was assisted by the Bureau of Agricultural Statistics (BAS). The BAS is responsible for collecting prices for agricultural items in areas covered by its representatives. The NSO on the other hand, collects prices for non-agricultural items all over the country. Moreover, the NSO does the price collections for all items in areas not covered by the BAS.

The Economic Research Department of the CBP used to compute all prices for NCR while NSO takes charge of the CPI for areas outside the NCR and for the Philippines. However, in accordance with the Letter of Instruction No. 1082 issued in November 1980, all computations for consumer, retail, wholesale and construction price indices in the Philippines including that of Metro Manila were transferred to NSO starting January 1981.

16.4.2.2 Characteristics of the Current CPI

The market basket and weights of the 1978 CPI series have been used for the past ten years. However, at present, some items of the market basket are no longer available in the market or may no longer be patronized by a majority of

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Filipino households. Moreover, the weights no longer reflect the current consumption patterns. Recognizing these weaknesses, and the need for a more current, more useful and relevant series that is reflective of the present conditions, the National Statistical Coordination Board (NSCB) approved the recommendation of the Technical Committee on Price Statistics (TCPS) as proposed by the National Statistics Office (NSO) the shifting of CPI base year from 1978 to 1988.

Inasmuch as the revision from base year 1978 to 1988 was anticipated, its requirements were incorporated in the 1988 Family Income and Expenditures Survey (FIES) and the 1985 Commodity and Outlet Survey (COS) of the NSO.

The 1988-based series has the following characteristics:

a. Base year: 1988

b. Geographic area covered: Philippines by region and by province; and a separate one for Metro Manila and areas outside Metro Manila (AOMM).

c. Income class: All-income households and bottom 30% released every quarter.

d. Market basket: The market basket was scientifically drawn from the 1985 COS. Unlike the 1978-based series which used a common basket for all regions, the present series uses 13 different market baskets, each containing goods and services commonly consumed by an average Filipino household in a specific region. Table 16.12 shows the number of items in the market basket in the 1988 series, by region. Market baskets for all income households were the combined baskets of the bottom 30% and upper 70% income groups.

e. Weights: The weights were derived from the results of the 1988 FIES.

16.4.2.3 Consumer Price Index for All-Income Households in the Philippines, Metro Manila and Areas Outside Metro Manila

The yearly nationwide CPI for all items exhibited an increasing trend from 1990 to October 1993. It posted the lowest annual increase of 8.95 percent in 1992 and the highest at 18.66 percent in 1991. In November 1993, the CPI was pegged at 184.2, up by 0.33 percent from the previous month and by 8.04 percent compared to the same period in 1992. See Table 16.15.

Table 16.16 shows that the direction of CPI in Metro Manila followed the same trend, although generally higher than the national level. It increased by 12.24 percent from 153.6 in 1991 to 172.4 in 1992. In November 1993, the CPI was marked at 198.3 which was 11.03 percent higher than its level in November 1992.

CPI for areas outside Metro Manila (AOMM) also exhibited an upward trend. From a 13.44 percent increase in 1990, it went up by 18.08 percent in 1991 and further rose by 7.85 percent in 1992. In November 1993, the CPI for AOMM was recorded at 179.6, up by 0.34 percent from the previous month and by 6.97 percent from November 1992.

In the Philippines, two commodity groups registered annual growths above 10.00 percent from November 1992 to November 1993. These are: housing and

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repairs (10.95 percent) and services (10.22 percent). The rest registered increases ranging from 6.43 percent (clothing) to 7.33 percent (fuel, light and water).

Meanwhile, for the same reference period in Metro Manila, increases in the services and housing and repairs groups were 17.78 and 13.23 percent, respectively. The rest had increases ranging from 6.83 percent (clothing) to 9.64 percent (fuel, light and water). Data for Price indices in Metro Manila are presented in Table 16.16.

In AOMM, housing and repairs registered the highest annual growth of 8.92 percent in November 1993. The rest went up ranging from 6.33 percent (clothing) to 7.27 percent (miscellaneous). See Table 16.17.

16.4.2.4 Price Index for Bottom 30% Income Households

A separate CPI for the bottom 30% income group was constructed and will be available in 1994. The series starts from 1988 to date. Like the CPI for all-income households, the base year is 1988 and covers the Philippines by region and by province and Metro Manila. The series also uses 13 different market baskets which were likewise drawn from the results of the 1985 COS. These contain goods and services commonly consumed by the households belonging to the bottom 30 percent income group in a specific region.

16.4.3 The Retail Price Index

Retail price index (RPI) is a measure of the changes in the retail price at which retailers dispose of their goods to consumers or end-users.

The RPI was developed by the Statistical Coordination Office (SCO) of the National Economic and Development Authority (NEDA), and was computed by the Economic Research Department of the Central Bank of the Philippines (DER-CBP) with 1972 as the base year. However, starting in January 1981, the task of computing was handed over to the NSO using 1978 as the base year.

The current RPI still uses 1978 as the base year and covers only the National Capital Region (NCR) or Metro Manila.

While the 1972-based series was computed using the geometric mean without any weighting pattern, the present series is constructed using the market basket weights based on the 1974 Input-Output tables of the NSO, estimated at 1978 prices. The weighted average of relatives method, basically the Laspeyre's formula, is used in the computation of the index.

The present market basket has a total of 182 commodities grouped according to the Philippine Standard Commodity Classification (PSCC).

Table 16.18 shows that from 1979 to 1983, the RPI has gradually increased by an average of 12.72 percent annually. In 1984, it almost doubled which may be due to the political instability that consequently led to the country's economic deterioration. After posting an 18.04 percent increase in 1985, it went up by an average of 8.40 percent from 1986 to 1992. As of September 1993, RPI was recorded at 661.9, up by 0.78 percent compared to its September 1992 level.

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The RPI of selected construction materials in Metro Manila from 1978 to 1991 followed a generally increasing trend, except in 1986 when it decreased by 3.20 percent. In 1984, it increased by almost three fourths (73.53 percent). From then on, it continued to rise at an average rate of 9.30 percent until 1992. As of October 1993, it was recorded at 710.2, an increase of 10.50 percent from the level in the same month last year. Refer to Table 16.19.

16.4.4 The General Wholesale Price Index

Wholesale price index (WPI) measures the monthly changes in the general price level of commodities (usually in large quantities) that flow into the wholesale trading system.

The 1978-based WPI series has a total of 376 commodities or items traded in the wholesale market. These items include producer's materials, consumer goods and capital goods which may either be raw materials, intermediate products or finished goods. Moreover, they may also be domestically produced (including exports) or imported for resale. Just like the RPI, these items are also grouped according to the Philippine Standard Commodity Classification (PSCC).

The weights of the current WPI were derived from the 1974 Input-Output tables at 1978 producer's price. The weighted average of relatives method, basically the Laspeyre's formula, is used in the construction of WPI.

The general WPI in Metro Manila rose steadily from 1979 to 1983 averaging 15.01 percent annually. Like the CPI and RPI, a significant growth was experienced in 1984 when it rose by 66.59 percent. After registering an 18.12 percent growth in 1985, it went down by 1.56 percent in 1986, the only decline noted in the series. In the succeeding years (1987-1992), the series posted an average annual growth of 10.22 percent. As of September 1993 the general WPI was recorded at 710.6,down by 0.49 percent from the previous month and by 2.47 percent from its September 1992 level. See Table 16.20.

Table 16.21 shows the construction material wholesale price index (CMWPI) in Metro Manila with 1985 as base year replacing the WPI of selected construction materials in Metro Manila (1978 = 100).

The series starts from 1990 to date. It covers 107 commodities grouped into 25 major categories. Like the other indices computed by NSO, Laspeyre's formula is used in the computation of the CMWPI. The weights were taken from the unpublished 1985 input-output table which was jointly constructed by the National Statistical Coordination Board and the National Statistics Office.

16.4.5 The Stock Price Index

The stock price index (SPI) is computed to measure the changes in, and to trace the movement of the average prices, value and volume of company shares of stock traded within the Manila and Makati Stock Exchanges. The classification scheme, by industrial economic activity, follows the 1977 Philippine Stand-

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ard Industrial Classification (PSIC) prepared by the National Economic and Development Authority (NEDA).

The present SPI uses 1985 as its base year. The computation of the SPI is done by determining the base weighted arithmetic average of price relatives which is a modified Laspeyre's formula with fixed base and weights. The relative price is derived from the current average price and the average price of the base period. In the absence of any transaction for a particular stock, the average price obtained during the previous trading day is carried over until there is a new transaction. The average price for the month is obtained by dividing the total value by the total volume.

The overall SPI in Manila and Makati has recorded annual increases during the period 1986 to 1989, 1991 and 1992. After registering a remarkable increase of 130.88 percent in 1987, it went down by 4.39 percent the following year and sustained its increasing rate until 1989. However, it slumped for the first time in the series when it posted a negative 12.33 percent rate in 1990. But this was reversed in 1991 and 1992 when SPI increased by 4.80 percent and 17.35 percent, respectively.

The positive growth in 1992 was brought about by the increases in the stock prices of the following sectors: transportation and communication, 76.23 percent; financing, 33.59 percent; non-metallic ore, 18.92 percent; manufacturing, 7.82 percent; and construction, 0.34 percent. On the other hand, services, metallic ore and wholesale and retail trade sectors posted decreases at 16.71 percent, 8.86 percent and 6.55 percent, respectively. See Table 16.22.

In 1993, the Manila and Makati Stock exchanges traded a combined volume of 636.62 billion shares worth P182.22 billion. The year's transactions posted an increase of 16.34 percent and 136.96 percent in volume and value, respectively, as compared with the previous year's level. Of the total, Manila Stock Exchange accounted for 342.85 billion shares (53.85 percent) valued at P86.62 billion. See Table 16.23.

Of the aggregate volume of 636.62 billion shares in 1992, oil sector generated the largest volume of 450.08 billion shares (70.70 percent of the total). Mining sector shared 170.15 billion (26.73 percent) while commercial and industrial sector had 16.39 billion shares (2.57 percent).

Of the total value of P182.22 billion transacted during the year, 88.46 percent (P161.19 billion) was accounted for by the commercial and industrial sector. Oil sector shared P11.42 billion (6.27 percent) while mining shared P9.61 billion (5.27 percent). See Table 16.23a.

16.5 Control and Stabilization of Prices

Upon the implementation of the Calamity Act of 1963, direct price controls were imposed in the country which gave the national government a limited authority to control prices during emergency situations such as floods, typhoons, earthquakes and others.

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Monopoly, hoarding, injurious speculation, manipulation and profiteering by fixing maximum prices on basic commodities are considered crimes against the national interest. Thus, in July 1971, Republic Act No. 6361 or the Price Control Law was enacted towards the prevention of these practices. When this law expired on June 30, 1979, the National Price Control Council (NPCC) was created with members from the government and private sectors.

Later, the Price Control Council was phased out to give way to a new Price Stabilization Council (PSC). This move, together with the expansion of the list of basic commodities covered by the Price Conrol Law and the extension of the Law itself, was provided by the NEDA Board Resolution No. 18.

In February 1980, the PSC was revived in the wake of increases in production cost. It was empowered to recommend to the President the following: fixing of price ceilings on essential items particularly those used by the low income groups; importation of commodities needed to stabilize prices and if required, ask the removal or reduction of tariffs and taxes on those items; and any subsidy to certain sectors to hasten production. Likewise, it is tasked to seek the aid of various departments and agencies concerned with the enforcement of price ceilings; order the immediate cancellation of the license of any person or entity violating the decree; and issue rules and regulations to carry out the provisions of the decree subject to the President's approval.

Strict price control was implemented by the government against hoarders and profiteers to preclude a further rise in prices in 1983. To keep the prices of prime commodities at reasonable levels, the PSC assisted the government by launching a vigorous campaign against these economic saboteurs.

However, by virtue of Executive Order No. 133, issued on July 1986, the PSC was abolished and its functions and powers were transferred to the Department of Trade and Industry (DTI). Regular price monitoring is now being conducted by the regional offices of the DTI.

Sources:

16.1-16.3.2	National Statistics Office, Household Surveys Section.
16.4-16.4.4	National Statistics Office, Prices Section.
16.4.5	Central Bank of the Philippines; Manila Stock Exchange; Makati Stock Exchange.
16.5	Department of Trade and Industry.

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Table 16.1 Mean and Median Income of Families, Urban and Rural: 1961, 1965, 1971, 1975, 1985, 1988 and 1991
(Pesos)

Year	Philippines	Urban			Rural
		Total	Manila and suburbs	Other Urban areas	
Mean Income					
1961	1,804	2,970	4,790	2,395	1,203
1965	2,541	4,405	6,590	3,463	1,755
1971	3,736	5,867	7,785	5,141	2,818
1975	6,698	8,922	11,274	7,564	5,712
1985	31,052	46,127	57,193	40,122	21,875
1988	40,408	60,330	79,314	49,642	28,284
1991	65,186	89,571	138,256	70,928	41,199
Median Income					
1961	1,105	1,799	3,004	1,559	900
1965	1,648	2,636	3,720	3,285	1,359
1971	2,454	3,972	5,202	3,650	1,954
1975	3,547	4,617	5,607	4,043	3,177
1985	20,480	31,243	39,655	-	16,437
1988	26,694	41,960	54,120	-	21,142
1991	41,040	59,270	93,414	-	30,330

Source: National Statistics Office. *1961, 1965, 1971, 1985 1988 and 1991 Family Income and Expenditure Survey; 1975 Integrated Census of the Population and Its Economic Activities, Phase II.*

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Table 16.2 Number of Families, Average Annual Income and Expenditures in the Philippines, by Region: 1985, 1988 and 1991

Region	No. of Families ('00)	Average Income	Average Expenditures	Savings
1985				
Philippines	98,473	31,052	26,865	4,187
Urban	37,260	46,127	39,134	6,993
Rural	61,213	21,875	19,397	2,478
National Capital Region (NCR)	13,105	57,193	48,453	8,740
Cordillera Administrative Region (CAR)	1,980	34,558	30,157	4,401
I. Ilocos	5,780	29,958	25,043	4,915
II. Cagayan Valley	3,973	27,433	22,429	5,004
III. Central Luzon	9,569	38,819	34,727	4,092
IV. Southern Tagalog	13,037	29,985	26,459	3,526
V. Bicol	6,685	20,221	19,092	1,129
VI. Western Visayas	8,816	24,807	22,310	2,497
VII. Central Visayas	7,838	20,756	16,932	3,824
VIII. Eastern Visayas	5,675	17,767	15,884	1,883
IX. Western Mindanao	5,948	23,779	19,456	4,323
X. Northern Mindanao	5,653	27,402	22,703	4,699
XI. Southern Mindanao	7,055	28,222	24,068	4,154
XII. Central Mindanao	4,359	24,366	22,509	1,857

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Table 16.2 Number of Families, Average Annual Income and Expenditures in the Philippines, by Region: 1985, 1988 and 1991 (continued)

Region	No. of Families ('00)	Average Income	Average Expendi-tures	Savings
1988				
Philippines	105,339	40,408	32,521	7,887
Urban	39,851	60,330	47,299	13,031
Rural	65,488	28,284	23,529	4,755
National Capital Region (NCR)	14,354	79,314	60,355	18,959
Cordillera Administrative Region (CAR)	2,136	33,838	28,722	5,116
I. Ilocos	6,247	34,031	27,670	6,361
II. Cagayan Valley	4,379	32,939	24,852	8,357
III. Central Luzon	10,382	46,855	38,660	8,195
IV. Southern Tagalog	12,845	37,978	32,058	5,920
V. Bicol	7,380	26,570	23,253	3,317
VI. Western Visayas	9,566	31,164	27,162	4,002
VII. Central Visayas	8,295	27,972	22,157	5,815
VIII. Eastern Visayas	5,985	25,345	20,533	4,812
IX. Western Mindanao	5,393	31,984	24,624	7,360
X. Northern Mindanao	6,068	35,801	28,865	6,936
XI. Southern Mindanao	7,378	37,132	30,061	7,071
XII. Central Mindanao	4,931	35,090	27,696	7,394

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Table 16.2 Number of Families, Average Annual Income and Expenditures in the Philippines, by Region: 1985, 1988 and 1991 (concluded)

Region	No. of Families ('00)	Average Income	Average Expendi-tures	Savings
1991				
Philippines	119,754	65,186	51,991	13,195
Urban	59,385	89,571	70,551	19,020
Rural	60,369	41,199	33,733	7,466
National Capital Region (NCR)	60,369	41,199	33,733	7,466
Cordillera Administrative Region (CAR)	2,277	58,985	43,816	15,169
I. Ilocos	6,715	56,678	45,016	11,622
II. Cagayan Valley	4,894	50,850	39,991	10,859
III. Central Luzon	11,949	76,203	61,904	14,299
IV. Southern Tagalog	16,159	68,960	54,818	14,142
V. Bicol	8,237	39,823	33,911	5,912
VI. Western Visayas	10,697	47,723	42,670	5,053
VII. Central Visayas	9,044	45,255	35,480	9,775
VIII. Eastern Visayas	6,613	38,475	31,760	6,715
IX. Western Mindanao[1]	6,048	43,011	33,715	9,296
X. Northern Mindanao	6,855	45,179	37,641	7,538
XI. Southern Mindanao	8,300	51,722	41,011	10,711
XII. Central Mindanao[1]	5,521	43,971	35,354	8,617

[1] In 1991, includes ARMM provinces and cities.

Source: National Statistics Office. *1985, 1988 and 1991 Family Income and Expenditure Survey.*

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Table 16.3 Income Decile Distribution of Families in the Philippines: 1985, 1988 and 1991

Decile Group	Philippines	NCR	CAR	Region I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1985															
First Decile	2.0	2.4	-	2.6	2.7	2.4	2.3	2.7	2.3	1.9	2.6	2.7	2.0	2.7	2.7
Second	3.2	3.6	-	3.9	3.9	3.8	3.6	4.1	3.6	3.2	3.8	4.0	3.1	3.9	4.0
Third	4.1	4.5	-	4.9	4.8	4.6	4.6	5.1	4.3	4.1	4.9	4.8	4.0	4.7	5.0
Fourth	5.0	5.4	-	5.7	5.8	5.6	5.5	6.0	35.1	5.0	6.0	5.7	5.0	5.7	5.9
Fifth	6.0	6.4	-	6.5	6.9	6.6	6.7	6.8	5.9	6.0	6.8	6.4	6.0	6.7	6.9
Sixth	7.3	7.5	-	7.5	8.0	8.0	7.8	7.9	6.9	7.1	7.8	7.5	7.2	7.9	8.5
Seventh	8.9	9.1	-	8.9	9.4	9.5	9.5	9.3	8.1	8.6	9.1	9.2	8.9	9.5	10.0
Eighth	11.4	11.3	-	11.1	11.6	11.8	12.0	11.2	9.9	11.1	11.3	11.2	11.1	11.4	12.0
Ninth	15.7	15.2	-	15.1	15.2	15.6	16.0	14.6	13.9	15.5	15.0	15.5	15.0	14.4	15.1
Tenth	36.4	34.4	-	33.8	31.7	32.1	32.1	32.1	40.0	37.5	32.6	32.8	37.7	33.0	29.9
1988															
First Decile	2.0	2.4	2.2	2.6	2.6	2.5	2.3	2.9	2.5	1.9	2.4	2.5	2.0	2.4	3.0
Second	3.2	3.5	3.6	3.9	3.8	3.8	3.5	4.2	3.9	3.0	3.8	3.8	3.2	3.7	4.2
Third	4.1	4.4	5.1	5.0	4.7	4.7	4.5	5.0	4.8	3.9	4.8	4.6	4.1	4.5	5.3
Fourth	5.0	5.3	6.5	5.9	5.6	5.7	5.5	5.8	5.5	4.9	5.7	5.5	5.1	5.5	6.2
Fifth	6.0	6.3	7.3	7.1	6.5	6.8	6.5	6.7	6.4	5.9	6.6	6.6	6.2	6.6	7.2
Sixth	7.3	7.5	8.7	8.3	7.7	8.1	7.9	7.6	7.5	7.2	7.6	7.5	7.5	8.0	8.3
Seventh	9.0	8.9	10.0	9.8	9.4	9.9	9.8	8.8	8.9	8.7	9.0	9.1	9.1	9.6	9.5
Eighth	11.6	11.0	11.6	12.1	11.8	12.3	12.4	10.8	11.0	11.0	11.3	11.1	11.3	11.9	11.5
Ninth	16.0	14.8	15.2	15.6	16.5	16.3	16.7	14.8	15.1	15.7	15.2	15.0	15.0	15.7	15.2
Tenth	35.8	35.7	29.7	29.6	31.4	29.8	31.1	33.4	34.5	37.8	33.5	34.4	36.5	32.2	29.7

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Table 16.3 Income Decile Distribution of Families in the Philippines: 1985, 1988 and 1991 (concluded)

Decile Group	Philippines	NCR	CAR	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
								Region							
1991															
First Decile	1.8	2.5	1.5	2.4	2.4	2.2	2.2	2.5	2.7	1.8	2.5	2.5	2.2	2.1	2.7
Second	2.9	3.6	2.8	3.8	3.7	3.7	3.4	4.1	4.0	3.0	3.8	3.8	3.3	3.3	4.0
Third	3.8	4.4	4.2	4.7	4.6	4.7	4.3	5.0	4.8	4.0	4.6	4.7	4.2	4.2	4.9
Fourth	4.7	5.2	5.3	5.5	5.4	5.7	5.2	5.9	5.6	4.8	5.5	5.7	5.1	5.2	5.8
Fifth	5.7	6.2	7.0	6.5	6.3	6.8	6.3	6.7	6.4	5.9	6.4	6.9	6.1	6.2	6.9
Sixth	7.0	7.3	7.9	7.7	7.5	8.0	7.6	7.7	7.3	7.1	7.5	8.1	7.4	7.5	8.3
Seventh	8.8	8.8	9.5	9.4	8.8	9.6	9.4	9.1	8.8	8.9	8.8	9.5	8.9	9.1	9.9
Eighth	11.4	10.8	11.7	11.7	11.0	12.0	11.9	11.2	11.0	11.2	10.7	11.8	11.2	11.3	11.8
Ninth	16.1	14.4	15.8	15.2	15.7	15.4	16.1	14.8	15.4	15.8	14.6	15.5	15.6	15.7	15.8
Tenth	37.8	36.8	34.3	33.2	34.6	31.9	33.4	33.0	33.9	37.5	35.7	31.5	36.0	35.6	30.0

In 1991, Regions IX and XII includes ARMM provinces and cities.

Source: National Statistics Office. *1985, 1988 and 1991Family Income and Expenditure Survey.*

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Table 16.4 Mean and Median Income and Expenditures of Families by Decile, Philippines: 1985, 1988 and 1991

Area and National Income Decile	1985				1988				1991			
	Income		Expenditure		Income		Expenditure		Income		Expenditure	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Philippines	31,052	20,480	26,865	18,988	40,408	26,694	32,521	23,431	65,186	41,040	51,991	35,140
First Decile	6,273	6,603	7,167	6,693	8,160	8,581	8,904	8,557	11,937	12,491	13,075	12,430
Second Decile	9,963	99,952	10,359	9,876	12,866	12,866	12,913	12,487	19,179	19,238	19,064	18,212
Third Decile	12,718	12,752	12,727	12,284	16,398	16,407	15,858	15,507	24,702	24,681	23,672	22,681
Fourth Decile	15,494	15,499	15,112	14,679	20,179	20,170	18,793	18,565	30,450	30,483	27,970	27,461
Fifth Decile	18,682	18,710	17,903	17,405	24,329	24,267	22,104	21,893	37,211	37,200	32,859	32,479
Sixth Decile	22,548	22,437	21,315	20,910	29,460	29,338	26,172	26,014	45,764	45,696	40,022	39,726
Seventh Decile	27,761	27,683	25,847	25,277	36,482	36,382	31,616	31,529	57,084	56,804	48,497	47,822
Eighth Decile	35,312	35,071	31,576	31,209	46,774	46,418	39,056	38,719	74,225	73,566	61,893	60,875
Ninth Decile	48,612	47,820	42,119	41,403	64,607	63,670	52,209	51,879	104,942	104,942	83,905	82,627
Tenth Decile	113,152	85,387	84,527	70,524	144,805	144,805	97,580	83,071	246,363	246,363	168,951	137,597

Source: National Statistics Office. *1985, 1988 and 1991 Family Income and Expenditure Survey.*

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Table 16.5 Percentage Distribution of Total Family Expenditure by Major Expenditure Group, Urban-Rural: 1985, 1988 and 1991

Expenditure Group	Total 1985	Total 1988	Total 1991	Urban 1985	Urban 1988	Urban 1991	Rural 1985	Rural 1988	Rural 1991
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food	51.9	50.7	48.5	46.3	45.8	45.0	58.8	56.6	55.7
Alcoholic beverages	1.1	1.1	1.0	0.9	1.0	0.9	1.3	1.3	1.3
Tobacco	2.3	2.1	1.7	1.9	1.7	1.4	2.9	2.6	2.2
Housing	12.7	12.8	13.5	16.1	16.6	15.9	8.4	8.1	8.4
Fuel, light and water	5.5	5.2	5.7	5.5	5.3	5.9	5.5	5.1	5.3
Household furnishings and equipment	1.9	2.2	2.4	2.2	2.3	2.7	1.6	2.0	2.1
Household operations	2.4	2.5	2.7	2.6	2.6	2.7	2.1	2.3	2.6
Clothing, footwear and other wear	3.6	4.2	3.7	3.5	4.0	3.5	3.8	4.5	4.1
Personal care and effects	2.1	3.3	3.3	2.3	3.4	3.4	1.9	3.2	3.2
Medical care	2.1	1.7	1.8	2.2	1.7	1.8	2.0	1.7	1.9
Transportation and communication	4.4	4.7	5.4	5.6	5.5	6.0	3.0	3.6	4.0
Recreation	0.4	0.5	0.4	0.5	0.5	0.5	0.3	0.4	0.3
Education	3.5	2.9	3.0	3.9	3.2	3.2	3.0	2.6	2.7
Gifts and contribution	1.0	1.0	1.0	0.9	0.8	0.9	1.1	1.1	1.2
Taxes	1.0	1.1	1.4	1.4	1.5	1.8	0.5	0.6	0.8
Special occasions	2.2	2.3	2.4	2.1	2.1	2.3	2.3	2.6	2.6
Other expenditures	1.8	1.8	1.9	2.2	2.2	2.1	2.1	1.6	1.4

Source: National Statistics Office. *1985, 1988 and 1991Family Income and Expenditure Survey.*

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Table 16.6 Percentage Distribution of Family Expenditure by Expenditure Group: 1991
(Million Pesos)

Expenditure Group	Philippines	NCR	CAR	Region I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	ARMM
Total	622,616	173,863	9,977	30,229	19,570	73,971	88,578	27,932	45,644	32,089	21,004	15,609	25,802	34,040	13,651	10,649
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food	48.5	41.5	52.1	50.6	50.9	49.7	48.8	53.6	50.3	52.0	55.5	56.7	52.2	51.6	53.4	56.9
Alcoholic beverages	1.0	.8	1.1	.8	1.1	.7	.7	1.1	1.8	1.5	1.7	1.5	1.2	1.4	1.2	.4
Tobacco	1.7	1.1	1.3	1.7	2.1	2.2	1.9	1.8	2.2	1.2	1.9	1.9	1.6	1.7	1.9	3.1
Fuel, light and water	5.7	6.6	5.5	6.0	5.3	5.6	5.3	5.8	5.5	5.3	5.2	5.2	5.4	4.0	5.2	5.1
Transportation and communication	5.4	7.3	4.8	5.2	4.5	4.7	5.4	4.0	4.1	5.0	3.8	4.4	4.0	4.6	4.3	4.0
Household operation	2.7	2.6	1.8	2.7	2.9	2.7	2.8	3.0	2.9	2.6	2.5	2.5	2.7	2.8	2.9	2.3
Personal care and effects	3.3	3.4	3.2	3.7	3.1	3.3	3.4	3.8	3.1	3.1	2.9	3.5	3.0	3.4	3.4	4.6
Clothing, footwear and other wear	3.7	3.1	4.4	4.1	3.8	3.6	4.0	3.8	4.3	3.6	3.2	3.8	4.2	4.6	4.6	3.4
Education	3.0	3.0	4.6	3.4	3.8	2.6	3.3	3.3	3.0	2.7	2.5	2.5	3.0	3.3	3.5	1.6
Recreation	.4	.5	.4	.5	.5	.2	.3	.5	.3	.4	.3	.3	.4	.5	.4	.2
Medical care	1.8	1.7	1.2	2.2	1.5	1.6	2.0	2.5	2.3	1.5	1.3	1.9	1.9	1.6	2.8	.8
Non-durable furnishings	.3	.3	.4	.3	.4	.2	.3	.3	.5	.3	.4	.4	.6	.4	.5	.6
Durable furniture and equipment	2.1	2.5	.8	2.5	1.7	1.2	2.0	1.8	2.1	1.9	3.0	1.4	2.7	3.0	1.9	2.6
Rent/rental value of occupied dwelling unit	12.4	19.6	11.1	8.3	8.6	10.4	11.8	6.6	9.5	10.6	6.8	8.1	8.1	9.5	7.1	8.1
House maintenance and minor repairs	1.12	.6	1.8	2.0	1.5	1.0	.7	1.3	2.3	1.8	1.8	.7	1.0	1.0	.9	.7

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Table 16.6 Percentage Distribution of Family Expenditure by Expenditure Group: 1991 (concluded)
(Million Pesos)

Expenditure Group	Philippines	NCR	CAR	Region I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	ARMM
Taxes paid	1.4	2.1	1.2	1.0	1.4	1.2	1.3	1.2	.9	1.6	1.5	.8	1.5	1.0	1.0	.5
Miscellaneous expenditures	3.4	2.3	2.8	3.8	3.8	4.2	4.1	3.8	3.1	3.9	4.3	3.2	3.7	3.6	3.2	4.0
Special occasions	2.4	1.5	2.0	2.6	2.4	3.1	3.1	2.7	2.4	2.8	3.1	2.3	2.8	2.7	2.3	1.0
Gifts and contribution	1.0	.8	.8	1.2	1.4	1.1	1.0	1.1	.7	1.1	1.2	.8	.9	.9	.9	3.0
Other expenditures	1.9	1.0	1.5	1.4	3.0	4.7	1.9	1.7	1.8	1.1	1.6	1.2	2.7	1.9	1.6	1.1

Source: National Statistics Office. *1991 Family Income and Expenditure Survey.*

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Table 16.7 Percent of Families Receiving Income and Percent of Income Received from Selected Sources, Philippines, Urban-Rural: 1988 and 1991

Income Source	1991						1988					
	Number of Families*			Income			Number of Families*			Income		
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Philippines												
Wages and salaries	66.7	73.8	59.8	41.7	45.4	33.5	66.8	76.2	61.1	43.3	48.6	36.3
Agricultural	21.6	11.5	31.5	4.0	2.2	8.0	23.5	7.4	33..3	5.0	1.6	9.4
Non-agricultural	52.7	67.2	38.4	37.6	43.3	25.5	50.3	72.4	37.4	38.3	47.1	26.9
Enterpreneurial activities	66.1	53.6	78.5	30.5	25.8	40.6	63.5	46.1	74.0	29.8	23.0	38.7
Crop farming and gardening	35.9	16.1	55.3	8.9	3.2	21.2	35.3	9.1	51.3	9.9	2.0	20.2
Livestock and poultry raising	11.5	6.1	16.9	1.1	0.6	2.2	9.5	3.7	13.0	1.1	0.5	1.9
Wholesale and retail trade	20.1	24.3	16.0	9.7	11.1	6.9	18.7	24.1	15.5	9.7	11.5	7.4
Manufacturing	5.4	4.8	6.1	1.8	1.9	1.7	6.0	5.3	6.4	2.1	2.3	1.8
Other sources of income	99.0	98.1	99.9	27.8	28.8	25.9	98.6	96.4	99.9	26.9	28.4	25.0
Net share of crops	13.3	9.8	16.8	1.5	1.1	2.1	13.8	8.7	16.9	1.5	0.9	2.2
Receipts from abroad	16.6	22.0	11.2	8.4	9.4	6.2	14.7	21.6	10.5	7.5	9.1	5.5
Rental value of occupied DU	93.6	87.8	99.3	8.4	9.7	5.6	90.7	79.4	97.5	7.9	9.8	5.4
Family sustenance activities	65.0	40.3	89.3	1.9	0.8	4.3	65.9	30.6	87.4	2.2	0.5	4.3

* A family is counted as many times as there are sources of income.

Source: National Statistics Office. *1988 and 1991 Family Income and Expenditure Survey.*

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Table 16.8 Total Number of Families, Average Income and Expenditures by Province : 1985, 1988 and 1991

Region/Province	Total Number of Families			Average Income			Average Expenditure		
	1985	1988	1991	1985	1988	1991	1985	1988	1991
Philippines	9,847,339	10,533,927	11,975,441	31,052	40,408	65,186	26,865	32,521	51,991
National Capital Region (NCR)	1,310,549	1,435,436	1,644,390	57,193	79,314	138,256	48,453	60,355	105,731
Cordillera Administrative Region (CAR)	198,039	213,592	227,719	34,558	33,838	58,985	30,157	28,722	43,816
Abra	32,007	35,096	37,276	23,175	23,899	30,576	21,572	21,019	27,024
Benguet*	78,128	85,706	61,551	48,241	44,828	62,471	39,557	37,415	43,547
Mt. Province	23,129	23,648	24,299	23,885	21,534	40,650	20,470	17,732	41,376
Ifugao	26,103	27,529	26,347	21,359	22,558	33,497	17,971	18,917	23,444
Kalinga Apayao	38,672	41,613	44,844	31,631	34,041	51,743	32,292	30,044	41,906
I - Ilocos	577,970	624,707	671,526	29,958	34,031	56,678	25,043	27,670	45,016
Ilocos Norte	81,841	88,741	94,525	33,484	31,497	58,330	30,242	28,632	45,033
Ilocos Sur	90,166	98,894	105,969	22,598	28,186	58,759	21,108	24,369	49,725
La Union	89,561	97,587	109,459	36,669	42,273	65,798	30,083	33,061	51,532
Pangasinan	316,402	339,485	361,574	29,243	34,026	52,875	23,392	26,830	41,659
II. Cagayan Valley	462,088	437,907	489,375	27,441	32,939	50,850	23,002	24,582	39991
Batanes	2,697	2776	2,839	29,312	31,701	93,158	22,556	21,998	61,315
Cagayan	148,783	157,908	174,397	24,759	26,559	53,453	20,390	21,133	43,215
Isabela	174,691	198,501	223,250	26,839	36,145	48,875	22,025	25,469	35,496
Nueva Vizcaya	52,319	57,460	64,755	33,508	42,477	52,961	27,250	31,639	48,799
Quirino	18,823	21,262	24,134	36,923	24,771	40,508	28,868	23,171	32,131

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Table 16.8 Total Number of Families, Average Income and Expenditures by Province : 1985, 1988 and 1991 (continued)

Region/Province	Total Number of Families			Average Income			Average Expenditure		
	1985	1988	1991	1985	1988	1991	1985	1988	1991
III. Central Luzon	956,921	1,038,222	1,194,940	38,819	46,855	76,203	34,727	38,660	61,904
Bataan	71,198	76,806	90,542	34,627	39,808	83,048	41,201	35,788	72,021
Bulacan	223,482	249,578	286,520	41,682	57,409	94,437	38,055	47,362	67,895
Nueva Ecija *	211,895	224,698	227,349	28,264	30,795	53,613	26,248	28,883	56,334
Pampanga *	175,603	195,673	200,846	44,939	55,384	81,671	41,605	44,112	64,955
Tarlac *	135,334	141,232	117,005	27,596	34,566	47,697	24,673	28,391	40,742
Zambales *	62,121	67,069	75,817	45,891	49,884	71,469	32,278	34,585	52,856
IV. Southern Tagalog	1,303,729	1,284,464	1,615,856	29,985	37,978	68,960	26,459	32,058	54,818
Aurora	21,702	25,433	30,048	18,479	34,141	49,548	18,525	30,270	41,603
Batangas *	237,408	253,014	213,997	30,020	43,240	64,967	25,715	32,948	49,319
Cavite	168,042	195,934	225,857	39,759	45,506	85,416	36,410	39,540	68,132
Laguna *	204,923	229,681	238,106	41,249	52,660	88,372	36,888	45,876	73,007
Marinduque	36,608	37,734	42,436	18,330	25,123	67,761	16,304	23,450	42,257
Occidental Mindoro	49,772	51,480	58,803	35,638	46,701	61,132	28,269	38,892	50,089
Oriental Mindoro	95,545	102,498	113,943	21,979	21,846	51,725	19,819	20,397	40,615
Palawan	82,515	91,685	101,541	20,746	27,722	41,415	17,243	23,311	31,081
Quezon *	245,316	256,549	259,008	19,741	27,991	43,906	18,081	24,021	38,294
Rizal	121,775	-	160,769	38,547	-	93,046	32,014	-	69,431
Romblon	40,125	40,457	44,220	15,856	16,002	27,387	16,839	12,584	23,035
V. Bicol	668,473	737,972	823,709	20,221	26,570	39,823	19,092	23,253	33,911
Albay	156,000	169,822	186,433	22,471	26,590	39,323	20,058	23,128	32,862
Camarines Norte	59,627	66,400	75,409	20,395	29,792	38,182	19,157	26,033	34,517
Camarines Sur	206,458	232,715	257,216	21,771	30,725	45,591	22,221	26,037	38,850

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Table 16.8 Total Number of Families, Average Income and Expenditures by Province : 1985, 1988 and 1991 (continued)

Region/Province	Total Number of Families			Average Income			Average Expenditure		
	1985	1988	1991	1985	1988	1991	1985	1988	1991
Catanduanes	33,436	35,162	39,483	20,013	25,566	50,965	18,200	21,278	42,112
Masbate	116,526	127,020	143,750	17,006	20,226	30,534	14,857	19,271	25,381
Sorsogon	96,626	106,854	121,418	17,116	23,357	36,766	16,218	21,045	32,111
VI. Western Visayas	881,554	956,611	1,069,712	24,807	31,164	47,723	22,310	27,162	42,670
Aklan	64,779	69,820	77,538	28,787	30,768	48,641	24,521	25,950	40,820
Antique	72,059	78,258	85,247	17,541	27,275	36,183	15,243	23,533	29,734
Capiz	97,919	106,637	118,131	21,693	29,112	35,911	19,580	24,583	30,433
Iloilo *	233,994	251,726	273,672	21,244	28,323	43,104	20,512	24,276	37,633
Negros Occidental *	316,737	347,774	396,515	19,874	26,389	42,707	17,884	24,175	39,750
VII. Central Visayas	783,846	829,546	904,437	20,756	27,972	45,255	16,932	22,157	35,480
Bohol	155,510	168,351	178,916	17,668	18,881	31,266	13,770	14,558	23,804
Cebu *	343,591	356,558	348,614	17,123	25,476	39,562	13,767	19,878	30,305
Negros Oriental	165,773	178,642	200,531	21,957	22,637	44,591	18,417	19,360	33,671
Siquijor	14,583	15,388	17,584	18,589	12,490	28,398	12,590	9,819	24,242
VIII. Eastern Visayas	567,496	598,521	661,344	17,767	25,345	38,475	15,884	20,533	31,760
Eastern Samar	63,680	67,598	76,471	18,174	33,555	45,972	15,995	27,259	37,854
Leyte	266,680	283,082	309,481	18,508	25,255	36,943	16,478	20,596	32,264
Northern Samar	75,931	83,558	95,754	13,423	20,642	43,134	11,537	16,420	33,166
Samar	101,157	98,199	104,106	18,254	21,961	31,386	15,937	17,930	24,868
Southern Leyte	60,048	66,085	75,532	18,720	28,310	41,029	18,540	22,455	31,244

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Table 16.8 Total Number of Families, Average Income and Expenditures by Province : 1985, 1988 and 1991 (continued)

Region/Province	Total Number of Families			Average Income			Average Expenditure		
	1985	1988	1991	1985	1988	1991	1985	1988	1991
IX. Western Mindanao	494,818	539,252	478,750	23,779	31,984	42,622	19,456	24,624	32,605
Basilan	41,704	46,197	49,634	16,183	22,789	34,509	14,048	17,027	26,511
Zamboanga del Norte	114,268	122,425	140,161	20,839	22,173	33,827	18,198	17,924	24,069
Zamboanga del Sur *	166,742	183,710	204,440	18,139	26,429	40,960	16,422	21,164	32,405
X. Northern Mindanao	565,270	606,783	685,493	27,402	35,801	45,179	22,703	28,865	37,641
Agusan del Norte *	37,068	41,905	47,049	25,809	32,624	38,510	25,165	30,381	37,367
Agusan del Sur	55,789	59,889	66,287	23,322	31,631	38,390	19,967	26,935	28,565
Bukidnon	129,381	139,132	154,628	31,713	47,467	45,810	26,159	32,423	36,486
Camiguin	11,094	11,034	12,059	15,046	28,792	32,311	13,166	28,217	24,694
Misamis Occidental	77,952	82,875	93,036	16,192	26,813	34,567	14,919	23,839	27,638
Misamis Oriental *	92,842	98,170	112,493	19,945	27,083	34,791	18,044	22,855	30,680
Surigao del Norte	75,129	79,944	91,056	22,852	27,661	38,614	21,270	23,957	33,356
XI. Southern Mindanao	705,453	737,782	830,030	28,222	27,661	38,614	21,270	23,957	33,356
Davao	156,269	158,648	172,227	25,928	35,828	43,808	22,767	30,268	35,988
Davao del Sur *	107,583	113,583	128,325	19,536	25,916	33,973	18,783	19,152	27,907
Davao Oriental	67,662	71,139	81,493	23,340	25,197	36,540	19,889	20,571	25,090
South Cotabato *	158,977	168,171	152,233	30,090	39,954	41,893	24,347	32,0151	35,738
Surigao del Sur	79,149	82,383	91,043	21,372	33,995	41,005	20,645	28,036	37,184
XII. Central Mindanao	435,911	493,131	367,323	24,366	35,090	44,398	22,509	27,696	37,165
Lanao del Norte *	54,295	63,641	69,901	19,248	28,910	33,925	18,427	24,590	30,914
North Cotabato	110,337	126,601	143,952	21,469	30,474	34,769	20,706	23,864	27,881

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Table 16.8 Total Number of Families, Average Income and Expenditures by Province : 1985, 1988 and 1991 (concluded)

Region/Province	Total Number of Families			Average Income			Average Expenditure		
	1985	1988	1991	1985	1988	1991	1985	1988	1991
Sultan Kudarat	60,985	69,892	79,573	27,434	37,262	50,186	22,859	29,486	40,708
Autonomous Region in Muslim Mindanao (ARMM)	-	-	310,837	-	-	43,677	-	-	34,260
Lanao del Sur *	76,656	82,080	73,606	29,995	37,431	45,732	29,788	26,274	31,674
Maguindanao *	101,454	112,549	111,159	21,406	32,037	41,396	18,644	25,709	31,807
Sulu	65,105	71,255	80,384	23,850	31,097	33,601	22,482	24,999	27,426
Tawi-Tawi	38,206	40,648	45,689	26,705	33.433	63,643	19,290	23,337	56,419

* Province excludes Key Cities/Municipalities considered as domains.

Source: National Statistics Office. *1985, 1988 and 1991 Family Income and Expenditure Survey.*

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Table 16.9 Composition of the Old Market Basket in the Updated Market Basket by Commodity Group and by Geographic Area: 1978 and 1988

Area/Region	All items			Food, beverages and tobacco			Clothing			Housing and repairs		
	1978 Old basket	Common commo-dities	1988 Updated basket	1978 Old basket	Common commo-dities	1988 Updated basket	1978 Old basket	Common commo-dities	1988 Updated basket	1978 Old basket	Common commo-dities	1988 Updated basket
Philippines	406	297	562	134	89	198	58	40	106	30	26	34
Metro Manila	402	271	384	133	93	144	58	29	57	30	24	26
Areas Outside Metro Manila	394	299	577	131	89	203	57	41	110	29	26	35
I. Ilocos	394	320	547	131	99	188	57	44	104	29	27	30
II. Cagayan Valley	394	231	590	131	72	217	57	24	108	29	21	36
III. Central Luzon	394	276	518	131	84	174	57	32	97	29	28	33
IV. Southern Tagalog	394	284	599	131	85	201	57	40	102	29	28	42
V. Bicol	394	317	523	131	88	193	57	45	74	29	28	34
VI. Western Visayas	394	294	646	131	93	226	57	32	147	29	23	33
VII. Central Visayas	394	319	541	131	96	211	57	48	90	29	25	32
VIII. Eastern Visayas	394	330	524	131	99	178	57	45	91	29	26	31
IX. Western Mindanao	394	326	583	131	93	211	57	51	119	29	29	37
X. Northern Mindanao	394	292	629	131	91	215	57	39	142	29	25	34
XI. Southern Mindanao	394	299	644	131	81	223	57	40	125	29	27	40
XII. Central Mindanao	394	296	578	131	84	197	57	48	117	29	27	40

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Table 16.9 Composition of the Old Market Basket in the Updated Market Basket by Commodity Group and by Geographic Area: 1978 and 1988 (concluded)

Area/Region	Fuel, light and water			Services			Miscellaneous		
	1978 Old basket	Common commo-dities	1988 Updated basket	1978 Old basket	Common commo-dities	1988 Updated basket	1978 Old basket	Common commo-dities	1988 Updated basket
Philippines	15	9	15	86	68	98	83	65	111
Metro Manila	12	12	12	86	61	73	83	53	72
Areas Outside Metro Manila	9	9	15	85	68	100	83	66	114
I. Ilocos	9	9	15	85	69	95	83	71	115
II. Cagayan Valley	9	6	19	85	61	96	83	47	114
III. Central Luzon	9	9	12	85	63	92	83	60	110
IV. Southern Tagalog	9	7	16	85	66	101	83	58	137
V. Bicol	9	9	15	85	74	108	83	72	99
VI. Western Visayas	9	8	18	85	70	101	83	68	121
VII. Central Visayas	9	9	11	85	70	99	83	71	98
VIII. Eastern Visayas	9	9	15	85	73	92	83	77	117
IX. Western Mindanao	9	9	14	85	72	103	83	72	99
X. Northern Mindanao	9	9	13	85	66	105	83	62	120
XI. Southern Mindanao	9	9	16	85	73	106	83	69	134
XII. Central Mindanao	9	9	18	85	63	101	83	64	105

Source: National Statistics Office, Prices Section.

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Table 16.10 Weights for All Income Households in the Philippines, Metro Manila and Areas Outside Metro Manila: 1988

Commodity group	Philippines	Metro Manila	Areas Outside Metro Manila (AOMM)
All Items	100.000000	24.417773	75.582227
Food items	58.480184	11.844980	46.635204
Food, beverages and tobacco			
Food	53.483735	10.911717	42.572018
Beverages	2.796076	0.588862	2.207214
Tobacco	2.200375	0.344402	1.855973
Cereal and cereal preparations	17.111023	2.304779	14.906244
Cereals	14.290708	1.556809	12.733899
Cereal preparations	2.820315	0.747970	2.072345
Rice	12.769317	1.543292	11.226025
Corn	1.521391	0.013517	1.507874
Dairy products	2.516912	0.701198	1.815714
Eggs	1.388851	0.291478	1.097373
Fish	8.120442	1.225043	6.895399
Fruits and vegetables	6.170130	1.319054	4.851076
Meat	7.330715	2.220365	5.110350
Miscellaneous foods	10.845664	2.849800	7.995864
Nonfood items	41.519817	12.572793	28.947024
Clothing	4.355248	0.867373	3.487875
Footwear	0.973967	0.206033	0.767934
Ready-made apparel	3.239268	0.647250	2.592018
Custom clothes	0.142016	0.014089	0.127927
Housing and repairs	13.307709	5.406388	7.901321
Minor repairs	1.171404	0.155982	1.015422
Rentals	12.136306	5.250406	6.885900

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Table 16.10 Weights for All Income Households in the Philippines, Metro Manila and Areas Outside Metro Manila: 1988 (concluded)

Commodity group	Philippines	Metro Manila	Areas Outside etro Manila (AOMM)
Fuel, light and water	5.359558	1.452843	3.906715
Fuel	2.757986	0.319060	2.438926
Light	1.957020	0.783752	1.173268
Water	0.644547	0.350031	0.294516
Services	10.906561	3.319696	7.586865
Educational	2.215856	0.710451	1.505405
Medical	1.745390	0.336851	1.408539
Personal	1.678103	0.532785	1.145318
Recreational	0.475211	0.144847	0.330364
Transportation and communication	4.792002	1.594762	3.197240
Miscellaneous	7.590739	1.526493	6.064246
Household furnishing and equipment	2.268334	0.416611	1.851723
Household operations	1.596305	0.266701	1.329604
Personal care and effects	2.739379	0.676568	2.062811
Other miscellaneous items	0.986725	0.166614	0.820111

Source: National Statistics Office, Prices Section.

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Table 16.11 Consumer Price Index by Commodity Group and by Region: 1989-1992
(1988 = 100)

Region	All items				Food, beverages and tobacco				Clothing			
	1989	1990	1991	1992	1989	1990	1991	1992	1989	1990	1991	1992
Philippines	112.2	128.1	152.0	165.6	114.0	127.6	147.2	157.3	109.4	120.3	140.6	155.7
National Capital Region (NCR)	109.6	127.3	153.6	172.4	109.7	124.5	144.6	154.8	106.1	111.8	131.8	146.5
Cordillera Administrative Region (CAR)	115.2	129.4	149.7	159.6	117.6	129.2	149.4	157.8	107.8	113.0	125.4	136.3
Areas Outside Metro Manila	113.1	128.3	151.5	163.4	115.2	128.4	147.9	157.9	110.2	122.4	142.9	158.0
I. Ilocos	113.7	128.5	149.3	160.4	115.6	129.0	145.8	156.0	115.0	124.9	146.3	166.8
II. Cagayan Valley	110.8	127.7	147.5	163.6	113.5	128.5	146.0	155.9	109.0	120.3	142.1	166.4
III. Central Luzon	111.2	125.5	151.1	161.5	111.4	123.6	150.3	160.7	108.2	117.2	136.0	148.5
IV. Southern Tagalog	113.9	129.1	153.2	165.1	115.3	127.8	147.5	158.3	113.1	127.1	147.7	160.2
V. Bicol	114.3	132.8	154.8	165.6	117.5	131.9	148.9	156.1	111.6	125.7	146.8	163.1
VI. Western Visayas	115.0	131.9	157.0	166.6	119.0	135.8	156.3	163.3	110.6	126.1	150.1	161.9
VII. Central Visayas	112.7	134.5	163.9	177.1	115.0	133.0	152.2	164.3	111.8	125.2	142.6	160.7
VIII. Eastern Visayas	114.8	125.7	148.6	162.3	116.8	128.2	148.0	159.2	107.5	117.5	138.9	155.2
IX. Western Mindanao	113.3	129.3	152.6	163.2	115.2	130.5	151.1	159.6	107.3	125.2	148.9	170.3
X. Northern Mindanao	113.1	126.4	145.9	159.3	115.2	126.3	141.7	152.8	108.3	120.5	143.3	158.9
XI. Southern Mindanao	109.9	120.6	138.0	150.8	111.9	120.8	135.3	146.3	107.7	115.2	1294.	145.2
XII. Central Mindanao	113.9	129.5	153.2	167.1	117.2	131.7	148.3	158.0	109.9	126.6	154.1	168.1

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Table 16.11 Consumer Price Index by Commodity Group and by Region: 1989-1992 (continued)
(1988 = 100)

Region	Housing and repairs 1989	1990	1991	1992	Fuel, light and water 1989	1990	1991	1992
Philippines	133.6	132.8	159.6	187.6	109.9	136.0	173.3	183.7
National Capital Region (NCR)	114.3	137.4	168.0	213.1	107.6	139.0	176.6	186.9
Cordillera Administrative Region (CAR)	117.6	136.6	133.5	156.0	108.4	128.4	172.2	157.6
Areas outside Metro Manila	113.1	129.7	153.8	170.2	110.7	134.9	172.0	182.5
I. Ilocos	109.8	113.1	122.7	129.8	112.5	139.4	174.5	184.2
II. Cagayan Valley	106.9	144.9	155.1	197.9	106.6	114.7	135.1	158.6
III. Central Luzon	112.3	118.5	129.9	135.0	121.8	145.3	166.6	168.0
IV. Southern Tagalog	118.4	137.3	169.3	187.2	110.5	141.8	188.5	193.7
V. Bicol	116.8	143.5	164.3	183.2	100.0	120.4	164.1	178.8
VI. Western Visayas	108.7	126.4	165.2	178.8	106.8	121.5	141.6	149.6
VII. Central Visayas	108.3	158.2	203.7	224.3	103.0	152.5	252.2	259.9
VIII. Eastern Visayas	118.1	119.5	146.0	180.3	113.4	119.4	149.6	166.0
IX. Western Mindanao	116.1	131.2	161.6	171.9	108.3	125.2	146.5	159.5
X. Northern Mindanao	108.6	120.2	145.3	158.3	123.6	156.6	183.5	208.7
XI. Southern Mindanao	112.2	124.4	136.6	154.6	100.1	118.6	144.9	164.6
XII. Central Mindanao	106.7	111.7	146.5	180.4	111.2	132.6	188.9	216.0

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Table 16.11 Consumer Price Index by Commodity Group and by Region: 1989-1992 (concluded)
(1988 = 100)

Region	Services				Miscellaneous			
	1989	1990	1991	1992	1989	1990	1991	1992
Philippines	106.0	129.3	171.4	183.6	107.9	120.5	140.0	158.3
National Capital Region NCR)	104.5	124.4	166.4	176.7	106.8	117.4	136.2	156.9
Cordillera Administrative Region (CAR)	110.1	137.2	186.8	195.6	107.4	119.7	138.2	152.8
Areas outside Metro Manila	106.6	131.5	173.6	186.6	108.1	121.3	141.0	158.6
I. Ilocos	105.2	131.3	178.4	188.4	115.4	135.1	154.4	173.5
II. Cagayan Valley	106.4	126.6	168.3	185.9	104.3	115.9	133.6	155.5
III. Central Luzon	107.7	141.3	185.9	201.1	106.6	119.4	139.1	158.2
IV. Southern Tagalog	107.3	128.0	164.4	176.1	107.3	120.9	138.8	153.2
V. Bicol	104.0	148.4	191.0	208.3	109.5	119.4	141.8	159.7
VI. Western Visayas	106.9	128.7	169.3	183.4	111.5	124.1	151.0	168.7
VII. Central Visayas	106.3	124.5	178.1	187.6	109.5	120.7	137.8	155.8
VIII. Eastern Visayas	107.0	126.8	170.4	182.3	105.8	116.4	137.3	151.2
IX. Western Mindanao	107.8	129.6	173.0	183.7	107.6	122.6	142.2	161.4
X. Northern Mindanao	107.8	130.0	168.1	184.7	106.5	116.7	134.3	152.0
XI. Southern Mindanao	103.4	121.9	159.1	170.0	107.1	117.7	133.5	151.8
XII. Central Mindanao	106.8	132.5	177.4	190.0	106.6	126.4	150.9	172.1

Source: National Statistics Office, Prices Section.

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Table 16.12 Consumer Price Index in the Philippines by Month and by Commodity Group: 1990-1993 (1988 = 100)

Year	All items	Food, beverages and tobacco	Clothing	Housing and repairs	Fuel, light and water	Services	Miscella-neous	Purchasing power of the peso
1990	128.1	127.6	120.3	132.8	136.0	129.3	120.5	0.78
January	122.0	123.2	115.8	121.3	124.3	121.3	116.6	0.82
February	122.4	123.0	116.6	122.6	128.2	121.9	117.5	0.82
March	123.0	123.1	117.1	124.8	129.6	122.3	118.0	0.81
April	124.0	123.8	117.9	129.0	130.4	122.5	118.2	0.81
May	124.8	124.9	118.3	129.3	131.3	123.0	118.6	0.80
June	126.1	125.9	119.0	130.9	132.4	125.6	119.2	0.79
July	128.1	127.7	119.8	136.1	133.2	127.4	119.8	0.78
August	128.9	128.4	120.5	137.5	134.1	127.7	120.4	0.78
September	130.2	129.8	121.8	138.4	136.9	128.9	121.4	0.77
October	132.7	131.6	123.4	140.0	143.9	135.2	123.2	0.75
November	135.2	133.5	125.4	141.4	149.8	140.1	125.3	0.74
December	139.5	136.6	127.7	142.5	157.7	156.0	127.5	0.72
1991	152.0	147.2	140.6	159.6	173.3	171.4	140.0	0.66
January	143.7	140.6	131.3	145.3	164.9	162.3	130.4	0.70
February	146.8	143.0	133.8	151.9	169.6	164.4	133.9	0.68
March	148.1	143.8	135.9	154.4	172.1	165.4	136.0	0.68
April	149.1	144.5	137.2	155.6	174.1	166.3	137.4	0.67
May	149.9	145.2	138.9	156.2	175.3	167.4	138.7	0.67
June	151.5	146.0	140.6	157.6	176.4	173.9	140.1	0.66
July	152.9	147.5	142.1	159.7	176.2	175.5	141.0	0.65

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Table 16.12 Consumer Price Index in the Philippines by Month and by Commodity Group: 1990-1993 (continued)
(1988 = 100)

Year	All items	Food, beverages and tobacco	Clothing	Housing and repairs	Fuel, light and water	Services	Miscella-neous	Purchasing power of the peso
August	154.6	149.9	143.2	160.8	174.8	175.9	142.0	0.64
September	156.4	151.5	144.7	166.0	174.0	175.1	143.5	0.64
October	156.5	150.9	145.6	168.6	174.2	175.7	145.1	0.64
November	157.1	151.5	146.8	169.1	173.7	176.5	145.5	0.64
December	157.8	152.2	147.5	169.5	173.8	177.8	146.7	0.63
1992	165.6	157.3	155.7	187.6	183.7	183.6	158.2	0.61
January	159.2	153.0	149.3	170.8	175.8	178.9	152.2	0.63
February	159.8	152.9	150.0	173.5	178.2	179.4	153.3	0.63
March	161.1	152.9	151.1	180.7	180.2	179.9	154.6	0.62
April	162.0	153.4	153.1	182.7	182.1	180.5	156.1	0.62
May	163.7	154.9	154.0	187.4	183.0	180.6	157.0	0.61
June	165.4	156.5	155.9	189.2	184.0	184.2	158.1	0.60
July	167.0	157.9	157.1	192.3	184.6	185.5	159.4	0.60
August	168.3	159.4	158.0	193.3	185.9	186.2	160.3	0.59
September	169.6	161.4	158.7	193.5	186.4	186.7	161.0	0.59
October	170.0	161.5	159.7	195.0	187.3	186.7	161.8	0.59
November	170.5	161.8	160.2	196.3	188.2	186.9	162.4	0.59
December	170.7	161.7	161.6	196.6	188.7	187.3	162.8	0.59

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Table 16.12 Consumer Price Index in the Philippines by Month and by Commodity Group: 1990-1993 (concluded)
(1988 = 100)

Year	All items	Food, beverages and tobacco	Clothing	Housing and repairs	Fuel, light and water	Services	Miscella-neous	Purchasing power of the peso
1993								
January	172.3	162.3	163.1	200.7	189.8	188.3	168.5	0.58
February	172.9	162.4	163.8	203.2	191.7	189.2	169.2	0.58
March	173.6	162.3	164.5	208.1	191.9	189.7	169.6	0.58
April	174.0	162.6	165.3	208.6	192.6	190.2	170.1	0.57
May	174.6	162.9	166.1	209.0	196.1	190.9	170.7	0.57
June	176.3	163.8	167.4	211.0	198.2	198.0	171.2	0.57
July	178.9	166.8	168.2	212.2	199.3	202.7	171.6	0.56
August	180.1	168.0	169.0	213.9	199.5	203.9	172.2	0.56
September	182.4	171.2	169.2	215.8	200.1	204.7	172.9	0.55
October	183.6	172.7	169.8	216.6	201.4	205.4	173.7	0.54
November	184.2	173.2	170.5	217.8	202.0	206.0	173.8	0.54

Source: National Statistics Office.

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Table 16.13 Consumer Price Index in Metro Manila by Month and by Commodity Group: 1990-1993 (1988 = 100)

Year	All items	Food, beverages and tobacco	Clothing	Housing and repairs	Fuel, light and water	Services	Miscella-neous	Purchasing power of the peso
1990	127.3	124.5	111.8	137.4	139.0	124.4	117.4	0.79
January	117.9	118.9	108.2	118.7	119.4	116.8	113.4	0.85
February	118.4	117.7	108.8	120.4	130.2	117.0	114.6	0.84
March	119.7	118.1	108.8	124.7	132.1	117.0	114.7	0.84
April	122.8	119.7	109.3	134.3	133.6	117.3	115.0	0.81
May	123.7	121.3	109.5	134.6	133.9	117.8	115.4	0.81
June	125.6	123.2	110.2	135.9	134.8	121.4	116.1	0.80
July	129.2	126.5	111.2	143.8	136.3	122.8	115.9	0.77
August	129.7	126.2	111.6	146.2	136.9	123.0	116.0	0.77
September	132.2	130.0	113.6	146.3	138.6	125.7	118.0	0.76
October	133.2	129.0	114.8	147.7	144.5	130.1	121.0	0.75
November	135.0	130.2	116.2	147.9	156.5	131.8	123.5	0.74
December	140.3	133.1	119.3	148.1	171.3	151.9	125.6	0.71
1991	153.6	144.6	131.8	168.0	176.6	166.4	136.2	0.65
January	144.2	137.7	122.6	149.8	175.7	158.3	125.9	0.69
February	146.5	137.6	125.3	158.5	176.7	159.3	128.5	0.68
March	148.6	139.5	126.8	162.9	177.3	159.5	129.9	0.67
April	149.7	140.8	128.6	163.0	177.8	160.6	132.5	0.67
May	150.2	141.4	130.3	163.0	179.0	161.1	133.8	0.67
June	152.2	142.5	132.0	163.7	178.8	169.2	136.1	0.67
July	154.0	144.6	133.1	164.9	179.0	172.0	137.2	0.65
August	156.1	148.5	134.4	166.0	177.8	171.4	138.7	0.64

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Table 16.13 Consumer Price Index in Metro Manila by Month and by Commodity Group: 1990-1993 (continued)
(1988 = 100)

Year	All items	Food, beverages and tobacco	Clothing	Housing and repairs	Fuel, light and water	Services	Miscella-neous	Purchasing power of the peso
September	159.8	150.9	135.6	177.6	175.7	170.2	141.5	0.63
October	159.5	148.3	136.6	181.8	174.5	170.8	142.1	0.63
November	161.0	150.8	137.8	182.1	173.6	171.5	143.4	0.62
December	161.8	152.1	138.1	182.2	173.0	172.4	144.6	0.62
1992	172.4	154.8	146.5	213.1	186.9	176.7	156.9	0.58
January	162.9	152.1	140.9	183.4	175.9	174.0	149.5	0.61
February	163.3	150.0	141.7	187.6	181.3	174.5	150.9	0.61
March	167.0	149.7	142.1	203.0	186.8	175.0	152.0	0.60
April	167.9	150.1	144.5	205.0	188.7	174.6	154.3	0.60
May	172.0	153.5	145.5	215.2	190.0	174.3	156.0	0.58
June	173.3	153.9	147.0	217.5	189.6	177.2	157.6	0.58
July	175.4	155.8	147.3	222.6	188.7	178.1	158.4	0.57
August	175.5	155.3	147.7	223.6	188.1	178.5	158.9	0.57
September	178.0	160.4	148.6	223.6	186.9	178.7	159.9	0.56
October	177.5	159.1	150.7	223.7	187.6	178.3	160.8	0.56
November	178.6	159.9	150.7	226.0	188.8	178.3	162.2	0.56
December	177.6	158.2	151.5	226.2	189.9	178.5	162.6	0.56

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Table 16.13 Consumer Price Index in Metro Manila by Month and by Commodity Group: 1990-1993 (concluded)
(1988 = 100)

Year	All items	Food, beverages and tobacco	Clothing	Housing and repairs	Fuel, light and water	Services	Miscella-neous	Purchasing power of the peso
1993								
January	181.8	162.5	152.8	231.7	189.4	180.4	167.9	0.55
February	181.9	160.5	153.1	235.0	191.8	180.9	168.4	0.55
March	184.1	159.9	153.9	246.2	191.7	181.2	168.8	0.54
April	184.9	160.8	155.6	246.9	192.1	181.7	169.1	0.54
May	185.7	160.1	157.5	248.5	201.4	182.2	170.0	0.54
June	189.1	162.6	158.1	250.5	201.9	194.7	170.6	0.53
July	192.4	165.7	159.1	251.2	202.7	206.3	170.8	0.52
August	192.4	164.9	159.6	251.7	204.9	207.2	171.0	0.52
September	195.9	169.9	159.8	255.3	205.7	208.5	171.5	0.51
October	197.9	173.3	160.3	255.9	206.4	209.2	171.9	0.51
November	198.3	173.8	161.0	255.9	207.0	210.0	172.1	0.50

Source: National Statistics Office, Prices Section.

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Table 16.14 Consumer Price Index in Areas Outside Metro Manila by Month and by Commodity Group: 1990-1993 (1988 = 100)

Year	All items	Food, beverages and tobacco	Clothing	Housing and repairs	Fuel, light and water	Services	Miscella-neous	Purchasing power of the peso
1990	128.3	128.4	122.4	129.7	134.9	131.5	121.3	0.78
January	123.3	124.3	117.7	123.1	126.1	123.3	117.4	0.81
February	123.7	124.3	118.6	124.1	127.4	124.1	118.2	0.81
March	124.0	124.4	119.2	124.9	128.7	124.6	118.8	0.81
April	124.4	124.8	120.0	125.3	129.2	124.8	119.0	0.80
May	125.2	125.8	120.5	125.7	130.4	125.3	119.4	0.80
June	126.2	126.6	121.2	127.4	131.5	127.4	120.0	0.79
July	127.8	128.0	122.0	130.8	132.1	129.4	120.8	0.78
August	128.6	128.9	122.7	131.6	133.1	129.7	121.5	0.78
September	129.6	129.7	123.8	133.0	136.2	130.3	122.3	0.77
October	132.6	132.2	125.5	134.8	143.7	137.4	123.8	0.75
November	135.3	134.4	127.7	137.0	147.3	143.8	125.8	0.74
December	139.3	137.5	129.8	138.7	152.7	157.8	128.0	0.72
1991	151.5	147.9	142.9	153.8	172.0	173.6	141.0	0.66
January	143.6	141.3	133.5	142.3	160.9	164.1	131.5	0.70
February	146.9	144.4	135.9	147.3	166.9	166.7	135.2	0.68
March	148.0	144.9	138.2	148.6	170.1	168.0	137.5	0.68
April	148.9	145.5	139.4	150.6	172.7	168.8	138.6	0.67
May	149.8	146.2	141.0	151.5	173.9	170.1	139.9	0.67
June	151.3	146.9	142.7	153.5	175.4	175.9	141.1	0.66
July	152.6	148.2	144.3	156.2	175.1	177.1	141.9	0.66
August	154.1	150.2	145.4	157.2	173.7	177.8	142.8	0.65

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Table 16.14 Consumer Price Index in Areas Outside Metro Manila by Month and by Commodity Group: 1990-1993 (continued)
(1988 = 100)

Year	All items	Food, beverages and tobacco	Clothing	Housing and repairs	Fuel, light and water	Services	Miscella-neous	Purchasing power of the peso
September	155.3	151.7	147.0	158.0	173.4	177.3	144.0	0.64
October	155.5	151.5	147.9	159.6	174.1	177.9	145.8	0.64
November	155.9	151.7	149.0	160.2	173.8	178.7	146.0	0.64
December	156.5	152.2	149.9	160.8	174.1	180.2	147.2	0.64
1992	163.4	157.9	158.0	170.2	182.5	186.6	158.6	0.61
January	158.0	153.2	151.4	162.1	175.8	181.0	152.9	0.63
February	158.6	153.6	152.1	163.9	177.1	181.6	153.9	0.63
March	159.1	153.7	153.3	165.5	177.7	182.1	155.2	0.63
April	160.1	154.2	155.3	167.4	179.7	183.1	156.5	0.62
May	160.9	155.2	156.1	168.3	180.4	183.4	157.3	0.62
June	162.9	157.1	158.1	169.9	181.9	187.3	158.2	0.61
July	164.2	158.4	159.5	171.6	183.1	188.7	159.6	0.61
August	165.9	160.4	160.6	172.6	185.1	189.6	160.6	0.60
September	166.9	161.7	161.2	172.9	186.2	190.2	161.3	0.60
October	167.6	162.1	162.0	175.3	187.2	190.4	162.0	0.60
November	167.9	162.3	162.6	176.0	188.0	190.6	162.4	0.60
December	168.3	162.6	164.1	176.4	188.3	191.1	162.8	0.59

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Table 16.14 Consumer Price Index in Areas Outside Metro Manila by Month and by Commodity Group: 1990-1993 (concluded)
(1988 = 100)

Year	All items	Food, beverages and tobacco	Clothing	Housing and repairs	Fuel, light and water	Services	Miscella-neous	Purchasing power of the peso
1993								
January	169.2	162.3	165.6	179.5	190.0	191.9	168.7	0.59
February	170.0	162.9	166.5	181.5	191.7	192.9	169.6	0.59
March	170.2	162.9	167.1	182.0	192.0	193.4	170.0	0.59
April	170.5	163.0	167.7	182.4	192.8	193.9	170.5	0.59
May	171.0	163.6	168.3	182.0	194.1	194.7	171.0	0.58
June	172.2	164.1	169.7	184.0	196.8	199.4	171.5	8.58
July	174.6	167.1	170.5	185.5	198.0	201.1	172.0	0.57
August	176.1	168.8	171.4	188.1	197.5	202.4	172.7	0.57
September	178.0	171.5	171.6	188.7	198.0	203.0	173.2	0.56
October	179.0	172.5	172.2	189.7	199.6	203.8	174.1	0.56
November	179.6	173.0	172.9	191.7	200.1	204.2	174.2	0.56

Source: National Statistics Office, Prices Section.

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Table 16.15 Retail Price Index in Metro Manila by Month and by Commodity Group: 1979-1993 (1978 = 100)

Year/Month	All items	Food	Beverages and tobacco	Crude materials except fuel	Mineral fuels, lubricants and related materials	Chemicals including animal and vegetable oils and fats	Manufactured goods classified chiefly by materials	Machinery and transport equipment	Miscellaneous manufactured articles
1979	120.7	118.8	112.2	125.3	137.1	113.7	129.2	118.7	112.6
1980	145.7	135.7	136.6	160.4	248.0	131.0	156.2	132.4	133.6
1981	162.4	151.0	160.9	176.4	284.8	143.6	170.5	141.1	148.4
1982	176.3	164.3	196.4	174.5	295.6	159.5	180.0	148.4	168.8
1983	194.2	178.7	208.5	191.1	320.6	191.9	206.2	160.3	198.1
1984	310.4	280.0	292.8	326.5	468.5	351.1	364.9	259.5	344.8
1985	366.4	338.6	346.3	369.0	519.0	411.2	416.7	295.2	404.6
1986	370.6	347.8	394.0	376.2	426.8	429.5	411.3	316.0	420.9
1987	393.4	375.7	436.0	378.5	420.8	445.0	424.6	327.2	435.8
1988	432.4	428.8	471.9	387.5	408.9	455.5	447.5	342.0	456.9
1989	467.6	472.0	504.0	415.4	343.1	475.8	498.7	360.7	467.6
1990	516.8	517.1	555.2	439.4	472.0	506.1	546.7	382.8	535.5
1991	609.0	583.8	639.8	517.0	799.0	611.6	652.7	455.8	627.5
January	590.2	568.1	601.6	477.6	856.4	553.2	612.6	425.2	579.8
February	591.5	563.2	619.6	488.3	856.5	569.4	629.7	440.0	601.7
March	592.9	562.5	633.2	493.7	856.5	568.6	634.2	443.2	607.8
April	597.1	564.3	636.9	502.0	856.6	582.0	646.1	451.4	612.3
May	600.0	566.0	637.7	515.6	856.7	594.0	650.9	457.6	619.2
June	604.4	571.2	640.3	517.8	856.5	606.4	651.6	459.5	628.4
July	610.9	578.4	641.3	525.8	856.6	615.6	659.0	461.7	638.3
August	619.7	599.1	645.8	529.4	769.7	626.3	661.6	462.3	641.3

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Table 16.15 Retail Price Index in Metro Manila by Month and by Commodity Group: 1979-1993 (continued)
(1978 = 100)

Year/Month	All items	Food	Beverages and tobacco	Crude materials except fuel	Mineral fuels, lubricants and related materials	Chemicals including animal and vegetable oils and fats	Manufactured goods classified chiefly by materials	Machinery and transport equipment	Miscellaneous manufactured articles
September	627.6	615.9	648.0	521.9	707.6	636.2	666.7	464.2	646.4
October	618.6	598.1	657.0	523.8	707.6	651.5	671.0	464.2	649.2
November	624.2	604.8	657.4	543.6	707.6	665.2	672.6	469.0	651.8
December	630.7	613.8	658.9	564.2	700.2	670.7	676.8	470.7	653.4
1992	640.1	618.1	703.5	555.0	641.7	727.9	696.7	502.4	701.4
January	631.8	614.0	673.0	551.9	684.4	671.7	685.4	472.5	651.2
February	628.3	603.2	696.1	555.3	684.5	676.5	692.7	475.9	658.8
March	628.3	598.1	700.2	551.7	684.6	697.1	704.4	479.6	668.4
April	624.8	593.5	702.8	560.3	639.1	718.3	705.7	482.4	684.5
May	632.9	607.3	704.4	550.2	634.0	726.4	699.3	489.2	698.8
June	638.1	613.4	706.7	557.5	633.9	732.4	698.8	509.6	712.9
July	649.2	630.0	706.7	557.4	633.9	736.1	701.5	516.0	720.2
August	646.8	627.2	707.8	557.7	634.0	740.6	694.3	516.0	723.1
September	656.8	641.7	710.5	566.1	633.8	753.4	695.1	522.6	724.7
October	648.4	628.9	711.4	569.0	625.7	754.8	693.4	523.4	723.1
November	650.0	631.8	711.6	539.9	625.7	761.3	694.2	520.4	724.8
December	646.1	628.5	710.3	543.4	587.2	765.8	695.8	521.6	726.2

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Table 16.15 Retail Price Index in Metro Manila by Month and by Commodity Group: 1979-1993 (concluded)
(1978 = 100)

Year/Month	All items	Food	Beverages and tobacco	Crude materials except fuel	Mineral fuels, lubricants and related materials	Chemicals including animal and vegetable oils and fats	Manufactured goods classified chiefly by materials	Machinery and transport equipment	Miscellaneous manufactured articles
1993									
January	638.9	614.5	718.4	543.8	587.3	769.2	697.2	525.7	737.3
February	642.2	614.8	721.0	544.2	587.4	773.0	702.7	526.8	738.8
March	641.1	615.1	722.0	544.2	587.4	776.3	704.9	526.8	743.0
April	641.4	612.9	722.5	544.3	587.4	782.8	712.1	528.6	748.1
May	641.1	609.2	726.6	547.8	588.2	777.5	723.3	529.8	753.2
June	649.0	617.3	727.1	552.5	588.2	776.0	741.9	531.4	754.4
July	653.2	624.2	722.7	555.1	588.2	776.0	743.5	531.5	756.0
August	657.3	628.9	729.5	556.1	588.2	779.1	746.3	535.3	758.3
September	661.9	635.8	729.4	556.8	588.3	789.0	746.3	534.0	759.2

Source: National Statistics Office, Prices Section.

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Table 16.16 Retail Price Index of Selected Construction Materials in Metro Manila by Month and by Type: 1979-1993 (1978 = 100)

YearMonth	All items	Carpentry materials	Electrical materials	Masonry materials	Painting materials and related compounds	Plumbing materials	Tinsmithry materials	Miscellaneous construction materials
1979	127.6	134.1	125.8	131.4	117.5	118.3	119.0	124.4
1980	150.5	165.7	147.3	163.9	136.2	130.9	131.9	131.3
1981	161.7	176.3	157.6	177.3	149.6	142.1	157.0	133.1
1982	167.2	174.8	165.4	197.0	156.9	149.9	169.5	128.4
1983	188.9	190.4	189.7	219.3	169.5	172.3	204.2	155.9
1984	327.8	316.5	348.2	335.9	298.7	345.0	426.9	285.6
1985	350.4	339.8	359.9	361.1	337.0	370.4	478.7	282.6
1986	339.2	336.0	354.4	352.4	338.1	374.4	406.2	277.0
1987	348.8	361.2	367.6	354.1	343.4	386.7	415.4	268.0
1988	377.0	404.1	432.6	362.7	356.4	402.4	453.6	293.6
1989	446.7	509.3	492.9	416.6	370.2	454.8	490.7	365.0
1990	503.5	565.8	522.7	478.0	397.7	538.5	512.6	438.9
1991	629.7	726.1	604.1	613.6	497.5	657.5	637.3	511.5
January	602.1	713.5	597.2	537.3	463.8	619.0	606.0	520.8
February	611.7	709.6	599.7	560.6	476.2	627.4	616.4	538.7
March	616.9	713.7	594.1	572.0	476.2	629.6	641.9	532.1
April	623.8	721.1	602.0	596.0	490.6	639.2	643.9	516.2
May	627.5	723.0	607.8	609.0	495.2	649.4	640.2	512.8
June	637.0	738.5	611.4	628.0	503.2	656.0	639.9	508.4
July	641.4	737.0	611.3	649.3	509.7	659.5	640.0	506.1
August	636.7	734.3	601.7	636.0	510.6	649.6	643.5	504.0
September	638.3	733.2	599.2	643.9	509.9	660.2	645.0	500.9
October	640.4	735.3	606.6	646.3	508.3	680.2	645.0	496.9

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Table 16.16 Retail Price Index of Selected Construction Materials in Metro Manila by Month and by Type: 1979-1993 (continued)
(1978 = 100)

Year/Month	All items	Carpentry materials	Electrical materials	Masonry materials	Painting materials and related compounds	Plumbing materials	Tinsmithry materials	Miscellaneous construction materials
November	638.9	727.1	608.7	641.9	513.2	701.1	641.9	499.4
December	641.2	727.3	609.7	642.9	512.7	718.9	643.5	502.0
1992	651.7	763.5	600.6	641.6	508.7	760.0	585.4	512.2
January	652.0	745.2	605.0	657.2	509.9	731.3	643.2	508.3
February	661.1	764.6	596.3	667.5	506.0	729.5	639.8	515.5
March	672.4	785.0	597.0	712.2	506.4	729.9	587.5	515.5
April	669.2	771.6	591.1	721.7	510.5	727.0	580.4	515.4
May	657.9	771.8	591.8	665.1	510.3	738.0	578.8	516.8
June	655.9	768.0	605.0	657.8	509.4	753.6	575.6	515.0
July	652.2	763.7	604.1	643.0	512.2	762.8	576.4	515.0
August	649.6	765.1	596.8	627.8	509.5	778.8	573.9	513.2
September	624.6	758.4	601.4	528.0	511.3	786.3	566.5	506.4
October	642.7	757.9	598.9	612.0	506.4	785.3	567.4	508.5
November	641.6	756.4	608.3	606.0	509.6	793.9	562.1	509.6
December	640.8	754.3	611.2	600.3	503.1	803.9	573.4	507.6

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Table 16.16 Retail Price Index of Selected Construction Materials in Metro Manila by Month and by Type: 1979-1993 (concluded)
(1978 = 100)

Year/Month	All items	Carpentry materials	Electrical materials	Masonry materials	Painting materials and related compounds	Plumbing materials	Tinsmithry materials	Miscellaneous construction materials
1993								
January	647.2	773.7	611.3	598.9	508.7	802.1	557.8	516.2
February	650.4	780.7	605.3	600.5	511.2	806.8	559.6	516.0
March	653.5	796.9	605.5	597.6	509.0	808.4	553.3	510.3
April	660.8	819.3	605.0	595.1	509.8	810.8	552.1	512.1
May	679.7	863.5	606.1	600.1	509.7	808.8	550.1	531.6
June	706.1	936.1	612.3	604.8	505.1	803.1	551.4	541.4
July	707.4	938.0	608.3	610.3	506.9	803.6	552.7	538.0
August	710.3	951.6	614.9	601.8	506.8	806.6	553.0	537.2
September	708.2	949.7	616.2	593.5	513.9	802.8	555.5	536.1
October	710.2	954.5	616.0	594.8	509.8	803.5	555.9	538.1

Source: National Statistics Office, Prices Section.

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Table 16.17 General Wholesale Price Index in Metro Manila by Month and by Commodity Group: 1979-1993 (1978 = 100)

Year/Month	All items	Food	Beverages and tobacco	Crude materials except fuel	Mineral fuels, lubricants and related materials	Chemicals including animal and vegetable oils and fats	Manufactured goods classified chiefly by materials	Machinery and transport equipment	Miscellaneous manufactured articles
1979	119.0	116.2	115.0	125.3	128.4	121.1	121.0	110.7	115.3
1980	140.8	133.2	134.6	137.9	203.0	135.4	146.1	123.9	140.0
1981	r161.1	156.5	147.2	r141.6	r275.3	137.7	162.8	136.9	157.7
1982	r179.0	178.4	160.2	r168.6	r289.7	147.5	r170.5	155.2	173.6
1983	r208.0	207.2	178.2	r217.7	r331.0	183.2	184.3	173.3	189.8
1984	346.5	357.3	265.9	356.0	503.7	333.9	294.6	274.1	333.1
1985	409.3	457.9	322.1	325.3	562.4	337.5	356.3	351.0	441.0
1986	402.9	465.9	359.4	310.1	370.1	324.1	373.7	371.1	474.1
1987	439.5	501.7	428.7	367.4	406.0	374.7	399.6	392.4	495.8
1988	498.5	587.7	465.1	451.4	366.5	423.4	441.0	427.4	534.2
1989	551.5	672.7	485.8	489.8	397.0	427.3	485.2	444.6	556.2
1990	607.6	747.0	511.6	476.1	578.8	422.5	546.0	489.3	593.2
1991	689.4	830.3	594.8	569.7	643.2	525.1	629.1	533.0	670.0
January	687.2	839.3	584.4	532.8	737.0	493.2	603.6	526.6	646.9
February	r663.3	r792.5	587.5	537.8	648.7	r498.3	608.2	526.9	656.3
March	664.2	789.0	590.2	559.7	607.7	505.9	618.0	527.2	670.7
April	669.4	799.2	590.1	550.0	626.4	506.5	621.4	529.4	671.3
May	665.4	780.7	591.0	556.7	639.6	515.5	627.4	529.6	671.5
June	r678.7	806.0	592.3	560.8	639.7	527.6	631.6	536.8	672.4
July	688.8	819.0	595.0	579.8	650.0	537.7	633.6	536.8	675.1

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Table 16.17 General Wholesale Price Index in Metro Manila by Month and by Commodity Group: 1979-1993 (continued)
(1978 = 100)

Year/Month	All items	Food	Beverages and tobacco	Crude materials except fuel	Mineral fuels, lubricants and related materials	Chemicals including animal and vegetable oils and fats	Manufactured goods classified chiefly by materials	Machinery and transport equipment	Miscellaneous manufactured articles
August	698.1	854.6	599.1	567.0	634.5	508.3	632.7	537.4	676.4
September	705.6	868.1	599.4	567.9	629.9	529.9	634.4	535.8	674.6
October	701.0	r843.1	599.5	584.0	645.5	641.0	537.0	675.2	675.2
November	r750..2	877.2	600.7	610.5	643.0	r561.4	643.9	536.3	674.6
December	r730.0	893.6r	608.2	629.6	615.9	571.2	653.2	536.6	675.1
1992	720.6	863.6	645.4	615.6	614.5	599.9	672.9	540.0	725.1
January	r737.6	890.3	642.7	662.0	r625.9	595.4	657.8	535.7	678.3
February	r715.5	846.8	643.5	639.4	r608.4	573.0	665.4	538.2	707.7
March	r714.6	840.5	645.0	646.7	r600.9	576.1	672.0	538.2	708.2
April	708.5	824.5	643.2	640.6	r595.7	584.0	679.0	538.5	708.3
May	r710.7	r837.6	645.7	r623.5	r609.2	r567.4	675.0	538.4	708.5
June	r717.4	r850.6	646.5	r616.6	r638.6	r560.3	675.3	538.4	724.6
July	r721.8	r870.6	644.8	r597.2	636.7	r544.3	676.6	538.4	725.9
August	718.7	865.0	646.4	594.4	624.4	547.5	675.6	538.5	735.2
September	728.6	886.6	646.3	598.0	631.3	547.5	673.4	539.3	744.4
October	724.2	875.0	645.8	603.8	626.4	542.9	676.1	540.1	744.5
November	727.5	893.2	647.1	585.5	592.2	542.2	674.5	548.3	752.8
December	721.5	882.4	647.6	580.0	583.8	538.7	674.0	548.4	763.0

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Table 16.17 General Wholesale Price Index in Metro Manila by Month and by Commodity Group: 1979-1993 (concluded)
(1978 = 100)

Year/Month	All items	Food	Beverages and tobacco	Crude materials except fuel	Mineral fuels, lubricants and related materials	Chemicals including animal and vegetable oils and fats	Manufactured goods classified chiefly by materials	Machinery and transport equipment	Miscellaneous manufactured articles
1993									
January	r713.7	860.8	647.5	584.1	r592.1	538.7	672.6	548.4	770.2
February	r709.5	846.6	646.0	589.0	r584.7	546.3	676.1	552.9	773.7
March	r706.7	844.3	649.7	585.5	r573.2	538.3	675.7	553.0	773.6
April	703.2	829.7	648.1	587.4	604.5	539.4	675.4	552.8	777.3
May	r705.1	r834.7	648.2	590.1	599.8	541.4	673.4	552.8	777.6
June	705.4	835.2	648.2	590.0	594.7	544.7	674.4	552.7	777.6
July	709.8	842.4	648.5	603.6	576.0	555.4	675.1	552.7	777.6
August	714.1	851.6	649.5	607.0	575.4	554.9	675.8	552.7	777.7
September	710.6	843.4	651.5	610.9	566.8	553.0	677.0	552.7	777.7

Source: National Statistics Office, Prices Section.

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Table 16.18 Construction Materials Wholesale Price Index in Metro Manila by Commodity Group: 1990-1993 (1985 = 100)

Commodity Group	Year 1990	1991	1992	[a]1993
All Items	157.5	182.6	189.3	[r]194.5
Sand, stone and gravel	221.8	258.3	265.4	290.5
Cement	157.9	193.0	200.7	175.4
Lumber	176.2	208.5	221.2	248.3
Plywood	134.5	163.5	177.0	186.4
Wood products	165.7	202.8	218.0	228.7
Fuels and lubricants	104.8	152.1	131.6	127.5
Asphalt	124.7	189.8	163.0	163.0
Glass and glass products	139.6	155.7	158.0	157.8
Hardware	145.3	175.8	183.8	184.2
Metal pipes	160.9	184.1	200.2	206.8
PVC pipes	168.6	188.9	180.0	182.8
Concrete products	160.5	183.8	205.3	205.4
Plumbing fixtures	148.2	180.5	183.0	183.5
Paints	102.1	124.1	124.2	125.2
Reinforcing steel	171.2	182.7	187.6	189.3
Structural steel	142.3	157.0	153.2	146.9
GI. sheets	156.4	178.0	170.3	161.5
Aluminum and other metal products	118.6	125.2	125.0	129.9
Exterior electrical equipment/supplies	128.2	140.3	210.8	222.1
Interior electrical fixtures and devices	130.7	154.6	156.8	160.2
Tileworks	121.4	153.5	159.1	155.3
Blasting materials	112.2	127.0	129.2	129.2
Machinery and equipment rental	182.8	182.8	182.8	[r]254.8
Electrical rough-in materials	134.2	148.6	157.3	162.3
UPVC water pipes	177.8	199.5	178.7	179.3

[a] As of October only.

Source: National Statistics Office, Prices Section.

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Table 16.19 Stock Price Index for Makati and Manila: 1986-1992
(1985 = 100)

Year	Overall	All items	Metallic ore	Non-metallic ore	Manu-factu-ring	Con-struc-tion	Whole-sale and retail	Transpor-tation and communi-cation	Finan-cing	Servi-ces
1986	194.3	175.3	188.7	145.8	387.4	772.8	835.3	401.0	148.8	93.4
1987	448.6	538.0	548.0	515.8	511.4	697.8	3,716.2	927.7	260.7	99.1
1988	468.3	528.2	570.2	434.8	626.6	541.8	3,812.9	494.0	290.4	96.2
1989	669.8	694.5	742.2	588.3	768.4	712.5	3,905.8	892.4	545.1	144.2
1990	587.2	562.4	619.6	435.2	503.5	625.6	4,346.4	519.2	598.6	155.0
1991	615.4	627.5	706.4	451.9	409.4	700.2	4,418.0	1,332.6	618.6	204.1
1992	722.2	611.0	643.8	537.4	441.4	702.6	4,128.7	2,348.4	826.4	170.0

Source: Central Bank of the Philippines.

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Table 16.20 Volume and Value of Business Securities Traded in Manila and Makati Stock Exchanges: 1976-1993 (Volume in million shares; value in million pesos)

Year	Total		Manila Stock Exchange		Makati Stock Exchange	
	Volume of shares traded	Value traded	Volume of shares traded	Value	Volume of shares	Value
1976	248,581.9	6,791.9	128,161.1	3,360.3	120,411.8	3,430.5
1977	129,406.9	2,505.1	63,118.0	1,208.1	66,288.9	1,297.0
1978	153,029.7	5,370.8	70,293.1	2,513.6	82,736.6	2,857.2
1979	130,042.0	4,953.1	56,189.9	2,249.7	73,852.1	2,703.4
1980	101,511.4	4,651.9	40,074.5	2,067.5	61,436.9	2,584.4
1981	51,683.3	1,291.3	19,677.3	607.8	32,097.3	684.1
1982	41,308.8	1,214.8	21,491.2	724.0	19,817.6	490.7
1983	37,113.6	5,364.5	16,727.3	3,365.9	20,386.2	1,998.6
1984	23,615.6	2,082.9	8,912.9	648.9	14,702.8	1,434.0
1985	11,639.4	2,067.2	6,992.1	1,557.3	4,647.3	509.9
1986	58,601.9	11,471.1	37,887.6	8,362.2	20,714.3	3,108.9
1987	315,030.8	31,345.1	207,750.7	19,265.7	107,280.1	12,079.4
1988	221,243.8	18,257.5	141,718.5	10,064.9	79,525.3	8,192.6
1989	417,632.3	50,731.4	250,871.0	28,297.3	166,761.3	22,334.1
1990	266,772.3	28,568.8	141,929.6	13,213.5	124,842.7	15,355.3
1991	279,581.7	39,407.2	154,700.6	17,688.9	124,881.1	21,718.3
1992	547,191.2	76,898.6	290,424.9	34,905.3	256,766.3	41,993.3
1993	636,615.4	182,221.9	342,848.9	86,617.7	293,766.5	95,604.2

Note: Details may not add up to totals due to rounding.

Sources: Manila and Makati Stock Exchanges.

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Table 16.20a Volume and Value of Business Securities Traded in Manila and Makati Stock Exchanges by Sector: 1978-1993 (Volume in million shares; value in million pesos)

Year	Total		Mining		Oil		Commercial and industrial	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
1978	153,029.7	5,370.8	57,620.6	1,872.0	91,943.1	2,375.4	3,466.0	1,123.2
1979	130,042.0	4,953.1	82,881.8	1,926.7	43,450.9	2,251.4	3,709.3	774.9
1980	101,511.4	4,651.9	42,967.8	2,622.2	55,351.7	1,228.4	3,191.9	801.3
1981	51,683.3	1,291.3	18,089.9	622.2	32,830.6	366.2	762.8	302.9
1982	41,308.8	1,214.8	12,279.2	447.8	28,956.8	390.7	72.7	376.3
1983	37,113.6	5,364.5	23,151.9	1,234.7	13,697.2	145.6	264.5	3,984.2
1984	23,615.6	2,082.9	15,062.4	638.8	8,465.7	41.9	87.5	1,402.2
1985	11,639.4	2,067.2	4,224.5	286.5	7,345.9	46.4	68.9	1,734.4
1986	58,601.9	11,471.1	24,395.1	3,211.6	33,829.2	359.4	378.5	7,900.0
1987	315,030.8	31,345.1	119,725.7	15,153.7	194,715.0	6,592.9	590.1	9,598.5
1988	221,243.8	18,257.5	79,027.1	6,939.7	141,770.7	3,097.4	445.9	8,220.5
1989	417,632.3	50,731.4	127,264.1	11,749.1	288,074.6	7,849.1	2,293.6	31,133.3
1990	266,772.3	28,568.8	86,011.5	4,080.7	177,310.1	3,955.7	3,450.7	20,532.4
1991	279,581.7	39,407.2	42,800.4	1,293.9	231,172.4	5,980.3	5,608.9	32,233.0
1992	547,191.2	76,898.6	64,093.2	1,944.3	472,567.9	13,347.2	10,530.2	61,607.1
1993	636,615.4	182,221.1	70,146.8	9,614.7	450,079.8	11,420.0	16,388.7	161,187.6

Note: Details may not add up to totals due to rounding.

Sources: Manila and Makati Stock Exchanges.

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Chapter 17
Domestic, Wholesale and Retail Trades, Services and Tourism

17.1 Domestic Trade

To meet the demands of various regional development programs, the National Economic and Development Authority (NEDA) and the National Census and Statistics Office (NCSO), now National Statistics Office (NSO), jointly initiated the Regional Commodity Flow Project in 1976, the primary task of which is to construct an inter-regional and inter-industry relations table which traces the inflow and outflow of goods in the 13 regions of the country. The NSO through its Domestic Trade and Shipping Section is the lead agency in the compilation of these statistics. The Philippine Airlines (PAL), Philippine National Railways (PNR), Bureau of Customs (BOC) and the Philippine Ports Authority (PPA), are the primary sources of air, rail and coastwise trade statistics, respectively.

The water and air trade statistics cover all regions of the country while rail trade statistics include only three regions with rail transport system, namely: the National Capital Region (NCR) and Regions IV and V.

The source document for water trade statistics is the Coasting Manifest (Bureau of Customs Form No. 78) which records the flow of commodities from one port to another. For air trade statistics, the Air Waybill (PAL Form No. F-0777) is used as a supporting document to furnish all the relevant information per air trade transaction. The Daily Report of outgoing shipments (DROS) which summarizes the day's transactions based on the express/freight shipping records or waybills issued for the day, provides data for rail trade statistics.

Commodities for air, water and rail trade statistics are coded based on the Philippine Standard Commodity Classification (PSCC). Special transactions (e.g. cash) which are not covered by the PSCC are provided with three-digit codes other than those found in the PSCC.

17.1.1 Regional Commodity Flow by Mode of Transport

Table 17.1 shows that a total of 23.28 billion tons of commodities valued at P224.4 billion flowed through the air, water and rail systems throughout the country in 1991.

The bulk of movement occurred along the water transport system as it carried 99.71 and 97.35 percent of the total quantity and value, respectively, of the regional commodity flow. This clear preference of traders for utilizing water

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transport facilities may be explained by the system's low freight charges, large carrying capacity and wide service coverage.

Majority of the commodities that were carried through the three modes of transport were composed of mineral fuels, lubricants and related materials (30.32 percent) and food and live animals (20.55 percent). In terms of value, the same commodity sections registered the highest, comprising 21.6 and 22.10 percent, respectively, of the total. See Tables 17.1 and 17.5.

Almost one third (31.65 percent) of the value of commodities from other regions were taken in by NCR. About one fourth was shared by two regions, in particular, Central Visayas (17.48 percent) and Western Visayas (8.33 percent). As to outflows of commodities, National Capital Region reported the highest value with P38.06 billion or 16.96 percent of the total. Not far behind were Central Visayas (13.67 percent) and Southern Tagalog (13.15 percent). See Tables 17.2 and 17.3.

17.1.2 Coastwise Trade

The transport of consigned goods from one port to another within the country is called *coastwise trade*. In 1991, the total quantity of coastwise trade was posted at 23.21 million tons valued at P218.47 billion, an increase of 22.85 and 42.43 percent, respectively, from the 1990 levels.

More than half of the quantity of goods transported through the water transport system consisted of mineral fuels, lubricants, and related materials (30.41 percent) and food and live animals (20.49 percent). These commodities accounted for 22.18 and 22.41 percent, respectively, of the total value of goods carried via the system. See Table 17.1.

Table 17.2 shows that 43.78 percent of the value of outgoing commodities were absorbed by three regions - NCR, 16.96 percent; Central Visayas, 13.67 percent and Southern Tagalog, 13.15 percent. The value of goods from NCR accounted for the largest share of the total outflows at P38.06 million or 16.96 percent; followed by Central Visayas, 13.67 percent; Southern Tagalog, 13.15 percent and Central Luzon, 12.45 percent.

From 1989 to 1991, local ports in Limay (Bataan) and Manila consistently landed on the top five busiest coastwise trading centers. In 1991, the latter recovered from a relatively poor performance the previous year by registering a remarkable increase of 120.00 percent in quantity and 102.33 percent in value.

Goods loaded in Limay (Bataan) reached an all-time high of 4.14 million tons worth P27.68 billion as compared to Manila's 2.42 million tons valued at P36.42 billion. While there was a big difference in the quantity of goods loaded in the two ports of origin, their values slightly differed. This is because the goods loaded in Manila were valued higher (P15.03 per ton) than those in Bataan (P6.68 per ton). Completing the country's top five (5) busiest local ports are those in the cities of Cebu, General Santos and Davao. These five ports had an aggregate load of 9.19 million tons worth P95.72 billion representing 39.58 percent share of the total quantity. See Table 17.4.

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17.1.3 Airway Trade

The movement of consigned goods from one airport to another within the country is known as *airway trade*. The total quantity and value of goods traded via the air transport system in 1991 amounted to 46.78 million tons valued at P5.79 billion.

Of the total quantity of commodities carried by air transport, 50.72 percent were accounted for by food and live animals. Miscellaneous manufactured articles posted a 28.95 percent share. However, in terms of value, P3.88 billion or 67.04 percent of the total was from commodities and transactions not classified elsewhere in the PSCC. This is expected because cash (money) and nonmonetary (gold) goods are usually transported through the safest and fastest means possible. Of the total value, 27.19 percent was shared by food and live animals (10.14 percent), miscellaneous manufactured articles (8.62 percent), and machinery and transport equipment (8.43 percent). See Table 17.1.

More than half (62.90 percent) of the value of air trade commodities was received by NCR. In terms of value of air trade outflows, Southern Mindanao and NCR gave the two largest shares of 45.66 and 27.19 percent, respectively. Located in these regions are the largest and busiest airports in the country. Refer to Table 17.2.

17.1.4 Railway Trade

Consigned commodities transported through railroads is called *railway trade*. The total quantity and value of railway trade in 1991 reached 21.02 million tons worth P156.59 million. Crude materials, inedible except fuels comprised the bulk of commodities that moved through the rail transport system (53.58 percent of the total quantity). Food and live animals (24.40 percent) and manufactured goods classified chiefly by material (10.14 percent) accounted for some of the remaining rail trade movement.

Table 17.1 shows that food and live animals valued at P46.71 million comprised 29.83 percent of the total value of rail trade. Manufactured goods classified chiefly by material; goods classified under crude materials, inedible, except fuels; and miscellaneous manufactured articles also contributed significantly with shares of 16.89, 15.26 and 15.03 percent, respectively.

With the regular operation of the Philippine National Railways (PNR) in the Bicol Region, its provinces registered the largest percentage of outflows (50.96 percent of the total value) as well as inflows (51.59 percent). NCR absorbed 26.75 percent of rail trade and sent out goods amounting to 40.13 percent of the total value. See Table 17.2.

17.2 Wholesale and Retail Trade

The Annual Survey of Establishments (ASE). The Annual Survey of Establishments is a comprehensive collection and compilation of statistical informa-

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tion pertaining to the business operations of the country's establishments as classified under the 1977 Philippine Standard Industrial Classification (PSIC). The data collected from this survey provide the government and private sectors with a reliable source upon which they can formulate policies and evolve economic development plans and programs.

The different economic activities covered by this survey are divided into two sectors - Industrial and Non-industrial. Under the Industrial sector are the following: mining and quarrying; manufacturing; electricity, gas and water; and construction. The Non-industrial sector includes wholesale and retail trade; transportation, communication and storage; financing, insurance, real estate and business services; community, social and personal services; and public education and health services.

The 1990 Annual Survey of Establishments is the sixteenth of the series conducted by the NSO. It was preceded by those taken in 1965, 1968, 1969, 1973, 1974, 1977, 1979, 1980, 1982, 1984, 1985, 1986, 1987 and 1989. The Annual Survey of Establishments is conducted between Census of Establishments.

Definition of Terms. For a better understanding of the statistics on the sectors on wholesale and retail trade; community, social and personal services; and private education and health services which are covered in this chapter, the users are referred to the Definition of Terms in Chapter 13 (Manufactures) of this book and the **1989 Philippine Yearbook.**

Paid employees - persons who work in or away from the establishment, receive compensation and are under the control of the establishment. Included are all employees working on a full- time or part-time basis and those who are on sick leave, paid vacation or holiday. Excluded are consultants, home workers and workers receiving commissions only.

Subsidies - special grants in the form of financial assistance or tax exemption or tax privilege given by the government to aid and develop an industry or production and to protect it against competition. For the public services sector, this item includes budgetary allocation from government.

Fixed Assets - physical assets expected to have a productive life of more than one year and intended for use and/or being used by the establishment. Included are land, buildings, fixtures, machinery, tool, furniture, office equipment, vehicles and the like.

Indirect taxes - all taxes, other than income tax, incidental to the production or sale of goods and services rendered by the establishment which are chargeable as expenses including excise and sales tax, business license, BIR stamps, franchise, real estate and other local taxes.

Gross Margin - the difference between the value of goods on account (including commission received on sales on account of others) during the inquiry period and the gross cost of these goods. The gross cost of goods is the value of purchases of goods intended for sales, adjusted for stock change of these goods during the inquiry period.

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Labor Productivity - measure of worker's efficiency or effectiveness, expressed as the ratio of value added to the number of paid employees.

17.2.1 Wholesale and Retail Trade

Wholesale trade is the resale (sale without transformation) of new and used goods to retailers; to industrial, commercial institutions or professional users; to wholesalers; and to the government wholesale merchants, industrial distributors, exporters and importers; separate sales office maintained by manufacturing enterprises and their agents; commodity exchanges; petroleum bulk stations; assemblers, buyers and cooperative marketing associations for the selling of farm products at wholesale price. Wholesalers who physically assemble, sort and grade goods in large lots; break bulk, repack and bottle (except in airtight containers) and distribute in smaller lots; store, refrigerate, deliver and install goods, and engage in sales promotion for customers are included. Scrap metal, waste and junk dealers are also included.

Specifically, the wholesale trade sector is divided into establishments engaged in the following: wholesaling of farm, forest and marine products; processed food, beverages and tobacco products; dry goods, textile and wearing apparel; construction materials and supplies; office and household furniture, furnishings and appliances and wares; dealing of machinery and equipment including transport equipment; minerals, metals and industrial chemicals except crude petroleum products dealing and petroleum products, wholesaling; and wholesale trade, not elsewhere classified.

Retail trade is the resale or sale without transformation of new and used goods for personal or household consumption. This includes regular retail stores such as gasoline filling stations, retail motor vehicle dealers and consumer cooperatives. Establishments engaged in selling to the general public, from displayed merchandise products such as typewriters, stationery, lumber or petrol, are classified in this group although these sales may not be for personal or household consumption or use. However, establishments which sell such merchandise to institutional or industrial users only are classified in wholesale trade. Also classified in retail trade are establishments primarily engaged in renting goods to the general public for personal or household use, except amusement and recreational goods such as boats and canoes, motorcycles and bicycles and saddle horses.

Based on the 1990 Annual Survey of Establishments on Wholesale and Retail Trade, the country had 7,886 large establishments engaged in wholesaling and retailing, an increase of 13.37 percent over the 6,956 recorded in 1989. *Large establishments* refer to those establishments with an average total employment (ATE) of ten or more while *small establishments* are those with an ATE of less than ten. Of the total, 3,003 or 38.08 percent were engaged in wholesale trading. Among the wholesale industry groups(except wholesale trade, n.e.c) machinery and equipment, including transport equipment, reported the biggest number of establishments with 545 or 6.91 percent of the total. Wholesalers of minerals,

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metals and industrial chemicals except crude petroleum products followed with 417 firms (5.29 percent). Dealers of processed food, beverages and tobacco products registered the third biggest number of establishments at 402 (5.10 percent). Wholesalers of petroleum products were least with 52 (0.66 percent).

Retail trade establishments, totalling 4,883 accounted for 61.92 percent of all industries covered. Retailers of construction materials and supplies posted the largest number at 977 or 12.39 percent of the total. This was followed by retailers of food, beverages and tobacco with 755 establishments (9.57 percent). Retailers of books, office and school supplies, including newspapers and magazines, contributed the least number of establishments (2.41 percent or 190). See Table 17.6.

The National Capital Region (NCR) topped all regions in the number of establishments with 3,886 or 49.28 percent. Southern Mindanao came next with a wide margin of 3,318 at 568 establishments or 7.20 percent. Following closely, with 563 trading firms or 7.14 percent was Central Visayas. The least number was registered by Cordillera Administrative Region (CAR) with 84 establishments (1.07 percent).Refer to 17.7.

In 1990, the wholesale and retail trade sector provided an employment of 247,406 whereby 240,937 or 97.38 percent were paid. It was 14.66 percent higher than the 215,774 posted in 1989. More than half (58.07 percent) of these employees worked in retail trade establishments while the remaining 41.93 percent rendered services for wholesalers. On the average, there were 31 paid employees per wholesale and retail trade establishment in the country.

The top three wholesalers(excluding those in wholesale trade, n.e.c.) which registered the most number of paid employees were the following: machinery and equipment including transport equipment dealers (20,530); minerals, metals and industrial chemicals except crude petroleum dealers (15,180); and farm, forest and marine products wholesalers (14,917). On the other hand, wholesalers of dry goods, textile and wearing apparel registered the least number of paid workers at 1,150.

On the average, 34 employees were paid by wholesale trade establishments. Wholesalers of petroleum products paid an average of 87 employees in contrast to wholesalers of dry goods, textile and wearing apparel with 19.

The largest number of paid employees in 1990 was generated by retailers of dry goods, textile and wearing apparel at 40,854 or 16.96 percent of the total for the whole industry. This number posted an average of 57 employees per establishment.

By region, NCR outnumbered the other regions in terms of employment. It registered 144,434 workers or 58.38 percent. Central Visayas came next with 22,612 employees or 9.14 percent followed by Southern Mindanao with 16,264 employees or 6.57 percent. Meanwhile, CAR had the least employment with only 1,701 or 0.69 percent.

Total compensation increased by 30.13 percent, from P9.58 billion to P12.46 billion in 1990. It posted an average annual compensation of P51,727.37

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per employee. Wholesale trade employees were paid an annual average salary of P70,384.87 while retailers paid their workers an average of P38,068.65.

The highest compensation of P131,865.85 per employee was paid by wholesalers of petroleum products. This record was more than twice the national average compensation. Employees of processed food, beverages and tobacco products wholesalers were the second highest paid at P88,226.31. On the other hand, retailers of food, beverages and tobacco products were being paid the lowest at P30,754.51 per employee.

Among the regions, NCR paid the highest average annual salary of P61,640.98 per employee which was higher than the national average. Outside this region, the average annual compensation ranged from P31,617.97 (Cagayan Valley) to P46,171.65 (Western Visayas).

Total revenue showed an increase of 40.69 percent over the P218.50 billion generated in 1989. Wholesalers accounted for 66.52 percent (P204.48 billion) while retailers earned the remaining 33.48 percent (P102.93 billion).

Petroleum and petroleum products wholesalers recorded the highest revenue at P63.63 billion which was about 20.70 percent of the total. Other top earners include wholesalers of processed food, beverages and tobacco products (P45.84 billion or 14.91 percent), retailers of dry goods, textile and wearing apparel (P23.27 billion or 7.57 percent) and dealers of minerals, metals and industrial chemicals, except crude petroleum products (P20.54 billion or 6.68 percent).

Again, NCR contributed more than half (P211.90 billion or 68.93 percent) of the total revenue for the year. Central Visayas came next with P20.93 billion. The least earnings was posted by CAR at P1.34 billion.

Total cost incurred by wholesalers and retailers for 1990 reached P278.60 billion. This was P78.58 billion higher than that recorded in 1989. Some P183.85 billion or 65.99 percent were used by wholesalers and the remaining P94.75 billion by retailers.

Petroleum and petroleum products wholesalers consumed the biggest amount at P57.30 billion while the least cost was incurred by dry goods, textile and wearing apparel wholesalers at P469.59 million or only 0.17 percent of the total.

By region, the largest spender was NCR at P192.58 billion accounting for more than twice the total cost of all the other regions combined. Central Visayas spent some 7.24 percent (P20.18 billion) of the total. The least spender was CAR at P1.25 billion.

Total capital expenditures for the year amounted to P4.17 billion, a decrease of 3.22 percent over the P4.31 billion recorded in 1989. Of the total, 64.10 percent (P2.67 billion) was put up by wholesale trade sector while 35.90 percent (P1.50 billion) by the retail trade sector.

By industry, the top spenders were wholesalers of machinery and equipment including transport equipment (P708.97 million); wholesalers of petroleum and petroleum products (P625.96 million); and retailers of dry

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goods, textile and wearing apparel (P468.46 million). The least capital outlay was registered by wholesalers of dry goods, textile and wearing apparel at P2.61 million or 0.06 percent of the total.

On the regional level, NCR spent the biggest amount on capital goods at P2.94 billion, which was more than twice the total of all other regions put together. Central Visayas and Southern Mindanao came next with P389.56 million and P227.10 million, respectively.

Wholesalers of processed food, beverages and tobacco products earned the biggest gross margin on goods sold worth P12.74 billion. This amount accounted for 21.51 percent of total gross margin. On the other hand, dry goods, textile and wearing apparel wholesalers registered the least at P122.39 million. In contrast, retailers of these goods posted the biggest gross margin of P5.18 billion.

The highest gross margin among the regions was posted by NCR at P37.35 billion while the least amount of P176.14 million was recorded by CAR.

Value added generated by all industries increased by 63.98 percent, from P30.21 billion in 1989 to P49.54 billion in 1990. Wholesalers of processed food, beverages and tobacco products contributed the biggest share of P10.85 billion (21.91 percent) to the total. On the other hand, the least contribution of P87.84 million or 0.18 percent came from wholesalers of dry goods, textile and wearing apparel.

By region, the biggest value added was recorded by NCR at P33.28 billion or 67.18 percent of the total. Western Visayas and Central Visayas came next with P3.16 billion and P2.32 billion, respectively. The least value added was recorded by CAR at P121.90 million. See Tables 17.6 and 17.7.

17.2.2 Agricultural Products in Domestic Trade

A large portion of the country's local trade is composed of agricultural products. This is primarily because the Philippine economy is still predominantly based on agriculture. Thus, the government, through the Department of Agriculture (DA) and in coordination with other agencies, had intensified its efforts to establish policies and programs conducive to agricultural growth and to provide the necessary support services to the agricultural sector. It accelerated the building of farm-to-market roads and bridges and other infrastructure projects, made way for a more open and supportive policy for the acquisition of farm machinery and other post-harvest facilities, upgraded services in the country's ports, expanded rural markets and promoted people's organizations and cooperatives. To improve yields and quality of agricultural products, reduce post-harvest losses and inefficiencies and foster technology transfer, research programs were encouraged and corrective actions were prepared.

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17.2.2.1 The National Food Authority

The National Food Authority (NFA) is the government agency tasked to promote the integrated growth and development of the food industry. As mandated in its original and amended charters of creation of 1972 and 1981, the NFA is responsible for the protection of farmers, food traders and consumers through marketing management and technology, price stabilization and control and the provision of timely and adequate information. With this multi-faceted role, the agency was able to uplift the industry particularly the grains industry, through the implementation of *Masagana 99*. This trend, however, was short-lived as the country experienced political turmoil and economic deterioration towards the end of the 70s to the mid-80s. In 1986, by virtue of Executive Order No. 1028, the new administration changed the structure of the NFA. This scheme deregulated the functions of the industry into four, such as: Stabilization, Marketing Development, Industry Regulation and Corporate Administration. The shift in the role of the agency as a catalyst to industry development can be attributed to the national industry liberalization, import deregulation and privatization of production and trading activity policies adopted by the government.

In 1989, a series of natural calamities hit the country, thus decreasing rice production. This caused the country to resort to importation. In the same year, the NFA established the *Bigasang Bayan*(s), its centerpiece program for 1989, to protect consumers against high prices of rice and to assure them of its adequate supply.

On October 30, 1991, as part of its deregulation scheme, the NFA launched Project Self-Reliance in Tagum, Davao del Norte. This project aimed at promoting cooperatives development and support among farmers particularly in the provinces.

Privatization of some of NFA's fixed assets such as the Food Terminal, Incorporated (FTI), Southern and Northern Grains Complex and other post-harvest facilities (warehouses, trucks, platform scales, and others) are currently under negotiations. This Divestment Plan is being handled by the Department of Agriculture Privatization Group.

The NFA is responsible for the protection of the interest of the country's rice and corn farmers. It serves as an alternative market for their produce while assuring a price which will give them fair returns on their production activities. The presence of the NFA in the market also safeguards the welfare of the consumers by stabilizing the prices and supply of the staple food.

Procurement is the centerpiece of activity at the NFA. In 1990 the agency was able to acquire grains (rice and corn) more than its previous year's procurement. A major factor behind these increases was the government's decision to raise its buying price for both grains.

The consumer sector is said to be the ultimate beneficiary of an efficient management of the grains industry. Over the years, the NFA continuously

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worked on its goal of keeping every consumer assured of sufficient supply of basic cereals at reasonable prices at all times.

In 1992, rice distribution increased significantly as compared to previous years. This was attributed to intensified rice distribution to NFA-accredited rice retailers and the newly-adopted Payment-In-Kind scheme in the payment of the agency's obligations. Another contributory factor in the high performance was the relatively low NFA release prices(to consumers) compared to the prevailing retail prices of regular and well-milled rice.

The NFA played a very significant role in the grains market as the country continued to experience a major slump in production in 1990 brought about by the *El Niño* phenomenon, the July 16 earthquake and the typhoons. To meet the demand for the staple grains, the government resorted to importation. In 1993, the domestic supply of rice was augmented by imported Thai rice. The Food Agency successfully enlisted the active participation of licensed and accredited retailers associations in the putting up of around 5,500 *Bigasang Bayans* and in tapping them as NFA rice outlets in their individual capacities. This enabled NFA to respond with dispatch during times of calamities/emergencies, consistent in its commitment in maintaining available supply of rice at affordable price when and where it is needed.

The grains businessmen not only serve as a vital link between the grains producers and consumers but act as NFA's partners in keeping the staple food available in the market. Corollary to this, the agency exercises police powers over this sector in the enforcement of trading laws and regulations for the protection of the consuming public.

NFA's Project Self-Reliance. The joint efforts of the DA, Land Bank of the Philippines (Land Bank) and NFA is focused primarily on increasing the farmers' income through cooperative development. These agencies preferred such measure over the traditional subsidy scheme wherein the beneficiaries were given financial assistance only to provide partial and temporary relief. Under the new program called Project Self-Reliance (PSR), farmers can now avail of the needed resources to improve income in a sustainable manner. The project also trains farmers organizations (FOs) to be self-reliant and lessens dependence on government subsidies and intervention.

The program was envisioned to be piloted in Luzon, Visayas and Mindanao. Designated areas should be determined by the NFA and Land Bank in coordination with Local Government Units (LGUs). On October 13, 1991 the first pilot area was launched in Tagum, Davao del Norte followed by those in Muñoz, Nueva Ecija and Concepcion, Tarlac.

To ensure the success of PSR, the DA shall provide the technical assistance on production and facilitate the acquisition of seeds and fertilizer. The NFA is tasked to lease its facilities; provide institutional, entrepreneurial and post-harvest technology training, marketing information and other support services and allow free market by suspending its buying and selling operations in the area. The Land Bank, on the other hand, shall be responsible for the financial needs

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of the FOs subject to its lending policies and procedures and provide training on financial management.

17.2.2.2 The Philippine Cooperatives Development

Cooperatives contribute to the development of domestic trade by serving as channels for the effective delivery of goods and services to and from the farm to ensure the proper use and management of resources. They serve as a major institutional effort to strengthen community welfare. Formation of cooperatives has been encouraged among farmers to help them in the marketing of their produce, the preparation and protection of their requirement for farming and in gaining better access to rural credit. By the very nature of their organization, cooperatives also serve to improve the bargaining position of individuals through collective efforts, thereby functioning as equity vehicles for members.

Government participation in the promotion of cooperatives started in 1915 with the enactment of Rural Credit Cooperative Association Act (RA No. 2508) which created and regulated agricultural credit associations. Later, the Cooperative Marketing Law was passed to organize farmers into marketing cooperatives. This law which provided for the organization of Farmers Cooperative Marketing Association (FACOMAs) was aimed at maximizing the farmers' efficiency in marketing and in the distribution of their products to consumers.

Though the cooperative has taken root in our country as a means of improving the lives of the Filipinos, it has remained stunted until the 60s. During the 70s, cooperatives began to perk up and show signs of optimistic growth. On April 14, 1973, Presidential Decree No. 175 ("Strengthening the Cooperative Movement") was enacted to further encourage the cooperative movement in support of the agrarian reform program. Under this decree, the cooperative structure included the following: *Samahang Nayons* (SNs), Area Marketing Cooperatives (AMCs) and Cooperative Rural Banks (CRBs). The *Samahang Nayons* were pre-cooperatives of 25 to 200 small farmers concerned with the promotion of discipline, education and savings mobilization but were not allowed to engage in any business activity. Ten or more SNs could establish an Area Marketing Cooperative to engage primarily in procuring production inputs for its members' produce at better prices. Cooperative Rural Banks are set up as the SNs' financial links.

On November 1, 1972, P.D. No. 175 placed all agricultural and nonagricultural cooperatives under one agency, the Bureau of Cooperatives Development (BOCD) under the Department of Local Government and Community Development (DLGCD).

The underlying agricultural thrust and productivity orientation of cooperatives led to the consequent transfer of the BOCD to the Department of Agriculture and Food in May 1980. Among the first steps taken by the BOCD under the new set-up was its involvement in the creation of the Cooperative Union of the Philippines (CUP), a private umbrella organization that coor-

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dinated the activities of the cooperatives. Since its inception in 1980, the CUP has developed domestic and international lines. It also drew up a Cooperative Development Plan which is continually being implemented up to the present.

In January 30, 1987, when the DA was reorganized under Executive Order No. 116, the BOCD was renamed Bureau of Agricultural Cooperatives Development (BACOD) which was mandated to formulate an integrated system of development and evaluation of agricultural cooperatives; provide assistance in the establishment of agricultural cooperatives in the rural communities; and evolve a program to promote the economic viability of agricultural cooperatives.

Cognizant of how cooperatives can alleviate poverty and promote self-sufficiency among Filipinos, the Aquino administration signed into laws Republic Act 6938 creating the Cooperative Code of the Philippines and Republic Act 6939 which renamed BACOD into Cooperative Development Authority (CDA) on March 10, 1990. Consequently, CDA was transferred from the auspices of the DA to the Office of the President. It continued its primary task of administering, developing and promoting the viability of cooperatives nationwide as instruments of equity, social justice and economic power.

As of December 31, 1991, a total of 13,715 cooperatives were confirmed and registered. The number of registered cooperatives were broken down as follows: 9,308 multi-purpose agricultural cooperatives, 11,692 multi-purpose nonagricultural cooperatives, 1,393 credit cooperatives, 387 consumers' cooperatives, 274 marketing cooperatives, 255 service cooperatives, 234 producers cooperatives, 100 cooperative federations, 36 cooperative unions, and 26 CRBs and AMCs.

By region, the biggest number of registered cooperatives during the same period was by Central Luzon, totalling 1,967 followed by Southern Tagalog with 1,551. Other regions reaching the 1,000 mark were: Ilocos, 1,399; Southern Mindanao, 1,182; Western Visayas, 1,132; Bicol, 1,091; and Cagayan Valley, 1,056.

17.3 Community, Social and Personal Services

Data on Community, Social and Personal Services (Private Services) sector were obtained from the Annual Survey of Establishments (ASE) conducted by National Statistics Office (NSO). Classified under this sector are: sanitary and similar services; private education services; private medical, dental and other health services; research and scientific institutes, public and private; social welfare services; motion picture and other entertainment services; amusement and recreational services, n.e.c.; repair of motor vehicles and motorcycles; repair services, n.e.c.; laundries, laundry services, and cleaning and dyeing plants; barber shops and beauty shops; photographic studios, including commercial photography and related services; personal services, n.e.c.; restaurants,

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cafes and other eating and drinking places; and hotels, motels and other lodging places. Refer to Tables 17.8 and 17.9 for statistics.

The 1990 ASE on Private Services covered a total of 8,410 firms (with average total employment of 10), up by 9.99 percent from the 7,646 counted in 1989. Majority (34.47 percent or 2,899) were restaurants, cafes and other eating and drinking places; while the smallest group was the research and scientific institutes numbering only 9 (0.11 percent).

The Metropolitan Manila Area (NCR), the hub of services activities in the country, continued to have the biggest concentration of establishments at 3,388 (40.29 percent). It was, however, the Southern Tagalog region which posted the fastest growth rate of 14.95 percent (highest for the sector). Only the Cordillera Administrative Region (CAR) recorded a decline in number, down by 3.23 percent to 180 from 186 in 1989.

Total employment sector numbered 343,634 in 1990, an increase of 23,553 persons (7.36 percent) compared to the 1989 level. Paid employees made-up 97.22 percent (334,068) while the rest (2.78 percent or 9,566) were working owners and unpaid workers.

Most of paid labor (41.71 percent or 139,331) were employed by the private educational institutions. Those working in the social welfare establishments comprised the smallest group at 364 (0.11 percent).

In spite of the general increase in the number of establishments in their locality, the Ilocos, Cagayan Valley and Northern Mindanao registered leaner workforces from their 1989 levels. The CAR reported the biggest decrement of 16.99 percent, down to 5,545 from 6,680.

A total of P13.98 billion as compensation for labor were disbursed by the private services industries in 1990, P3.03 billion more than what was spent in 1989. Highest earners were engaged by the research and scientific institutes receiving on the average, P6,710 per month. Lowest paid were in the barber and beauty shops business with P1,522 average monthly income.

The sector's combined revenues for 1990 reached P49.37 billion as there was sustained demand for food, health care, entertainment and education. This represented a 26.42 percent increment over the P39.05 billion earned in 1989.

Top grossers with over a billion receipts were: restaurants, cafes and other eating and drinking places (P14.62 billion); private education services (P10.15 billion); hotels, motels and other lodging places (P5.76 billion); amusement and recreational services, n.e.c (P5.64 billion); private medical, dental and other health services (P5.12 billion); and motion picture and other entertainment services (P4.86 billion). Reductions in aggregate income were however, experienced by research and scientific institutes (down 37.18 percent from P200.11 million to P125.70 million); social welfare services (down to 0.87 percent from P97.61 million to P47.96 million) and hotels, motels and other lodging places (9.20 percent drop from P6.35 billion to P5.76 billion).

The cost for operating the private services establishments summed to P27.00 billion, or 37.82 percent increase from their 1989 operations. Hiked

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interest payments at a 62.69 percent rise from P510.63 million to P830.76 million in 1990 largely contributed to the increment. The biggest portion of the total cost was, however, spent on materials and supplies (P12.58 bilion or 46.60 percent).

Decrements in operational costs compared with the 1989 expenditures were reported by social welfare services industries (38.97 percent), personal services, n.e.c. (3.60 percent) and hotels, motels and other lodging places (0.66 percent); while the restaurants, cafes and other eating and drinking places registered the highest increase in expenses (86.54 percent) over the year ago level.

Capital investments spending by private services establishments rose 29.68 percent from P2.94 billion in 1989 to P3.81 billion in 1990. Acquisition of fixed assets composed the bulk of expenditures, P2.77 billion or 44.30 percent of total.

The highest in the sector at P1.54 billion (40.50 percent) was invested by private education institutes. The lowest was expended by the barber and beauty shops at P4.14 million (0.11 percent).

As in the past, capital expenditures were heaviest in the NCR at P2.33 billion or 61.19 percent of the total. The least expenses on fixed assets were poured in Eastern Visayas at P16.15 million (0.42 percent).

Value added contributed by the sector was estimated at P25.20 billion with the private education services contributing 30.61 percent (P7.72 billion) of the total. More than two-thirds (P16.86 billion) was shared by NCR-based establishments.

17.4 Public Education and Health Services

The ASE on Public Education and Health Services covered all government-owned establishments rendering educational and medical, dental and other health-related services. Excluded were the following: public pre-elementary, elementary and secondary schools and other vocational schools below collegiate level; and public, medical, dental and other health services which render only free services. For statistics refer to Tables 17.10 and 17.11.

Establishments engaged in public education and public medical, dental and other health related services covered in the 1990 ASE numbered 918, a 1.32 percent increase over that counted in 1989. Of the total, 554 or 60.35 percent were public hospitals and clinics while 364 or 39.65 percent were public colleges and universities. Southern Tagalog had the most number with 122 while Central Mindanao had 37, the lowest among the regions.

Some 68,620 were engaged by public health institutions while 60,795 worked in state colleges and universities. Employment dropped by 0.33 percent to 129,415 from the 1989 level due to the 10.49 percent negative growth rate in the number of non-itemised workers. Except for the National Capital Region (NCR), Eastern Visayas, Bicol and CAR, the rest of the regions also reported declines in their workforces.

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Payments to employees aggregated to P6.75 billion, an amount higher by 21.94 percent than the P5.54 billion disbursed in 1989. Average monthly compensation improved by 22.34 percent from P3,554 to P4,348. In real terms, this was only P3,743 or 5.32 percent bigger than the 1989 level. The NCR accounted for the largest share of compensation paid at P1.78 billion or 26.32 percent of the total.

Combined revenue and subsidies in 1990 reached almost P12.20 billion, 13.22 percent more than what was realized the previous year. Public health institutions earned more revenue and received bigger subsidies than public colleges and universities. They generated 61.20 percent (P869.72 million) of the total revenue and accounted for 55.56 percent (P5.99 billion) of the total subsidies received by the sector.

As of 1989, hospital and clinics comprised the bigger part (P2.62 billion or 76.10 percent) of the total cost incurred valued at P3.44 billion. While NCR earned the highest revenue, it also incurred the largest expenditures. The region spent P1.27 billion or more than one-third of the aggregate cost.

Capital expenditures grew from P1.68 billion in 1989 to P2.52 billion in 1990. This was mostly due to the 130.56 percent increment in capital investments posted by the public health sector. As in the past, capital investments spending was heaviest in the NCR, P1.53 billion or 60.76 of year's total.

17.5 Tourism

Since the early 1970's tourism policies have been geared towards establishing the Philippines as a major tourist destination center. Marketing priorities were directed to the usual heavy volume markets as well as strong potential sources. In support to this, tourist facilities including hotels were constructed and upgraded.

A major accomplishment of the Philippine tourism industry in the 1980s was the attainment of the millionth mark in volume of visitor traffic. However, the political and economic instability besetting the country and the negative publicity abroad resulted in a continuing five-year decline at an average of 5.16 percent per annum from 1981 to 1985.

A reversal in the negative trend of arrivals to an average growth of 12.02 percent was achieved in 1986 to 1989. In the same period, foreign exchange earnings expanded by 33.43 percent from $647.06 million to $1.46 billion.

In 1990, although the number of arrivals was beyond the million mark, volume of visitor traffic fell by 13.89 percent. The slump continued in 1991 with total inflow numbering 951,365. Visitor inflow increased by 21.19 percent or 1.15 million in 1992 and by 19.01 percent or 1.37 million in 1993. See Table 17.12.

The U.S. market continued to dominate the visitor traffic accounting for 19.68 percent (269,964) of total arrivals in 1993. Japan, the second biggest source of travellers, contributed 17.74 percent (243,412) to the year's visitor volume. Other major markets include: Europe (179,982 or 13.12 percent), Taiwan

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(169,288 or 12.34 percent) and Hongkong (76,562 or 5.58 percent). Overseas Filipinos shared 9.16 percent (125,676) to total visitor arrivals. See Table 17.13.

Of the total inflow in 1990, visitors who came for holiday comprised the largest group, representing 74.82 percent. Business travellers accounted for 12.84 percent while those who attended official missions and conventions made up 1.24 percent and 0.86 percent, respectively. See Table 17.14.

Tourist influx, as historical pattern shows, was generally heavy in December. This is due to the fact that most Filipinos abroad and even some tourists take this month off from work for the holidays and for family visits. See Table 17.15.

Outbound Philippine Residents. Statistics on outbound travel cover the departures of Filipinos and foreign nationals who are permanent residents of the country.

A total of 1,231,183 Philippine residents travelled abroad in 1992, a reduction of 2.97 percent over the 1991 departures numbering 1,268,834. Philippine nationals comprised 97.20 percent of the outflow and nonnational, 2.80 percent. See Table 17.16.

17.5.1 Tourist Facilities

Transportation. In 1993 a total of 35 international air carriers operated on regular flights to Manila from all over the world, offering 302 international scheduled flights weekly. On the domestics routes, the Philippine Airlines managed air services to 78 destinations. Chartered air services are also available to most areas of the country. By sea, comfortable inter-island ships ply the routes between Manila and other major local ports. Smaller vessels on scheduled routes are available from island to island. Land transportation includes regular and airconditioned taxis and buses, and the colorful and highly ornamented jeepneys which ply all routes within the city and smaller towns. In Metro Manila, the Metrorail, a light rail transit, operates from Baclaran, Parañaque to Kalookan City. Car hires and airconditioned tourist buses can also be easily arranged.

Manila, being a major seaport, is serviced by several international shipping lines such as American President Lines, Ben Line Containers, Ltd., "K" Lines, Everett Lines, Hapag Lloyd, Knutsen Line and other shipping companies which make regular calls at South Harbor.

Accomodations. Accommodation establishments consist of hotels, resorts, apartels, tourist inns, pensions, lodging houses and motels. The Tourism Research and Statistics Division and the Office of Tourism Standards of the Department of Tourism (DOT) accredit and regularly monitor the operations and conditions of these institutions.

The hotels in the country provide excellent facilities and services to fit every taste and budget. Aside from modern palaces of luxury offered by international

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named hotels like the Mandarin and the Peninsula, there are also scores of smaller but quite comfortable hotels, as well as cozy pension houses and family-run inns for frugal travelers. A large number of these establishments can be found in Metro Manila and in other cities like Cebu, Davao and Baguio.

As of March 1994, there were 303 hotels, 46 inns, 9 apartels and 70 resorts accredited by DOT with total room supply of 16,628.

Tour Operators. As of 31 March 1994, there were 169 licensed travel/tour agencies in the country corresponding to 30 tourist transport operators. These agencies and operators assist travellers in arranging inbound, outbound and local tours. They have come up with various tours to adopt to the visitor's moods, inclinations and considerations such as adventure, special festival, business and regular tours. Majority of these tour operators are under the guidance of their mother organization, the Philippine Travel Agencies Association. There are also tour guides numbering 347 who can speak English and other languages.

Shopping Districts. Manila is a shopper's delight for the lover of handicrafts as well as for the curio and souvenir hunter. It abounds with a variety of shops where one can have the best buys that range from antiques; fine, elegant cloth and garments; handicrafted items like cottage industry products, bamboo and rattan furniture, shellcrafts, ceramic, pottery, woodcarvings of statues and figurines and novelty items; tastefully designed pieces of jewelry of every color, shape and size; brass and bronzewares; silver and china wares; fresh farm products; liquor; cigars; toys; religious articles and amulets - all at reasonable prices.

Manila's shopping centers range from posh airconditioned outlets in all major hotels to outdoor flea markets and handicraft centers. Principal shopping centers include Harrison Plaza, Robinson's Commercial Complex, Makati Commercial Center, Broadway Centrum, Araneta Commercial Complex in Cubao, Greenhills Shopping Center; Ayala Center (formerly Makati Cinema Square and Greenbelt Square Commercial Center), Rustan stores, the Landmark, the Shoemart chain of stores, Robinson's Galleria and the new Shangrila Plaza.

The country also has tourist duty-free shops located at the shopping arcades of selected five-star hotels in Manila, at the PICC, in the departure and transit areas of the Ninoy Aquino International Airport (NAIA) and Mactan International Airport(MIA), *Paskuhan* Village in Pampanga, Fort Ilocandia in Ilocos Norte and the Fiesta Shopping Center complexes in Manila and Cebu.

For the bargain hunter, one can haggle with the prices at the local goods markets and the cottage industry centers. In Metro Manila, these are located in Divisoria, Quiapo, Chinatown, Baclaran, San Andres and Central Market. There are also special shops featuring native handicrafts like *Pistang Pilipino*, Flea Markets along Mabini and M. H. del Pilar and the Philippine Trade Exhibits along Roxas Boulevard.

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Restaurants. The culinary adventurer will discover that dining is one of the greatest pleasures here in the Philippines. This is because the choice of restaurants is varied. Manila boasts of several restaurants that offer international cuisine like French, Japanese, Chinese, Spanish, Italian, German, Indian, Indonesian and American. Restaurants devoted to Filipino cooking offer a wide range of dishes from the classic roast pig called *lechon* down to the luscious mangoes. The Filipino menu varies from region to region, each being a food adventure, unmatched anywhere in the world.

Entertainment. Manila is the center of a wide variety of entertainment with its nightlife as the most exciting. Nightclubs and discos are centered along Roxas Boulevard, Quezon Boulevard and the Ermita District, featuring local and foreign singers and with music for dancing. Dinner shows have also become a fad among big restaurants and hotels. Cultural performances by local and foreign artists are also featured regularly in many venues of the performing arts. Free open-air concerts are held at the Paco park, Puerta Real in Intramuros and Rizal park.

The city boasts of numerous cinema houses showing the latest American and European films. There are also casinos in some hotels in Metro Manila as well as in the provinces.

17.5.2 The Department of Tourism (DOT)

The Department of Tourism (DOT), established in May 1973 by Presidential Decree No. 189, is the government agency in-charge of encouraging, promoting and developing tourism as major socio-economic activity. Its task is to ensure that government policies are laid down so that private sectors' investment effort and initiative are fostered and supported; and foreign exchange is earned. But the primary task of DOT is to give international visitors the opportunity to travel within the Philippines and appreciate her natural beauty, history and culture; and, enable Filipinos themselves to see more of their country and be imbued with greater pride in and commitment to the nation.

The Philippine Tourism Authority (PTA), created by virtue of Presidential Decree 564, is the implementing arm for the development of physical infrastructure (e.g. hotels, lodges, resorts, and the like). The Philippine Convention Bureau (PCB) was created in January 1976 by Presidential Decree 867 as the government's marketing arm for convention in the advent of strong prospects for making the Philippines a convention destination.

Upon assumption into office of the new leadership in 1986, a thorough review of the DOT structure was undertaken. In January 1987, Executive Order No. 120 was promulgated which reorganized the DOT structurally and functionally.

Executive Order No. 120 also attached two additional agencies to the DOT: the Intramuros Administration (IA) and the National Parks Development Committee (NPDC). As mandated by Presidential Decree 1616, IA is respon-

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sible for the orderly restoration and development of Intramuros as a monument to the Hispanic period of Philippine history. Its objective is to recreate a historic period of Manila and to build it into a living, throbbing city of which it was once the best. The NPDC (created through Executive Order No. 30 dated 14 January 1963) is aimed at establishing, developing and maintaining national parks for the promotion of cultural and historical landmarks, recreational and health requirements of the citizenry.

Issued on 20 July 1987, Executive Order No. 120-A renamed the PCB into Philippine Convention and Visitors Corporation (PCVC) and entrusted it with the task of promoting the country as a convention site and securing bids for the holding of meetings/convention in the Philippines.

Under the Ramos dispensation, the DOT was directed to adopt a single national tourism organization (NTO) which would merge DOT, and PTA and PCVC function. The NTO, tentatively named the "Philippine Tourism Corporation" is envisioned to be more rationalized and effective in implementing the Tourism Master Plan (TMP) - the blueprint for the development of the tourism industry in the country.

Conventions. The Philippine International Convention Center (PICC) has the most up-to-date convention facilities and communication systems. Other convention sites for regional and national events, which are fully equipped with requisite facilities/services are located in Zamboanga, Baguio and Cebu.

Among the important events held in the Philippines in 1993 were: the ASEAN Senior Economic Ministers Meeting; the ASEAN Ministers Meeting; the ASEAN Tourism Forum (ATF); the Pacific Asia Travel Association (PATA) and Ecotourism Conference and Mart '93 in Cebu and Manila and the Asian Beach Volleyball Circuit in Boracay.

In 1994, the country is priviledged to host among others the following: the Miss Universe Beauty Pageant; the Asian Association of Radiology Congress; the WJA's 16th Conference on the Law of the World; the ASTA International Conference; and the World Conference on Lauric Oils.

Programs and Projects. A vital role of the DOT is to strengthen and sustain the image of the Philippines as primary tourist destination area. This is efficiently accomplished through its overseas field offices by continuously undertaking vigorous and intensive promotional and marketing activities in order to stimulate and accelerate tourist traffic to the country. Specifically, this is done by participating in travel fairs and exhibitions, sponsoring seminars and workshops, and organizing invitational trips to the Philippines for travel agents and media.

The Islands Philippines and Visit ASEAN campaigns were vigorously pursued. Special interest tours on ecological tourism such as spelunking and surfing were likewise implemented.

In domestic tourism promotion, the DOT continued to implement its social tourism program which included the *Tuklas ng Bayan* Program, a fully-sub-

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sidized one-day tour for out-of-school youth, indigents and other consumers; the Summer Camp Program, a 7-day camp program subsidized for out-of-school youth to indulge in productive pursuits during summer; and *KASAPI ng TURISMO* which enabled students to travel to various destinations at discounted rates. Other projects which were all aimed at creating awareness and interest on areas as tourist destinations were the Eco-Village in Cagayan de Oro; *Paskuhan* Village in San Fernando, Pampanga, Vigan Heritage Village in Vigan, Ilocos Sur; Tour Caravans; and Pilgrimage Tours.

Tourism Facilities and Services. The DOT continued to deliver frontline services in the form of reception, guided tours, information dissemination and security for visitors of the country. These were dispensed at the NAIA and other major ports of entry through the tourism assistance centers. The *Tulungan ang Turista* (TAT) and the *Ang Turista'y Kaibigan* Programs sought to further assist tourist and resolve complaints cases.

Tourism-oriented and related projects were specifically subjected under thorough licensing and accreditation. In 1992, licenses/accreditation certificates were issued by the DOT to 829 establishments. Under the 1993 Investment Priorities Plan (IPP) of the BOI, three preferred projects for investments were tourism estate development, accomodation and transport facilities. These economic areas are entitled to incentives in the form of additional funds through the Omnibus Investment Code of 1987 (EO 226).

In infrastructure development, the PTA in 1992 completed 105 projects (valued at P373.77 M) which include sports and recreation facilities and streetlights in various cities and provinces particularly in places with public parks, plazas and beaches.

Sources:

17.1	National Statistics Office, Domestic Trade and Shipping Section.
17.2.1	National Statistics Office, Wholesale and Retail Trade Section.
17.2.2	Department of Agriculture.
17.2.2.1	National Food Authority.
17.2.2.2	Cooperative Development Authority.
17.3-17.4	National Statistics Office, Services Statistics Section.
17.5	Department of Tourism.

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Table 17.1 Quantity and Value of Domestic Trade Classified by Commodity Section and by Mode of Transport: 1991
(Quantity in thousand tons, value in thousand pesos)

Commodity section	Total		Mode of transport: Water		Air		Rail	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
All commodities	23,276,767	224,413,261	23,208,959	218,471,327	46,785	5,785,343	21,023	156,591
Food and live animals	4,784,355	49,591,838	4,755,497	48,958,411	23,729	586,719	5,129	46,708
Beverages and tobacco	1,168,942	14,729,239	1,168,693	14,720,993	51	3,376	198	4,869
Crude materials, inedible, except fuels	3,195,856	12,246,169	3,183,944	12,200,985	649	21,294	11,263	23,890
Mineral fuels, lubricants and related materials	7,057,194	48,464,682	7,057,152	48,463,584	5	564	37	534
Animal and vegetable oils, fats and waxes	140,004	1,154,333	139,999	1,154,173	3	148	2	12
Chemicals and related products, n.e.s.	1,126,907	12,476,864	1,124,338	12,281,711	1,855	182,661	714	12,492
Manufactured goods classified chiefly by material	3,953,239	31,633,989	3,949,434	31,481,709	1,674	125,828	2,131	26,450
Machinery and transport equipment	1,207,666	38,239,769	1,203,162	37,737,568	4,184	487,539	320	14,662
Miscellaneous manufactured articles	227,374	4,721,653	212,853	4,199,360	13,545	498,752	977	23,540
Commodities and transactions not classified elsewhere in the PSCC	415,230	11,154,728	413,886	7,272,831	1,092	3,878,462	252	3,435

PSCC - Philippine Standard Commodity Classification.

Source: - National Statistics Office, Trade Statistics Division.

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Table 17.2 Total Value of Domestic Trade Balances for All Commodities by Mode of Transport: 1991
(Value in million pesos)

Region	Total			Mode of transport: Water			Air			Rail		
	Outflow	Inflow	Balance	Outflow	Inflow	Balance	Outflow	Inflow	Balance	Outflow	Inflow	Balance
Philippines	224,413	224,413	-	218,471	218,471	-	5,785	5,785	-	157	157	-
National Capital Region (NCR)	38,058	71,022	(32,964)	36,422	67,341	(30,919)	1,573	3,639	(2,066)	63	42	21
I. Ilocos	214	2,947	(2,733)	209	2,944	(2,735)	5	3	1	-	-	-
II. Cagayan Valley	146	130	16	49	94	(45)	97	36	61	-	-	-
III. Central Luzon	27,946	293	27,653	27,946	293	27,653	-	-	-	-	a	a
IV. Southern Tagalog	29,503	18,706	10,797	29,377	18,486	10,891	111	186	(75)	14	34	(20)
V. Bicol	10,299	11,012	(713)	10,109	10,821	712	111	110	1	80	81	(1)
VI. Western Visayas	18,351	18,683	(332)	18,179	18,324	(145)	171	359	(188)	-	-	-
VII. Central Visayas	30,688	39,218	(8,530)	30,056	38,839	(8,783)	632	379	253	-	-	-
VIII. Eastern Visayas	13,022	18,360	(5,338)	12,992	18,164	(5,172)	31	196	(165)	-	-	-
IX. Western Mindanao	5,047	7,799	(2,752)	4,840	7,463	(2,623)	207	336	(129)	-	-	-
X. Northern Mindanao	12,244	16,515	(4,271)	12,086	16,337	(4,251)	159	178	19	-	-	-
XI. Southern Mindanao	26,657	14,356	12,302	24,016	14,053	9,963	2,642	302	2,340	-	-	-
XII. Central Mindanao	12,236	5,370	6,866	12,190	5,311	6,879	46	59	(13)	-	-	-

Details may not add up to totals due to rounding.

a Value less than one million.

Source: National Statistics Office, Trade Statistics Division.

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Table 17.3 Regional Commodity Flow by Mode of Transport: 1991
(Value in pesos)

Region of origin/ destination	Total	Mode of Transport		
		Water	Air	Rail
All Commodities	224,413,261,170	218,471,326,631	5,785,343,308	156,591,231
Region I	214,187,708	209,051,543	5,136,162	-
Region I	373,793	373,793	-	-
Region II	1,446,883	-	1,446,883	-
Region III	6,130,000	6,130,000	-	-
N C R	5,287,730	2,738,000	2,549,730	-
Region IV	149,472	-	149,472	-
Region V	1,495,878	1,450,000	45,878	-
Region VI	2,440,295	1,750,000	690,292	-
Region VII	16,428,925	16,371,500	57,425	-
Region VIII	180,238,600	180,238,250	350	-
Region IX	39,806	-	39,806	-
Region X	13,450	-	13,450	-
Region XI	108,236	-	108,236	-
Region XII	34,640	-	34,640	-
Region II	146,073,955	49,216,448	96,857,507	-
Region I	33,437	-	33,437	-
Region II	23,961,950	7,230,000	16,731,950	-
Region III	-	-	-	-
N C R	109,813,554	29,962,528	79,851,026	-
Region IV	70,794	-	70,794	-
Region V	44,075	-	44,075	-
Region VI	9,197,460	9,150,960	46,500	-
Region VII	38,000	-	38,000	-
Region VIII	11,300	-	11,300	-
Region IX	500	-	500	-
Region X	2,880,885	2,872,960	7,925	-
Region XI	18,000	-	18,000	-
Region XII	4,000	-	4,000	-
Region III	27,946,407,402	27,946,407,402	-	-
Region I	796,043,059	796,043,059	-	-
Region II	68,932,667	68,932,667	-	-
Region III	52,687,500	52,687,500	-	-
NCR	16,361,097,298	16,361,097,298	-	
Region IV	2,032,078,326	2,032,078,326	-	-
Region V	157,799,715	157,799,715	-	-
Region VI	1,698,356,324	1,698,356,324	-	-
Region VII	2,566,253,776	2,566,253,776	-	-
Region VIII	550,992,868	550,992,868	-	-
Region IX	793,981,898	793,981,898	-	-
Region X	1,123,699,058	1,123,699,058	-	-
Region XI	1,002,919,455	1,002,919,455	-	-
Region XII	741,565,458	741,565,458	-	-

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Table 17.3 Regional Commodity Flow by Mode of Transport: 1991 (continued)
(Value in pesos)

Region of origin/ destination	Total	Mode of Transport		
		Water	Air	Rail
N C R	38,057,825,305	36,421,872,421	1,573,282,865	62,670,019
Region I	4,670,377	1,665,955	3,004,422	-
Region II	21,305,034	10,411,152	10,893,882	-
Region III	27,961,960	27,961,960	-	-
N C R	37,957,577	37,926,598	18,000	12,979
Region IV	1,890,685,033	1,710,935,938	177,810,453	1,938,642
Region V	490,903,754	377,993,910	52,191,446	60,718,398
Region VI	5,751,021,321	5,442,233,631	308,787,690	-
Region VII	12,939,585,247	12,639,360,786	300,224,461	-
Region VIII	2,559,257,773	2,412,097,242	147,160,531	-
Region IX	1,928,081,887	1,798,789,913	129,291,974	-
Region X	5,274,649,105	5,122,401,890	152,247,215	-
Region XI	5,916,988,013	5,677,730,101	239,257,912	-
Region XII	1,214,758,224	1,162,363,345	52,394,879	-
Region IV	29,502,541,688	29,376,862,880	111,521,476	14,157,332
Region I	1,713,225,987	1,713,167,206	58,781	-
Region II	44,323	10,000	34,323	-
Region III	95,960,900	95,957,900	-	3,000
N C R	2,446,258,666	2,334,804,194	108,533,712	2,920,760
Region IV	12,942,600,018	12,937,908,667	248,715	4,442,636
Region V	1,231,925,245	1,225,069,545	64,764	6,790,936
Region VI	2,163,489,716	2,162,503,309	986,407	-
Region VII	3,538,056,983	3,536,673,678	1,383,305	-
Region VIII	591,717,827	591,710,208	7,619	-
Region IX	338,073,072	338,011,572	61,500	-
Region X	1,290,689,228	1,290,622,928	66,300	-
Region XI	2,552,939,775	2,552,863,725	76,050	-
Region XII	597,559,948	597,559,948	-	-
Region V	10,299,345,366	10,108,863,253	110,718,233	79,763,880
Region I	6,142,650	6,048,000	94,650	-
Region II	27,100	-	27,100	-
Region III	23,250	23,250	-	-
N C R	287,838,723	193,342,839	55,769,922	38,725,962
Region IV	290,334,182	262,683,713	209,739	27,440,730
Region V	541,604,619	476,729,211	51,278,220	13,597,188
Region VI	115,301,338	115,023,977	277,361	-
Region VII	239,757,437	237,921,032	1,836,405	-
Region VIII	8,476,919,611	8,476,824,786	94,825	-
Region IX	8,074,570	7,400,000	674,570	-
Region X	77,793,835	77,602,354	191,481	-
Region XI	16,776,308	16,524,948	251,360	-
Region XII	238,751,743	238,739,143	12,600	-

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Table 17.3 Regional Commodity Flow by Mode of Transport: 1991 (continued)
(Value in pesos)

Region of origin/ destination	Total	Mode of Transport		
		Water	Air	Rail
Region VI	18,350,698,567	18,179,400,715	171,297,852	-
Region I	434,586	393,750	40,836	-
Region II	3,748,050	3,738,600	9,450	-
Region III	27,053,650	27,053,650	-	-
N C R	9,080,722,183	8,936,193,643	144,528,540	-
Region IV	360,555,471	356,351,145	4,204,326	-
Region V	442,882,446	442,613,130	269,316	-
Region VI	3,713,116,489	3,713,051,739	64,750	-
Region VII	2,464,291,045	2,449,150,248	15,140,797	-
Region VIII	421,179,551	420,588,576	590,975	-
Region IX	650,514,242	649,920,304	593,938	-
Region X	498,166,345	496,849,073	1,317,272	-
Region XI	429,210,968	424,950,874	4,260,094	-
Region XII	258,823,541	258,545,983	277,558	-
Region VII	30,688,284,611	30,056,158,159	632,126,452	-
Region I	137,845,972	137,800,243	45,729	-
Region II	8,540,140	1,892,240	6,647,900	-
Region III	18,962,400	18,962,400	-	-
N C R	7,564,310,089	7,135,520,235	428,789,854	-
Region IV	335,672,558	332,796,773	2,875,785	-
Region V	900,734,207	895,210,490	5,523,717	-
Region VI	3,216,505,992	3,174,513,618	41,992,374	-
Region VII	5,845,997,797	5,835,117,481	10,880,316	-
Region VIII	3,167,117,189	3,119,601,585	47,515,604	-
Region IX	1,216,519,585	1,194,922,388	21,597,197	-
Region X	5,055,397,653	5,044,752,207	10,645,446	-
Region XI	2,211,706,617	2,160,344,952	51,361,665	-
Region XII	1,008,974,412	1,004,723,547	4,250,865	-
Region VIII	13,022,457,168	12,991,727,847	30,729,321	-
Region I	246,712,050	246,710,500	1,550	-
Region II	1,150	-	1,500	-
Region III	26,328,500	26,328,500	-	-
N C R	1,658,357,709	1,630,530,175	27,827,534	-
Region IV	57,758,717	57,757,867	850	-
Region V	6,641,551,631	6,641,528,601	23,030	-
Region VI	537,738,929	537,580,945	157,984	-
Region VII	753,189,573	750,668,679	2,520,894	-
Region VIII	343,070,155	343,070,155	-	-
Region IX	57,926,701	57,808,648	118,053	-
Region X	1,989,814,754	1,989,784,904	29,850	-
Region XI	186,553,121	186,513,495	39,626	-
Region XII	523,454,178	523,445,378	8,800	-

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Table 17.3 Regional Commodity Flow by Mode of Transport: 1991 (continued)
(Value in pesos)

Region of origin/ destination	Total	Mode of Transport		
		Water	Air	Rail
Region IX	5,047,367,553	4,840,371,878	206,995,675	-
Region I	36,500	-	36,500	-
Region II	13,953	-	13,953	-
Region III	-	-	-	-
N C R	1,286,667,270	1,185,798,606	100,868,664	-
Region IV	11,099,444	10,967,194	132,250	-
Region V	3,254,547	2,940,000	314,547	-
Region VI	135,828,149	134,823,178	1,004,971	-
Region VII	840,156,654	823,769,126	16,387,528	-
Region VIII	14,849,830	14,601,505	248,325	-
Region IX	1,658,462,632	1,577,286,646	81,175,986	-
Region X	57,566,717	56,875,454	691,263	-
Region XI	806,635,616	801,859,253	4,776,363	-
Region XII	232,796,241	231,450,916	1,345,325	-
Region X	12,244,385,680	12,085,726,056	158,659,624	-
Region I	7,926	-	7,926	-
Region II	2,268,297	2,245,111	23,186	-
Region III	13,658,150	13,658,150	-	-
N C R	3,311,944,650	3,160,314,100	151,630,550	-
Region IV	373,828,714	373,806,264	22,450	-
Region V	314,772,509	314,697,587	74,922	-
Region VI	517,965,951	517,165,036	800,915	-
Region VII	4,662,234,121	4,659,137,657	3,096,464	-
Region VIII	1,631,735,937	1,631,517,900	218,037	-
Region IX	124,782,497	124,439,560	342,937	-
Region X	715,028,937	714,902,176	126,761	-
Region XI	189,266,776	186,996,625	2,270,151	-
Region XII	386,891,215	386,845,890	45,325	-
Region XI	26,657,445,649	24,015,583,215	2,641,862,434	-
Region I	41,797,853	41,759,503	38,350	-
Region II	12,350	-	12,350	-
Region III	24,231,365	24,231,365	-	-
N C R	20,804,495,961	18,304,656,803	2,499,839,158	-
Region IV	237,944,482	237,619,352	325,130	-
Region V	148,279,188	148,072,958	206,230	-
Region VI	238,700,657	234,523,293	4,177,364	-
Region VII	3,013,213,174	2,989,422,614	23,790,560	-
Region VIII	260,650,921	260,551,001	99,920	-
Region IX	776,891,605	676,769,657	100,121,948	-
Region X	107,007,671	94,130,363	12,877,308	-
Region XI	871,650,989	871,632,359	18,630	-
Region XII	132,569,433	132,213,947	355,486	-

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Table 17.4 Quantity and Value of Coastwise Trade by Port of Origin: 1989 - 1991
(Quantity in tons, value in thousand pesos)

Port of origin	1989 Quantity	1989 Value	1990 Quantity	1990 Value	1991 Quantity	1991 Value
Total	14,260,771	107,229,926	18,891,775	153,390,649	23,208,959	218,471,327
Limay, Bataan	486,463	3,151,664	3,214,252	20,035,457	4,144,512	27,680,841
Manila	1,488,439	23,333,071	1,101,207	18,000,916	2,422,682	36,421,872
General Santos City, South Cotabato	97,265	953,245	824,533	12,342,123	958,880	11,102,734
Cebu City, Cebu	323,457	3,201,995	763,624	8,420,013	1,022,595	14,208,355
Davao City, Davao del Sur	505,541	3,516,760	502,314	4,461,051	637,422	6,303,197
Iloilo City, Iloilo	337,077	2,644,101	436,771	3,490,864	504,603	4,616,634
Batangas City, Batangas	283,484	3,588,391	309,327	3,618,119	339,280	5,406,711
Bislig, Surigao del Sur	a	a	213,554	2,184,007	258,746	2,448,856
Iligan City, Lanao del Norte	a	a	213,173	2,024,269	243,593	4,154,628
Zamboanga City, Zamboanga del Sur	206,107	1,804,887	201,741	1,822,968	229,380	2,825,768
Pulupandan, Negros Occidental	116,246	1,410,162	189,697	2,363,740	243,890	3,136,050
Dumaguete City, Negros Oriental	120,802	929,175	184,787	1,040,025	78,712	827,706
Tagbilaran City, Bohol	6,372	51,761	106,565	1,019,568	121,551	1,477,505
Ozamis City, Misamis Occidental	a	a	102,766	565,634	121,013	892,109
Cagayan de Oro City, Misamis Oriental	494,373	3,572,932	94,328	645,024	499,582	4,208,440
Surigao City, Surigao del Norte	64,232	339,347	91,734	475,851	321,134	648,408
Tacloban City, Leyte	121,870	784,517	79,314	493,479	85,367	760,981
Masbate, Masbate	39,453	280,778	74,126	481,393	47,598	537,471
Puerto Princesa City, Palawan	51,334	392,765	63,441	421,821	55,748	566,181
Legazpi City, Albay	22,554	155,893	48,027	238,317	32,508	240,010
Ormoc City, Leyte	41,365	256,816	40,657	275,348	39,838	322,947
Romblon, Romblon	27,096	72,007	37,637	131,363	40,459	157,064
Culasi, Roxas City, Capiz	4,961	43,220	36,787	334,748	44,537	422,129
San Jose, Northern Samar	10,848	60,406	31,752	149,832	27,852	157,244
Bulan (Subport), Sorsogon	4,052	45,489	28,829	166,928	33,981	213,387
Tabaco, Albay	16,448	135,798	27,142	219,424	29,903	297,630

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Table 17.3 Regional Commodity Flow by Mode of Transport: 1991 (concluded) (Value in pesos)

Region of origin/ destination	Total	Mode of Transport		
		Water	Air	Rail
Region XII	12,236,240,518	12,190,084,814	46,155,704	-
Region I	32,077	-	32,077	-
Region II	1,500	-	1,500	-
Region III	-	-	-	-
N C R	8,067,557,131	8,028,600,406	38,956,725	-
Region IV	173,020,843	173,017,843	3,000	-
Region V	136,987,398	136,978,698	8,700	-
Region VI	583,735,063	583,429,496	305,567	-
Region VII	2,339,063,860	2,335,225,164	3,838,696	-
Region VIII	162,545,128	162,532,028	13,100	-
Region IX	245,748,009	243,631,205	2,116,804	-
Region X	322,333,842	322,092,399	241,443	-
Region XI	170,870,966	170,840,186	30,780	-
Region XII	34,344,701	33,737,389	607,312	-

Source: National Statistics Office, Trade Statistics Division.

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Table 17.4 Quantity and Value of Coastwise Trade by Port of Origin: 1989 - 1991 (concluded)
(Quantity in tons, value in thousand pesos)

Port of origin	1989		1990		1991	
	Quantity	Value	Quantity	Value	Quantity	Value
Masao, Butuan City, Agusan del Norte	62,211	253,784	24,909	159,545	30,000	371,220
Pagadian City, Zamboanga del sur	15,660	105,185	23,531	146,313	20,803	169,954
Maasin, Southern Leyte	18,462	150,157	21,273	125,930	12,548	102,979
Toledo City, Cebu	18,261	126,254	19,263	131,993	25,875	188,344
Catbalogan City, Western Samar	24,571	61,245	18,420	80,596	39,909	257,074
Jolo, Sulu	20,626	159,571	16,798	104,612	9,076	56,880
Tubigon, Bohol	8,811	68,058	15,047	117,247	9,309	102,684
Balanacan, Marinduque	5,684	72,502	14,353	336,947	19,326	574,173
Lapu-lapu City, Cebu	1,442	3,074	13,994	41,985	60,119	484,384
San Fernando, La Union	4,142	21,198	10,032	36,809	2,509	27,063
Bongao, Tawi-tawi	9,437	63,426	6,725	56,326	512	3,563
Pulawan, Dapitan City, Zamboanga del Norte	8,417	42,769	6,691	30,883	-	-
Claveria, Cagayan	a	a	a	a	-	-
San Jose de Buenavista, Antique	3,437	24,027	2,416	23,587	3,387	26,047
Polloc, Cotabato	745,116	1,662,624	a	a	-	-
Aparri, Cagayan	22,511	23,321	449	2,110	15,573	50,220
Other ports	8,422,104	53,667,551	9,679,789	66,573,484	10,374,647	86,021,884

a No clearance manifest submitted.

Source: National Statistics Office, Trade Statistics Division.

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Table 17.5 Quantity and Value of Coastwise Trade by Commodity: 1989-1991
(Quantity in tons, value in thousand pesos)

Commodity	1989 Quantity	1989 Value	1990 Quantity	1990 Value	1991 Quantity	1991 Value
Total	14,260,771	107,229,926	18,986,584	158,394,179	23,108,959	218,471,327
Live animals, chiefly for food	55,278	1,340,561	219,354	8,035,419	157,087	5,472,636
Meat and meat preparations	5,001	147,685	10,335	293,515	16,257	455,114
Dairy products and birds' eggs	73,060	1,834,371	54,373	1,379,191	92,816	2,601,215
Fish and fish preparations	99,644	2,052,876	120,368	2,206,635	195,916	3,740,640
Cereals and cereal preparations	954,650	1,377,018	1,473,664	11,012,862	2,104,923	13,206,512
Vegetables and fruits	214,014	8,089,188	405,402	2,969,172	655,633	5,123,976
Sugar, sugar preparations and honey	1,442,029	1,099,948	1,123,714	11,626,971	982,743	12,567,713
Coffee, tea, spices and manufactures thereof	45,658	1,082,996	38,906	856,953	48,861	1,254,860
Feeding stuff for animals (not including unmilled cereals)	183,114	1,200,695	238,349	1,392,875	376,330	2,242,894
Misc. edible products and preparations	79,394	6,149,238	88,596	1,290,957	124,932	2,292,851
Beverages	746,965	2,611,722	1,044,935	9,025,643	1,104,198	10,810,278
Tobacco and tobacco manufactures	36,932	28,876	29,369	2,203,644	64,495	3,910,716
Hides, skins and furskins, raw	2,624	2,723,214	2,715	36,055	3,298	53,631
Oil seeds and oleaginous fruits	442,790	587,316	803,232	3,735,313	507,258	3,147,879
Crude rubber	37,478	2,844,346	42,754	540,456	58,147	772,813
Cork and wood	1,322,412	33,258	412,652	1,838,704	599,548	2,465,759
Pulp and waste paper	10,819	339,184	34,730	115,632	27,511	156,102
Textile fibers (other than wool tops) and their wastes (not manufactured into yarn or fabric)	24,174	721,981	41,065	777,131	96,432	2,130,355
Crude fertilizers and crude minerals (excluding coal, petroleum and precious stones)	529,269	1,297,392	928,901	815,856	1,611,457	1,961,673

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Table 17.5 Quantity and Value of Coastwise Trade by Commodity: 1989-1991 (continued)
(Quantity in tons, value in thousand pesos)

Commodity	1989 Quantity	1989 Value	1990 Quantity	1990 Value	1991 Quantity	1991 Value
Metalliferous ores and metal scrap	360,841	631,191	404,203	1,199,857	169,225	610,701
Crude animal and vegetable fibers, n.e.s.	105,738	284,578	95,716	656,768	111,067	902,073
Coal, coke and briquettes	169,412	18,176,764	163,596	322,260	482,533	1,754,215
Petroleum, petroleum products and related materials	2,644,143	461,866	5,756,728	36,367,243	6,329,352	44,041,749
Gas, natural and manufactured	77,212	953	172,129	1,052,147	245,267	2,667,620
Animal oils and fats	65	616,386	523	7,276	1,389	17,684
Fixed vegetable oils and fats	75,601	342	88,474	621,964	137,509	1,121,738
Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	43	166,011	199	1,406	1,102	14,752
Organic chemicals	18,584	583,865	31,082	334,337	37,688	387,027
Inorganic chemicals	77,770	65,493	155,603	1,266,272	164,980	1,714,876
Dyeing, tanning and coloring materials	4,373	271,604	4,771	76,293	11,131	235,485
Medicinal and pharmaceutical products	12,592	271,604	11,979	277,242	27,685	889,642
Essential oils and perfume materials, toilet polishing and cleansing preparations	69,458	1,561,886	61,314	1,473,622	90,575	2,544,710
Fertilizers, manufactured	521,166	2,495,025	651,972	3,019,168	615,372	3,962,618
Explosives and pyrotechnic products	145	2,830	244	7,246	32,580	461,276
Artificial resins and plastic materials, and cellulose esters and ethers	12,027	98,510	23,084	314,082	3,042	58,529
Chemical materials and products, n.e.s.	62,530	667,747	51,071	624,948	141,284	2,027,548
Leather, leather manufactures, n.e.s., and dressed furskins	1,151	7,821	197	2,806	501	10,973

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Table 17.5 Quantity and Value of Coastwise Trade by Commodity: 1989-1991 (continued)
(Quantity in tons, value in thousand pesos)

Commodity	1989 Quantity	1989 Value	1990 Quantity	1990 Value	1991 Quantity	1991 Value
Rubber manufactures, n.e.s.	21,358	385,826	24,722	485,962	39,122	754,278
Cork and wood manufactures (excluding furniture)	274,215	2,805,565	247,565	3,136,872	283,392	4,069,223
Manufactures of paper, paperboard, and articles of paperpulp, of paper or of paperboard	190,004	2,406,350	166,277	2,268,054	412,940	2,998,248
Textile yarns, fabrics, made-up articles, n.e.s., and related products	20,462	335,858	28,273	607,254	27,656	702,397
Nonmetallic mineral manufactures, n.e.s.	1,557,720	4,505,565	1,664,849	5,252,971	148,064	8,054,571
Iron and steel	94,495	1,102,859	452,409	4,176,654	581,094	8,518,843
Nonferrous metals	35,645	114,656	47,065	211,021	42,548	527,463
Manufactures of metals, n.e.s.	138,601	1,499,489	209,289	1,964,098	96,678	1,636,871
Power generating machinery and equipment	9,126	205,559	6,599	161,641	11,171	357,287
Machinery, specialized for particular industries	17,895	433,303	19,000	507,209	33,096	913,954
Metalworking machinery	1,909	48,096	1,258	34,096	9,968	155,230
General industrial machinery and equipment, n.e.s., and machine parts, n.e.s.	13,305	361,327	16,746	594,363	23,608	686,348
Office machines and automatic data processing equipment	471	13,292	371	15,804	1,171	49,129
Telecommunications and sound recording and reproducing apparatus and equipment	3,223	73,056	3,960	108,379	6,919	349,309

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Table 17.5 Quantity and Value of Coastwise Trade by Commodity: 1989-1991 (continued)
(Quantity in tons, value in thousand pesos)

Commodity	1989 Quantity	1989 Value	1990 Quantity	1990 Value	1991 Quantity	1991 Value
Electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof (including nonelectrical counterparts, n.e.s., of electrical household type equipment)	27,502	599,790	29,206	705,463	47,965	1,632,197
Road vehicles (including air-cushion vehicles)	626,601	16,298,144	706,466	19,202,113	1,068,949	33,578,543
Other transport equipment	91	3,506	191	3,971	316	15,571
Sanitary plumbing, heating and lighting fixtures and fittings, n.e.s.	804	12,603	1,011	13,641	1,710	34,512
Furniture and parts thereof	24,402	291,707	38,015	596,802	41,426	859,958
Travel goods, handbags and similar containers	393	8,489	112	3,526	916	18,327
Articles of apparel and clothing accessories	10,482	195,003	9,391	186,074	15,318	403,990
Footwear	13,292	424,977	9,390	375,060	20,530	593,877
Professional, scientific and controlling instruments and apparatus, n.e.s.	679	27,044	580	20,743	1,460	80,814
Photographic apparatus, equipment and supplies and optical goods, n.e.s., watches and clocks	469	7,852	456	11,374	1,374	47,388
Miscellaneous manufactured articles, n.e.s.	83,309	935,815	82,102	1,125,150	130,119	2,160,494
Postal packages not classified according to kind	197	1,442	419	3,214	414	2,667
Special transactions and commodities not classified according to kind	13,272	126,385	13,378	146,211	23,953	353,777

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Table 17.5 Quantity and Value of Coastwise Trade by Commodity: 1989-1991 (concluded)
(Quantity in tons, value in thousand pesos)

Commodity	1989 Quantity	1989 Value	1990 Quantity	1990 Value	1991 Quantity	1991 Value
Animals, live, n.e.s. (including zoo animals, dogs, cats, insects, etc.)	26	692	138	1,276	-	-
Armored fighting vehicles, arms of war and ammunition, and parts of arms, n.e.s.	34	349	2	111	-	-
Coins (other than gold coins) not being legal tender	286	52,175	45	1,715	873	10,604
Gold, nonmonetary (excluding gold ores and concentrates)	-	5,939,669	a	9	-	-
Various commodities, n.e.s.	562,347	6,087,142	326,191	3,691,897	388,646	6,739,029

Note: Details may not add up to totals due to rounding.

a Less than one ton.

Source: National Statistics Office, Trade Statistics Division.

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Table 17.6 Summary Statistics Large Wholesale and Retail Trade with an Average Total Employment of Ten or More Establishments by Industry Major Group: 1989 and 1990 (Value in thousand pesos)

Industry major group	Number of establishment		Employment (average for the year)				Compensation	
			Total		Paid employees			
	1990	1989	1990	1989	1990	1989	1990	1989
All industries	7,886	6,956	247,406	215,774	240,937	210,299	12,463,038	9,577,090
Wholesale trade	3,003	2,737	103,745	90,781	101,834	89,005	7,167,573	5,534,161
Farm, forest and marine products	391	361	15,611	9,445	14,917	9,110	484,295	254,850
Processed food, beverages and tobacco products	402	356	14,251	11,125	14,162	11,031	1,249,461	706,265
Dry goods, textile and wearing apparel,wholesaling	61	50	1,264	1,298	1,150	1,217	46,707	52,852
Construction materials and supplies, wholesaling	358	318	11,749	9,890	11,583	9,775	874,637	563,498
Office and household furniture, furnishing and appliances and wares, wholesaling	107	101	3,175	2,938	3,151	2,913	168,507	141,687
Machinery and equipment including transport equipment, dealing	545	509	20,593	17,336	20,530	17,195	1,608,202	1,162,799
Minerals, metals and industrial chemicals except crude petroleum prods.,dealing	417	378	15,390	13,375	15,180	13,172	1,202,342	969,116
Petroleum products, wholesaling	52	51	4,555	5,266	4,547	5,249	599,594	665,082
Wholesale trade n.e.c.	670	613	17,157	20,108	16,614	19,343	933,827	1,018,012

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Table 17.6 Summary Statistics Large Wholesale and Retail Trade with an Average Total Employment of Ten or More Establishments by Industry Major Group: 1989 and 1990 (continued)
(Value in thousand pesos)

Industry major group	Revenue/sales		Costs		Capital expenditures		Gross margin		Value added	
	1990	1989	1990	1989	1990	1989	1990	1989	1990	1989
All industries	307,413,392	218,496,439	278,600,332	200,020,300	4,169,957	4,308,680	59,223,172	39,758,327	9,537,112	30,209,912
Wholesale trade	204,484,432	144,806,197	183,845,691	132,118,617	2,673,007	3,135,324	41,817,038	27,581,062	36,149,099	21,083,823
Farm, forest and marine products	11,521,589	7,027,519	10,630,597	6,833,987	172,977	174,912	4,309,880	1,071,213	2,086,038	458,334
Processed food, beverages and tobacco products	45,836,443	28,758,452	40,542,282	27,113,041	296,143	366,150	12,740,836	4,843,845	10,852,037	3,418,269
Dry goods, textile and wearing apparel, wholesaling	541,117	653,872	469,590	572,273	2,614	9,147	122,388	184,947	87,844	92,608
Construction materials and supplies, wholesaling	21,988,610	13,326,185	19,931,147	12,406,446	247,984	140,921	3,032,314	2,290,386	3,160,059	1,987,826
Office and household furniture, furnishing and appliances and wares, wholesaling	4,385,482	2,922,660	3,677,793	2,620,499	55,972	55,781	1,158,082	485,335	997,698	388,742
Machinery and equipment including transport equipment, dealing	19,428,297	17,253,620	16,669,241	15,144,741	708,971	479,760	4,541,650	4,270,424	4,077,817	3,389,980
Minerals, metals and industrial chemicals except crude petroleum prods.,dealing	20,544,832	18,221,960	18,909,185	14,734,766	374,275	549,765	5,816,549	5,360,106	4,120,175	4,260,713
Petroleum products, wholesaling	63,629,041	38,445,249	57,297,316	34,590,838	625,957	1,042,011	7,168,988	5,750,924	9,011,318	5,037,261
Wholesale trade n.e.c.	16,609,021	18,196,679	15,718,540	18,102,025	188,113	316,877	2,926,352	3,323,880	1,756,112	2,050,089

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Table 17.6 Summary Statistics Large Wholesale and Retail Trade with an Average Total Employment of Ten or More Establishments by Industry Major Group: 1989 and 1990 (continued)
(Value in thousand pesos)

Industry major group	Number of establishment		Employment (average for the year) Total		Paid employees		Compensation	
	1990	1989	1990	1989	1990	1989	1990	1989
Retail trade	4,883	4,219	143,661	124,993	139,103	121,294	5,295,464	4,042,930
Books, office and school supplies, including newspapers & magazines, retailing	190	173	5,746	5,920	5,566	5,783	232,852	233,972
Food, beverages and tobacco retailing	755	601	25,674	21,634	24,575	20,713	755,792	572,424
Dry goods, textile and wearing apparel, retailing	717	620	41,360	37,685	40,854	37,154	1,479,449	1,102,118
Construction materials and supplies, retailing	977	880	21,587	17,518	20,526	16,717	710,306	494,113
Office, household furniture and furnishing, fixtures, appliances & wares, retailing	431	372	11,284	9,079	11,095	8,951	528,912	406,388
Transport machinery and equipment, accessories and supplies, retailing	458	387	11,838	8,281	11,545	8,140	455,218	308,485
Medical supplies and equipment stores	440	403	8,634	8,121	8,505	7,896	522,399	374,392
Petroleum and other fuel products, retailing	568	541	10,502	10,747	9,802	10,168	332,828	314,322
Retail trade, n.e.c.	347	242	7,036	6,008	6,635	5,772	277,709	236,715

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Table 17.6 Summary Statistics Large Wholesale and Retail Trade with an Average Total Employment of Ten or More Establishments by Industry Major Group: 1989 and 1990 (concluded)
(Value in thousand pesos)

Industry major group	Revenue/sales		Costs		Capital expenditures		Gross margin		Value added	
	1990	1989	1990	1989	1990	1989	1990	1989	1990	1989
Retail Trade	102,928,960	73,690,242	94,754,640	67,901,683	1,496,951	1,173,356	17,406,133	12,177,265	13,388,013	9,126,089
Books, office and school supplies, including newspapers magazines, retailing	2,478,806	2,437,156	2,348,982	2,145,487	37,286	157,746	621,201	688,044	323,743	446,452
Food, beverages and tobacco retailing	18,965,057	14,906,820	17,699,058	14,005,045	350,163	308,440	2,463,015	1,966,637	2,059,003	1,477,101
Dry goods, textile and wearing apparel, retailing	23,272,460	18,131,231	20,509,949	15,984,959	468,455	298,290	5,175,650	3,692,781	3,940,563	2,760,429
Construction materials and supplies, retailing	11,135,224	8,240,083	10,484,703	7,926,566	216,098	112,825	2,152,580	1,352,047	1,606,668	964,530
Office, household furniture and furnishing, fixtures, appliances & wares, retailing	11,511,774	7,218,249	10,843,489	6,954,842	97,620	89,248	1,951,226	1,243,441	1,353,877	778,688
Transport machinery and equipment, accessories and supplies, retailing	10,157,735	3,661,422	8,915,302	3,337,141	148,135	80,814	2,108,276	937,753	1,870,120	767,952
Medical supplies equipment stores	8,685,187	7,629,271	8,262,458	7,000,127	31,143	41,563	1,080,375	925,797	878,404	767,022
Petroleum and other fuel products, retailing	11,485,937	8,413,701	10,964,520	7,933,566	31,168	29,197	960,314	596,879	725,822	549,197
Retail trade, n.e.c.	5,236,781	3,052,308	4,726,180	2,613,949	116,883	55,233	893,495	773,886	629,813	614,719

Note: Details may not add up to totals due to rounding of figures.
Source: National Statistics Office, Wholesale and Retail Trade Section.

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Table 17.7 Summary Statistics for Large Wholesale and Retail Trade Establishments by Region: 1989 and 1990 (Value in thousand pesos)

Region	Number of establishments		Employment (average for the year)				Compensation	
			Total		Paid employees			
	1990	1989	1990	1989	1990	1989	1990	1989
Philippines	7,886	6,956	247,406	215,774	240,937	210,299	12,463,038	9,577,091
National Capital Region (NCR)	3,886	3,485	144,434	130,688	142,070	128,610	8,757,334	6,979,795
Cordillera Administrative Region(CAR)	84	71	1,701	1,380	1,653	1,325	63,847	56,562
I. Ilocos	252	212	4,765	4,667	4,517	4,473	174,129,556	
II. Cagayan Valley	119	106	3,550	2,490	3,395	2,346	107,343	73,976
III. Central Luzon	424	371	9,217	7,422	8,709	6,923	292,701	196,402
IV. Southern Luzon	505	385	9,752	7,391	9,023	6,979	320,750	233,027
V. Bicol	143	115	3,497	3,193	3,364	3,047	107,573	79,941
VI. Western Visayas	480	411	12,058	9,680	11,774	9,426	543,625	366,438
VII. Central Visayas	563	529	22,612	17,365	21,975	16,805	763,932	514,221
VIII. Eastern Visayas	115	107	2,712	2,197	2,525	2,040	99,866	71,042
IX. Western Mindanao	204	175	4,909	4,357	4,693	4,171	176,922	112,722
X. Northern Mindanao	377	346	8,300	7,335	7,904	7,023	316,683	197,844
XI. Southern Mindanao	568	493	16,264	14,673	15,818	14,316	625,873	476,441
XII. Central Mindanao	166	150	3,635	2,936	3,517	2,815	111,746	89,124

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Table 17.7 Summary Statistics for Large Wholesale and Retail Trade Establishments by Region: 1989 and 1990 (concluded) (Value in thousand pesos)

Region	Revenue/sales		Costs		Capital expenditures		Gross margin		Value added	
	1990	1989	1990	1989	1990	1989	1990	1989	1990	1989
Philippines	307,413,392	218,496,439	278,600,332	200,020,300	4,169,957	4,308,678	59,223,172	39,758,328	49,537,112	30,209,913
National Capital Region (NCR)	211,897,768	157,730,271	192,582,065	144,253,076	2,944,820	3,377,048	37,346,895	29,183,104	33,277,801	22,403,770
Cordillera Administrative Region(CAR)	1,340,307	902,348	1,245,651	837,935	2,346	37,691	176,137	164,780	121,899	110,125
I. Ilocos	6,380,641	3,857,731	4,734,412	3,600,180	43,714	37,938	2,324,568	541,547	2,155,788	416,864
II. Cagayan Valley	1,668,225	1,145,626	1,550,024	1,060,199	21,838	15,224	482,078	292,636	357,418	221,058
III. Central Luzon	9,003,166	5,126,591	7,943,608	4,534,217	50,125	47,720	1,776,285	1,077,706	1,421,123	870,148
IV. Southern Luzon	7,037,894	4,505,654	5,952,944	3,985,843	99,866	81,638	1,681,903	1,019,909	1,402,850	721,225
V. Bicol	3,296,030	2,308,634	3,064,538	2,213,154	85,191	124,459	776,517	267,563	564,672	253,224
VI. Western Visayas	17,519,076	10,651,093	15,656,033	9,842,580	110,771	88,563	4,102,111	1,978,697	3,161,787	1,419,102
VII. Central Visayas	20,926,879	13,108,972	20,179,852	12,651,602	389,565	163,966	4,439,836	1,542,179	2,319,603	976,902
VIII. Eastern Visayas	1,976,427	1,084,806	1,763,953	967,213	28,296	20,563	456,079	208,641	333,630	137,919
IX. Western Mindanao	3,287,596	2,177,077	2,882,595	1,831,320	19,241	37,025	908,581	514,323	679,637	404,145
X. Northern Mindanao	6,745,876	3,504,023	5,761,061	3,165,076	117,553	74,298	2,003,891	683,032	1,752,534	533,560
XI. Southern Mindanao	12,054,068	10,233,437	11,247,348	9,093,579	227,103	176,409	2,202,399	1,924,358	1,562,990	1,478,495
XII. Central Mindanao	4,279,440	2,160,176	4,036,249	1,984,326	29,527	26,136	545,890	359,853	425,381	263,376

Note: Details may not add up to totals due to rounding of figures.

Source: National Statistics Office, Wholesale and Retail Trade Section.

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Table 17.8 Comparative Selected Statistics for Community, Social and Personal Services Establishments with Average Total Employment of 10 or more by Industry Major Group : 1989 and 1990
(Value in thousand pesos)

Industry Description	Number of establishments		Total employment		Paid employees		Total compensation	
	1990	1989	1990	1989	1990	1989	1990	1989
All industries	8,410	7,646	343,634	320,081	334,068	311,986	13,983,201	10,948,331
Sanitary and related services	99	92	10,208	9,902	10,167	9,857	279,586	253,048
Private education services	2,384	2,328	141,664	138,522	139,331	136,378	5,955,598	4,976,852
Private medical, dental and other health services	723	695	38,684	39,284	37,624	38,227	1,489,309	1,236,290
Research and scientific institutions, public and private	9	13	1,410	1,478	1,408	1,474	113,375	109,091
Social welfare services	12	11	393	841	364	756	14,055	25,988
Motion picture and other entertainment services	563	548	15,599	15,600	15,320	15,252	834,050	591,991
Amusement and other recreational services n.e.c.	362	332	16,530	15,620	15,973	15,243	932,063	755,496
Repair of motor vehicles and motorcycles	408	359	7,309	6,295	6,941	5,971	214,381	166,180
Repair services n.e.c.	157	129	2,970	2,754	2,906	2,645	124,603	90,287
Laundries, laundry services, and cleaning and dyeing plants	35	30	1,613	1,929	1,560	1,914	63,551	49,977
Barber and beauty shops	121	114	1,665	1,549	1,539	1,300	28,115	18,491
Photographic studios including commercial photography and related services	64	62	946	1,057	856	947	28,264	27,038
Personal services n.e.c	153	152	3,215	3,424	3,105	3,271	121,678	101,418
Restaurants, cafes and other eating and drinking places	2,899	2,392	75,846	55,671	71,817	52,992	2,338,151	1,244,217
Hotels, motels and other lodging places	421	389	25,582	26,155	25,157	25,759	1,446,412	1,304,966

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Table 17.8 Comparative Selected Statistics for Community, Social and Personal Services Establishments with Average Total Employment of 10 or more by Industry Major Group : 1989 and 1990 (concluded)
(Value in thousand pesos)

Industry Description	Total revenue		Total costs		Capital expenditures		Value added	
	1990	1989	1990	1989	1990	1989	1990	1989
All Industries	49,366,550	39,050,081	27,001,407	19,591,353	3,812,794	2,940,078	25,204,495	21,862,348
Sanitary and related services	513,331	483,011	143,931	132,414	8,696	12,853	377,012	356,883
Private education services	10,145,331	8,484,977	2,713,826	2,108,237	1,544,066	1,299,084	7,716,140	6,575,396
Private medical, dental and other health services	5,121,596	4,495,683	2,952,508	2,460,968	414,727	326,061	2,275,382	2,148,393
Research and scientific institutions, public and private	125,701	200,108	81,490	71,384	23,828	8,948	52,677	133,373
Social welfare services	47,953	97,607	21,924	56,263	7,002	9,311	27,021	45,615
Motion picture and other entertainment services	4,857,173	4,595,991	3,328,475	2,554,307	387,687	391,884	1,750,673	2,259,973
Amusement and other recreational services n.e.c.	5,641,170	4,545,253	2,212,029	2,051,311	285,790	365,566	4,631,089	3,670,291
Repair of motor vehicles and motorcycles	956,077	663,261	598,797	436,139	45,899	7,318	417,950	249,795
Repair services n.e.c.	701,369	502,419	308,476	224,051	43,553	16,178	424,140	316,444
Laundries, laundry services, and cleaning and dyeing plants	222,415	189,944	138,526	108,584	14,886	12,436	93,047	88,830
Barber and beauty shops	60,417	46,313	31,468	24,539	4,141	1,028	30,586	22,436
Photographic studios including commercial photography and related services	153,014	136,055	111,177	97,027	9,599	29,824	49,284	47,195
Personal services n.e.c.	437,169	366,905	231,690	240,345	16,018	27,226	221,968	150,750
Restaurants, cafes and other eating and drinking places	14,619,012	7,894,490	11,039,915	5,918,130	314,515	123,727	3,907,917	2,240,264
Hotels, motels and other lodging places	5,764,823	6,348,785	3,087,176	3,107,655	692,387	308,635	3,229,609	3,556,710

Note: Details may not add up to totals due to rounding or suppression. Source: National Statistics Office, Services Statistics Section.

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Table 17.9 Selected Statistics for Community, Social and Personal Services Establisments With Average Total Employment of 10 or more by Region: 1989 and 1990 (Value in thousand)

Region	Number of establishments		Total employment		Paid employees		Total compensation	
	1990	1989	1990	1989	1990	1989	1990	1989
Philippines	8,410	7,646	343,634	320,081	334,068	311,986	13983,201	10,948,331
National Capital Region (NCR)	3,388	3,059	175,368	157,463	172,033	155,168	8,614,606	6,421,429
Cordillera Administrative Region (CAR)	180	186	5,701	6,869	5,545	6,680	226,427	258,341
I. Ilocos	346	321	9,904	9,969	9,526	9,636	260981	225,864
II. Cagayan Valley	151	150	4,247	4,410	4,089	4,263	142800	130,136
III. Central Luzon	870	772	25,859	25,299	24,681	24,186	717263	586,432
IV. Southern Tagalog	869	756	29,511	28,357	28,441	27,196	887,217	770,286
V. Bicol	313	299	9,481	8,794	9,139	8,521	237321	195,530
VI. Western Visayas	436	381	18,132	16,319	17,601	15,893	710216	569,507
VII. Central Visayas	477	444	21,156	20,722	20,651	20,208	818601	647,222
VIII. Eastern Visayas	119	112	4,119	3,675	3,769	3,564	116467	100,778
IX. Western Mindanao	183	176	5,711	5,406	5,460	5,220	159333	133,289
X. Northern Mindanao	309	297	10,139	10,302	9,819	9,994	327320	293,839
XI. Southern Mindanao	553	498	17,146	16,320	16,436	15,536	574191	465,876
XII. Central Mindanao	216	195	7,160	6,176	6,878	5,921	190414	149,802

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Table 17.9 Selected Statistics for Community, Social and Personal Services Establisments With Average Total Employment of 10 or more by Region: 1989 and 1990 (concluded)
(Value in thousand)

Region	Total revenue		Total costs		Capital expenditures		Value added	
	1990	1989	1990	1989	1990	1989	1990	1989
Philippines	49,366,550	39,050,801	27,001,407	19,591,353	3,812,794	2,940,078	25,204,495	21,862,348
National Capital Region (NCR)	35,834,640	27,359,302	21,138,627	14,731,969	2,332,887	1,729,442	16,856,702	14,440,097
Cordillera Administrative Region (CAR)	546,923	745,385	259,200	355,915	34,132	33,987	300,506	447,794
I. Ilocos	600,856	548,224	279,945	252,055	115,032	44,120	356,230	320,072
II. Cagayan Valley	254,469	218,864	63,557	49,340	43,574	19,759	196,049	176,405
III. Central Luzon	1,977,262	1,765,486	860,496	662,786	147,536	76,271	1,182,109	1,166,389
IV. Southern Tagalog	2,218,474	1,800,874	1,025,586	854,707	303,967	345,244	1,267,322	1,095,038
V. Bicol	473,185	413,415	178,209	158,714	41,601	202,737	318,093	262,012
VI. Western Visayas	1,991,188	1,642,785	828,739	619,463	214,212	137,577	1,289,341	1,135,951
VII. Central Visayas	2,363,038	1,850,537	1,166,177	900,332	251,101	141,821	1,424,051	1,043,174
VIII. Eastern Visayas	255,915	219,003	97,727	77,608	16,146	16,783	163,455	145,526
IX. Western Mindanao	356,927	296,266	133,981	120,532	17,565	29,106	232,417	185,675
X. Northern Mindanao	726,538	616,165	245,290	209,449	73,256	52,123	510,576	424,233
XI. Southern Mindanao	1,345,003	1,235,285	544,283	465,556	189,776	85,057	848,075	800,718
XII. Central Mindanao	422,133	339,209	179,591	132,929	32,005	26,051	259,571	219,265

Note: Details may not add up to totals due to rounding or suppression.
Source: National Statistics Office, Private Services Section.

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Table 17.10 Comparative Selected Statistics for All Public Educational, Medical, Dental and OtherHealth Services Establishments by Industry Major Group: 1989 and 1990 (Value in thousand pesos)

Industry description	Number of establishments		Total emolyment		Total compensation		Total revenue	
	1989	1990	1989	1990	1989	1990	1989	1990
All industries	918	906	129,415	129,837	6,752,431	5,537,445	1,420,997	1,135,422
Public education services	364	358	60,795	61,454	3,398,261	2,908,053	551,282	443,836
Public medical, dental and other health services	554	548	68,620	68,383	3,354,170	2,629,392	869,715	691,587

Industry description	Total subsidies		Total costs		Capital expenditures	
	1989	1990	1989	1990	1989	1990
All Industries	10,777,335	9,638,961	3,437,537	3,044,998	2,521,222	1,678,778
Public education services	4,788,935	4,669,971	821,588	728,700	782,526	924,657
Public medical, dental and other health services	5,988,400	4,968,990	2,615,948	2,316,296	1,738,696	754,121

Details may not add up to totals due to rounding or suppression.

Source: National Statistics Office, Services Statistics Section.

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Table 17.11 Comparative Selected Statistics for All Public Educational, Medical, Dental and Other Health Services Establishments by Region: 1989 and 1990
(Value in thousand pesos)

Region	Number of establishments		Total employment		Total compensation		Total revenue	
	1990	1989	1990	1989	1990	1989	1990	1989
Philippines	918	906	129,415	129,837	6,752,431	5,537,445	1,420,997	1,135,422
National Capital Region (NCR)	50	49	28,759	28,580	1,777,238	1,386,983	789,508	646,489
Cordillera Administrative Region (CAR)	44	44	4,351	4,300	210,533	172,385	33,386	16,775
I. Ilocos	61	60	6,843	6,936	363,625	302,274	37,343	31,949
II. Cagayan Valley	55	55	5,775	6,077	293,782	243,827	20,116	21,523
III. Central Luzon	68	67	8,537	8,665	411,194	346,212	70,704	68,439
IV. Southern Tagalog	122	122	16,477	16,480	810,910	719,077	164,633	119,903
V. Bicol	66	61	6,889	6,276	350,335	266,037	28,092	19,609
VI. Western Visayas	97	93	10,509	10,510	538,926	448,119	95,751	67,980
VII. Central Visayas	64	64	6,561	6,659	319,209	245,506	43,863	23,103
VIII. Eastern Visayas	84	84	9,055	9,040	421,823	364,100	37,742	32,754
IX. Western Mindanao	51	51	6,078	6,155	280,179	229,240	20,697	18,834
X. Northern Mindanao	67	67	6,460	6,468	302,959	228,346	44,028	38,488
XI. Southern Mindanao	52	52	4,666	5,172	230,771	211,884	20,333	14,834
XII. Central Mindanao	37	37	8,455	8,519	440,948	373,455	14,802	14,742

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Table 17.11 Comparative Selected Statistics for All Public Educational, Medical, Dental and Other Health Services Establishments by Region: 1989 and 1990 (concluded)
(Value in thousand pesos)

Region	Total subsidies		Total costs		Capital expenditures	
	1990	1989	1990	1989	1990	1989
Philippines	10,777,335	9,638,961	3,437,537	3,044,998	2,521,222	1,678,778
National Capital Region (NCR)	2,819,028	2,576,578	1,272,387	1,110,206	1,531,797	787,458
Cordillera Administrative Region (CAR)	333,196	390,935	105,193	88,280	36,989	31,007
I. Ilocos	562,926	520,554	152,448	125,114	48,960	66,733
II. Cagayan Valley	470,552	402,504	122,286	116,502	82,918	62,280
III. Central Luzon	668,415	550,263	197,164	166,565	104,286	73,066
IV. Southern Tagalog	1,332,822	1,247,481	406,577	354,910	167,107	127,338
V. Bicol	627,373	486,672	176,714	137,745	97,288	69,505
VI. Western Visayas	869,965	2,742,262	211,259	199,602	105,316	82,607
VII. Central Visayas	485,659	381,749	135,760	119,276	44,358	75,756
VIII. Eastern Visayas	685,031	579,029	151,131	135,664	111,601	115,688
IX. Western Mindanao	446,445	384,172	124,146	118,184	42,993	50,420
X. Northern Mindanao	499,760	403,526	143,624	127,420	63,130	55,536
XI. Southern Mindanao	390,594	429,821	140,494	135,800	55,476	44,138
XII. Central Mindanao	585,568	543,415	98,355	109,730	29,004	37,247

Note: Details may not add up to totals due to rounding or suppression.

Source: National Statistics Office, Services Statistics Section.

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Table 17.12 Visitor Arrivals and Estimated Tourist Receipts: 1965-1993 (Receipts in million U.S. dollars)

Year	Visitor arrivals	Growth rate (%)	Tourist receipts[1]	Growth rate (%)
1965	84,015	11.66	17.64	13.22
1966	101,695	21.04	21.01	19.10
1967	108,805	6.99	23.11	10.00
1968	112,713	3.59	24.75	7.10
1969	123,268	9.36	27.07	9.37
1970	144,071	16.88	94.73	a
1971	144,321	0.17	65.93	(30.40)
1972	166,431	15.32	121.97	85.00
1973	242,811	45.89	76.90	(36.95)
1974	410,138	68.91	58.18	(24.34)
1975	502,211	22.45	109.63	88.43
1976	615,159	22.49	93.06	(15.11)
1977	730,123	18.69	130.85	40.61
1978	859,396	17.71	210.05	60.53
1979	966,873	12.51	238.01	13.31
1980	1,008,159	4.27	319.74	34.34
1981	938,953	(6.86)	343.72	7.50
1982	890,807	(5.13)	450.14	30.96
1983	860,550	(3.40)	464.75	3.25
1984	816,712	(5.09)	366.25	(21.19)
1985	773,074	(5.34)	507.00	38.43
1986	781,517	1.09	647.06	27.63
1987	794,700	1.69	1,200.00	85.45
1988	1,043,114	31.26	1,300.00	8.33
1989	1,189,719	14.05	1,460.00	12.31
1990	1,024,520	(13.89)	1,306.19	(10.53)
1991	951,365	(7.14)	1,281.30	(1.91)
1992	1,152,952	21.19	1,673.83	30.64
1993	1,372,097	19.01	2,120.00	26.66

[1] Figures from 1965-69 were based on a survey of outgoing visitors while figures in subsequent years were based on reports from commercial banks and authorized foreign exchange dealers as compiled by the Central Bank of the Philippines. From 1987 to the present, figures are estimated using Average Length of Stay and the Average Daily Expenditures of visitors derived from the annual Visitor Sample Survey and the number of visitors gathered from the A/D (Arrived/Departure) cards.

a Data not comparable with previous years as explained above.

Sources: Department of Tourism and Central Bank of the Philippines.

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Table 17.13 Distribution of Visitor Arrivals to the Philippines by Major Travel Market: 1982-1993

Travel market	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total	890,807	860,550	816,712	773,074	781,517	794,700	1,043,114	1,189,719	1,024,520	951,365	1,167,917	1,372,097
ASEAN	80,171	64,641	57,190	49,454	46,844	46,528	59,671	64,806	47,758	48,683	55,508	68,103
Brunei[1]	-	-	2,024	2,140	2,031	1,890	2,382	2,456	1,660	1,657	1,850	2,226
Indonesia	10,996	7,711	6,175	5,916	6,222	5,664	7,250	7,994	6,190	7,980	8,591	9,686
Malaysia	25,339	18,107	14,459	14,525	12,780	11,941	16,336	17,201	11,809	13,594	14,633	21,230
Singapore	33,732	27,219	22,147	17,271	17,556	17,785	23,794	26,402	19,331	15,662	20,467	23,302
Thailand	10,104	11,604	12,385	9,602	8,255	9,248	9,909	10,753	8,768	9,790	9,967	11,659
Australia	62,969	53,238	49,670	48,176	44,571	43,126	45,349	50,529	47,351	43,966	50,911	60,066
Hongkong	75,625	70,043	62,939	52,407	75,344	80,886	133,331	130,346	70,629	55,673	66,238	76,562
Korea	13,698	13,258	11,602	10,873	12,623	14,463	16,125	36,587	36,533	40,554	54,115	69,544
Japan	159,652	178,527	160,542	152,771	133,536	126,127	181,741	215,634	201,982	197,540	221,578	243,412
Taiwan	46,251	42,782	40,275	35,708	34,369	35,899	56,465	90,146	56,744	52,548	122,177	169,288
Middle East												
Saudi Arabia	16,374	14,209	17,809	13,539	19,976	20,396	17,778	15,052	13,112	12,514	14,275	12,862
North America	163,554	165,217	176,030	177,525	182,903	193,694	231,232	267,679	224,510	214,724	250,424	305,696
Canada	14,761	13,976	15,392	15,205	16,521	17,965	19,730	21,093	20,569	22,225	28,794	35,732
U.S.A.	148,793	151,241	160,638	162,320	166,382	175,729	211,502	246,586	203,941	192,499	221,630	269,964
Europe	98,742	96,882	85,556	79,096	80,251	80,865	99,930	109,339	112,083	117,204	151,634	179,982
Denmark	2,366	2,390	2,334	2,081	2,294	2,572	3,398	3,320	2,843	3,414	4,200	4,668
Finland	884	885	836	725	669	573	1,200	1,103	1,032	1,061	1,053	1,397
France	9,760	8,415	7,783	7,714	7,980	6,808	8,004	9,543	10,204	10,406	13,180	13,705
Germany W.	27,612	27,892	23,738	22,110	23,210	22,784	27,399	30,045	26,915	28,229	36,031	41,787
Italy	8,701	8,287	7,020	5,463	5,379	5,956	7,415	8,869	8,516	8,048	9,447	11,104
Netherlands	5,171	5,503	4,781	4,355	4,325	4,818	6,109	6,543	6,487	7,247	7,404	9,271

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Table 17.13 Distribution of Visitor Arrivals to the Philippines by Major Travel Market: 1982-1993 (concluded)

Travel market	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Norway	1,844	1,688	1,769	1,622	1,999	1,912	2,411	2,726	3,023	3,058	3,582	4,560
Spain	4,926	3,828	2,134	1,851	1,415	1,770	2,403	2,978	2,827	2,723	3,362	3,920
Sweden	4,102	3,904	3,844	3,984	4,838	5,557	6,883	6,759	6,381	6,375	7,240	7,507
Switzerland	10,751	11,100	10,095	9,512	8,826	8,248	9,993	10,853	10,382	10,672	12,254	13,556
United Kingdom	22,625	22,990	21,222	19,679	19,316	19,867	24,715	26,600	33,473	35,971	38,916	51,419
Other European countries	-	-	-	-	-	-	-	-	-	-	14,965	17,088
Others and unspecified residence	107,485	96,740	85,846	86,983	81,165	79,966	95,961	95,985	83,061	66,012	56,328	60,906
Overseas Filipinos	66,286	65,013	69,253	66,542	69,935	72,750	105,531	113,616	130,757	101,947	109,764	125,676

[1] Prior to Brunei's membership in ASEAN in 1984, Brunei arrivals were lumped under "Others".

Source: Department of Tourism.

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Table 17.14 Distribution of Visitor Arrivals by Purpose of Travel: 1988-1990

Purpose of travel	1988 Total	1988 Philippine nationals	1988 Non-nationals	1989 Total	1989 Philippine nationals	1989 Non-nationals	1990 Total	1990 Philippine nationals	1990 Non-nationals
Total	1,043,114	105,531	937,583	1,189,719	113,616	1,076,103	1,024,520	130,757	893,763
Holiday	696,119	55,562	640,557	794,067	58,012	736,055	325,153	8,761	316,392
Business	124,672	2,786	121,886	145,798	2,784	143,014	332,238	6,015	326,223
Official mission	42,861	1,045	41,816	51,061	1,022	50,039	12,513	-	12,513
Visit friends/ relatives	-	-	-	-	-	-	235,795	96,368	139,427
Convention	9,540	633	8,907	14,099	648	13,451	40,480	261	40,219
Health	6,391	1,984	4,407	6,694	1,852	4,842	-	-	-
Others	119,177	35,733	83,444	135,474	42,606	92,868	53,948	19,091	34,857
Not stated	44,354	7,788	36,566	42,526	6,692	35,834	24,393	261	24,132

Source: Department of Tourism.

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Table 17.15 Visitor Arrivals by Month: 1982-1993

Month	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total	890,807	860,550	816,712	773,074	781,517	794,700	1,043,114	1,189,719	1,024,520	951,365	1,152,952	1,372,097
January	87,895	78,779	68,301	71,254	63,981	72,038	66,338	98,130	89,907	77,585	85,424	128,312
February	68,639	83,108	71,711	77,310	46,330	62,867	96,435	106,867	91,484	63,626	92,445	93,817
March	76,475	81,606	69,612	69,936	54,393	65,643	79,774	102,479	102,685	77,930	94,609	108,754
April	75,306	72,802	68,832	61,683	58,410	73,002	76,167	91,022	97,989	77,387	92,244	103,391
May	67,555	68,026	58,424	60,737	59,946	59,551	74,743	94,060	86,160	81,306	76,990	93,915
June	65,277	68,950	60,271	62,066	62,989	63,356	77,600	94,434	78,877	71,497	87,433	100,591
July	75,156	76,975	71,751	66,611	71,395	73,017	92,671	115,755	88,843	72,549	95,090	112,565
August	75,793	78,701	76,054	49,122	78,729	77,474	90,615	113,676	79,753	79,058	96,145	100,321
September	57,652	53,591	54,165	52,880	58,258	52,540	79,014	87,434	66,019	68,411	78,986	93,256
October	67,959	55,234	61,257	56,349	65,445	58,744	96,556	96,997	68,987	79,864	88,468	115,945
November	77,890	63,576	69,480	61,941	72,601	56,558	99,598	101,577	76,071	89,461	92,262	130,658
December	95,210	79,202	86,854	83,185	89,040	79,910	113,603	87,288	97,745	112,691	172,856	190,572

Source: Department of Tourism.

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Table 17.16 Outbound Philippine Residents by Nationality: 1982-1992

Nationality	1982	1983	1984	1985	1986	1987	1988	1989	1990[a]	1991[a]	1992
Total	666,257	672,230	703,034	757,645	805,584	912,762	1,007,038	1,009,164	1,136,842	1,268,834	1,231,183
Philippine nationals	639,725	648,090	676,447	730,725	777,847	884,043	959,540	966,543	1,095342	1,239,981	1,196,766
Nonnationals	26,532	24,140	26,587	26,920	27,737	28,719	47,498	42,621	41,500	28,853	34,417
American	5,037	4,582	5,328	4,877	5,077	4,754	10,103	9,498	-	-	4,538
British	1,151	1,126	1,419	1,354	1,348	1,471	2,544	2,410	-	-	1,283
Chinese	13,461	11,529	11,539	12,953	12,521	13,651	16,301	15,479	-	-	15,506
Indian	1,418	1,479	1,414	1,456	1,670	2,052	3,110	1,839	-	-	1,877
Japanese	876	964	1,219	901	1,100	1,059	3,372	2,985	-	-	1,831
Spanish	401	320	321	343	324	321	365	362	-	-	264
Others	4,188	4,140	5,347	5,036	5,697	5,411	11,703	10,048	-	-	9,118

[a] Breakdown for nonnationals not available.

Source: Department of Tourism.

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Chapter 18
Foreign Trade

External trade is important to a developing economy like the Philippines. As a catalyst of growth, overseas trade brings to the country the needed raw materials and durable equipment necessary to propel industries into further productivity. It also opens markets for the country's agricultural produce and manufactured goods.

The National Statistics Office (NSO) through its Trade Statistics Division, is the sole agency tasked to compile the country's foreign trade statistics since 1973. Data include all goods entering/leaving the Philippines whether for government or private use or for commercial purposes, donations or gifts, samples or demonstration, animals for the zoo or for breeding and the like. Excluded are the following: fish and other marine products landed by Philippine vessels direct from the sea; goods imported and exported by, or on behalf of diplomatic services and armed forces; exposed cinematographic films imported or exported on rental basis; personal effects of passengers on which no duty was paid; issued currency notes and coins; goods in transit to foreign countries; fuels purchased abroad by ships and aircrafts of Philippine registry; and goods sent through parcel post.

Statistics are taken from import and export documents submitted by importers and exporters or their authorized representatives to the Bureau of Customs as required by law. Imported articles of commercial nature with dutiable value above P2,000.00 are cleared on formal import entry (Bureau of Customs Form No. 236). Those with dutiable value of P2,000.00 or less and personal and household effects are cleared on informal import entry (Bureau of Customs Form No. 177) whenever duty, tax or other charges are collectible. Effective 1980, imports cleared through the Export Processing Zone Authority (EPZA Form 8102 - Import Tally) are included. Moreover, data on shipping statistics are gathered from Bureau of Customs Form No. 15/89 (Inward Foreign Manifest) and Bureau of Customs Form No. 16/88 (Outward Foreign Manifest) both of which are provided by the shipping agent of the vessel.

The Philippines adopts the "general" system of recording foreign trade statistics and uses the customs frontier (not the national boundary) as the statistical frontier.

Since 1982, goods are considered imported/exported on the date the carrying vessel or aircraft arrives/departs at the port or airport of unloading/loading.

Commodities for foreign trade statistics are classified according to the 1989 Revised Philippine Standard Commodity Classification (PSCC). This classification scheme is aligned with the third revision of the United Nations

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Standard International Trade Classification (SITC), up to the five-digit level and with the Harmonized Commodity Description and Coding System of the Philippines, otherwise known as Harmonized System of the Philippines (HSP), up to the 6-digit level.

Definition of Terms

Trade - the exchange of goods and services for cash, credit and/or other goods and services resulting from transactions conducted by natural persons, juridical persons or the government with the intention usually of making profit.

Domestic trade - trade carried out within the national border of a country.

External trade - trade carried out across the political boundary of a country.

Foreign trade - the external trade of a country with its trading partners.

International trade - the external trade of two or more countries with their trading partners.

Import - goods coming from foreign countries through a seaport or airport of entry and properly cleared through the Bureau of Customs or remaining under customs control, whether these are for direct consumption, merchandising, warehousing or for further processing.

Export - all goods leaving the Philippines which are properly cleared through customs and destined to foreign countries.

Domestic export - export of goods grown, mined, quarried, caught or manufactured in the Philippines with local or imported raw materials and supplies.

Re-export - refers to commodities originally imported and later exported to other countries without undergoing physical and/or chemical transformation or have undergone simply blending, husking, cleaning, repacking or other minor processing that have left them unchanged.

Total trade - sum of total export and total import of a country.

Balance of trade (BOT) - the difference between export and import. It is favorable, if export value is greater than import value. Otherwise, it is unfavorable.

Country of origin - country where the commodity imported is grown, mined or manufactured. Further processing or material added to it in another country must bring about a material transformation to render such country as the country of origin. Otherwise, the country of origin remains unchanged if the commodity is subjected to mere sorting, grading, cleaning, packaging or similar processes.

Country of destination - country of ultimate destination as shown in the export document.

18.1 Philippine Trade Trend and Policies

Several factors determine the performance of the country's external trade sector. These include, among others, the demand for goods both local and

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foreign, import and export prices, and foreign trade policies which dictate the structure and direction of trade of the country.

After World War II (1946-1949), the country directed its efforts towards the restoration of its productive capacity and repair of infrastructure and other facilities. This resulted in increased demand for both production materials and consumption goods. On the other hand, foreign exchange earnings through increased exports, particularly of agricultural goods was encouraged through the Philippine Trade Act of 1946.

The demand for imported goods, however, surpassed exports which resulted in a serious balance of trade (BOT) deficits in the following years.

From 1950 to 1961, in spite of import controls implemented by the government to check the outflow of foreign exchange, imports continued to gain momentum, growing by 75 percent, compared to only 62 percent growth in exports. Thus, BOT continued to worsen over the eleven-year period.

Statistics show that the increase in import value may be attributed more to increase in import prices rather than growth in its volume. For the period 1950 to 1961, import quantum index rose only by 55 percent while export quantum index rose by 70 percent. On the other hand, import prices increased by 15 percent while export prices declined.

Trade liberalization began with the lifting of import controls in January 1962, and with this the devaluation of the peso. Consequently, BOT began to improve in 1962, even registering a surplus in 1963. This, however, was shortlived, for in the late 60s, BOT began to deteriorate. During the period 1961-1969, export value index went up by 70 percent, while import value index grew by 84 percent.

Liberalization policy continued in the 70s with the further devaluation of the peso. The effect was a huge reduction in BOT deficit in 1971 similar to that in 1962. In 1973, a huge BOT surplus was realized largely on account of increased prices of exports to almost 50 percent which can be attributed to inflation in foreign countries, rather than increased export volume, which rose by only 13 percent. In 1974, BOT deteriorated again, and in subsequent years, registered deficits as trading countries applied contractionary measures to fight inflation. On the other hand, import prices continued to be relatively high mainly due to high prices of imported petroleum.

In the 80s the move towards liberalization became more concrete with the implementation of the Import Liberalization Program (ILP) in 1981, aimed at freeing the business environment from the protectionist policy adopted by the government in the last three decades.

In 1983, in line with the government's flexible exchange rate policy to attain a more manageable trade balance, the peso was again allowed to depreciate by 7.8 percent to P11 to $1.

In 1984, the peso was further devalued to an average exchange rate of P16.8 to $1. This significantly brought down the level of import value by 8.3 percent, thereby effecting an improved BOT in the same year.

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The latter part of the 80s saw the country's imports increasing significantly, while exports grew moderately, resulting in the worsening of the country's BOT. Increased imports was brought about by renewed economic vigor and partly by the full implementation of the ILP.

From a $2.60 billion merchandise trade gap in 1989, BOT deficit widened to $4.02 billion in 1990 as imports rose at a rate nearly four times that of exports. The expansion in imports stemmed from the continued implementation of the ILP, the need to upgrade and replace obsolete capital equipment and the steep rise in oil prices brought about by the Middle East crisis. Exports, on the other hand, continued to grow although at a slow pace reflecting low domestic growth, economic slowdown in industrialized countries and the protectionist policies of some major trading partners.

The 1990 total trade increased by 11.80 percent over the previous years's level. The government's import liberalization program (lowering tariffs on commodities in lieu of quotas) contributed to the significant increase in the country's import bills. Imports grew faster than exports leading to a wider negative balance of trade of more than half of its value a year ago. The trade deficit aggravated the country's external account that led to a negative balance of payment (BOP) position, the first time since 1983 and a drop in the country's international reserves. The peso further depreciated vis-a-vis the US dollar from an average of P21.69 to US $1 in 1989 to P24.29. This required the temporary imposition of an additional import levy.

A favorable BOP position in 1991 was achieved partly due to BOT deficit reduction of 20.11 percent. Exports expanded while imports were reduced. Contributing to export growth were electronics, garments, crude petroleum and sugar. Decline in import bills was due to imposition of import levy and energy-saving measures cutting down oil importation.

18.2 Philippine Foreign Trade in 1992

Total merchandise trade in 1992 reached $24.34 billion, a 16.5 percent increase from $20.89 billion recorded in 1991. The increase was mainly attributed to the growth of imports which was up by 20.5 percent from the previous year to $14.52 billion. Exports also went up by 11.1 percent to reach $9.82 billion. The sluggish growth in exports may be traced to the following: recession in some of the country's major markets like the US and Japan, appreciation of peso against the US dollar and other major currencies, and energy crisis experienced by the country during the year. Imports, on the other hand, surged due to the total abolition of the five percent import levy in the second quarter of 1992. The stronger peso weakened exports but made imports cheaper; thus, leading to higher import bills. With imports greatly outpacing exports, the country's trade gap again worsened, reaching a huge trade deficit of $4.70 billion and surpassing the record of $4.02 billion in 1990. See Table 18.1.

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18.3 Philippine Trading Partners

18.3.1 Philippine Trade with Top Trading Countries

The country's major trading partners in 1992 were the following: United States of America, Japan, Taiwan, Federal Republic of Germany, Hong Kong, Saudi Arabia, Korea, Singapore, United Kingdom, Netherlands, Australia, Malaysia and France (Table 18.2a). Trade with these countries accounted for 83.4 percent of the total trade in 1992. Together, US and Japan, the country's principal trading partners, gobbled up 46.4 percent of the country's total trade in 1992.

The US (including Alaska and Hawaii) continued to be the country's largest trading partner. Exports to US during the year was valued at $3,831.55 million or 39.0 percent of the total exports. On the other hand, imports from US amounted to only $2,620.20 million resulting to a favorable balance of trade or a $1,211.34 million surplus.

Japan was the country's second biggest export market in 1992, comprising 17.8 percent of total exports amounting to $1,745.42 million. It was also the country's main source of imports during the year accounting for 21.3 percent of the total import bills. Top imports from Japan were materials for electronics as well as machinery and transport equipment. Trade with Japan incurred a deficit of $1,341.36 million.

Taiwan is becoming the country's fastest-growing trading partner. It stepped up its importation by $286.79 million in 1992. Taiwan imported mainly electronics products specifically integrated circuits and microassemblies. On the other hand, Taiwan was the largest source of textile yarn and fabrics as well as non-electrical machinery and equipment.

18.3.2 Trade with Economic Blocs

The world's nine major economic blocs are the General Agreement on Tariffs and Trade (GATT), Economic and Social Commission for Asia and the Pacific (ESCAP), Association of Southeast Asian Nations (ASEAN), European Community (EC), Generalized System of Preferences Donor countries (GSP), Organization for Economic Cooperation and Development (OECD), European Free Trade Association (EFTA), Latin American Free Trade Association (LAFTA), and Association of African States and Malagasy (ASSM). Member countries of these blocs are listed in Section 18.9 of this chapter.

The country experienced negative trade balances with all economic blocs (except EC) in 1992. Trade with ESCAP registered the biggest deficit of $2.425 billion as exports inched up by only 10.40 percent ($7.660 billion) while imports reached $10.085 billion or 18.2 percent growth over the previous year's level.

Trade with EC netted $156.83 million surplus as exports surged to $1.86 billion, while imports amounted only to $1.70 billion. Trade surplus, however,

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was slightly lower than the $394.02 million recorded a year ago. The EC region was the only economic bloc which showed consecutive positive balance of trade since 1984.

As the biggest international economic bloc, GATT accounted for about 90.06 percent of the country's total export earnings during the year. Likewise, it continued to supply the bulk of Philippine imports amounting to $10.8 billion.

Trade with the ASEAN amounted to $1.773 billion, a slight increase of 2.98 percent over the past year. In recent years, the ASEAN (in which the Philippines is also a member country) had been aiming at expanding intra-regional trade which remained low. Efforts have been made towards the formation of ASEAN Free Trade Area (AFTA) to countervail the European and North American counterparts by introducing a schedule of tariff reduction according to the Common Effective Preferential Tariff Programmes (CEPT).

The effect of the withdrawal of Great Britain, Portugal and Denmark from EFTA continuously cut down Philippine import transactions with EFTA. Import bill was slashed to $151.127 million from $158.616 million in 1991. Exports, on the other hand, managed to expand by 3.01 percent to $70.231 million.

Trade transactions with the AASM had a decreasing trend since 1990. In 1992 total trade reached only $17.384 million. Exports was valued at $365.803 thousand down by 55.86 percent over the previous year's amount of $828.752 thousand. On the other hand, imports decreased also by 11.80 percent from $19.295 million in 1991 to $17.018 million in 1992. Most of the transactions came from Senegal ($14.203 million) and Togo ($8.096 million). See Table 18.2b.

18.3.3 Philippine Trade by Major Product Group

Exports of industrial manufactures hit $4.184 billion in 1992, a 14.64 percent hike from last year's $3.650 billion. The rise in exports of these products was largely due to the strong performance of electronics which reached $2.971 billion or 71.00 percent of total industrial manufacture exports in 1992.

At the same time, imports of industrial manufactures also inched up but at a lesser rate (22.14 percent) than exports. It could be seen from figure 18.2 that about 82.69 percent of the country's imports was concentrated in this product group. The increase in import expenditures was due to the country's growing demand for electronics (15.02 percent); machinery and transport equipment (35.76 percent); and construction materials (39.50 percent).

Consumer manufactures, mainly composed of garment products, emerged as the second leading commodity group. Shipments of consumer manufactures increased by 13.64 percent from $2.746 billion in 1991 to $3.121 billion in 1992. Receipts from garments in 1992 comprised 64.55 percent of total consumer manufacture exports. Meanwhile, imports of consumer manufactures soared 21.37 percent from $390.708 million in 1991 to $474.206 million in 1992. All commodities under this group showed favorable growth except fashion acces-

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sories and leather goods, and footwear which registered negative growth of 5.08 percent and 3.60 percent, respectively.

In contrast, receipts from food and food preparations dropped 8.33 percent to $1.141 billion in 1992 from $1.245 billion in 1991. The decline was due to the 14.94 percent decrease in shipment of fresh food. Food and food preparation imports amounted to $1.017 billion in 1992, up by $207.843 million or 25.69 percent from previous year's $809.082 million. Specifically, imports of processed food reached $629.524 million while fresh food amounted to $387.401 million.

Resource-based products ranked third with exports valued at $1.113 million, a 20.06 percent improvement over the past years's $0.927 million. Commodities classified under this group include coconut, mineral, forest products and tobacco. On the other hand, imports of resource-based products increased by 5.75 percent from $712.362 million in 1991 to $753.301 million in 1992.

18.4 Terms of Trade

Table 18.5 shows the country's trade indices for both exports and imports from 1979 to 1991. It shows quantum, price and value indices with 1985 as the base year.

The terms of trade index in 1991 was computed at 118.1 percent, 8.8 index points higher than that in 1990. This developed as import price index went down by 4.2 percent while export price index managed to grow by 3.6 index points. Thus, the purchasing power of exports, which is indicative of the country's capacity to import based on export receipts expanded to 202.4 percentage points, up by 11.5 percent or 20.9 index points from the previous year's level of 181.5 percent.

The quantum index for both exports and imports rose by 1.7 percent and 3.2 percent, respectively. A contrasting trend was observed in the value index. Import value index was calculated at 225.4 percent, 2.7 percent lower than the 231.6 index points recorded in 1990. On the other hand, value index for exports was 182.3 percent, up by 11.7 index points.

18.5 Principal Exports

The country's top ten exports in 1992 earned an aggregate of $6,051.93 million to account for more than half (61.6 percent) of total export earnings for the year. Comprising the top ten export earners were the following: articles of apparel and clothing accessories; electronics and components; coconut oil; woodcraft and furniture; ignition wiring sets use in vehicles; cathodes of refined copper; fresh shrimps and prawns; input or output units for computers; other products manufactured from materials imported on consignment; and fresh bananas (Table 18.6). Except for fresh bananas and input or output units for computers, these commodities were also the top ten export winners in 1991.

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Consistently on top of the list, articles of apparel and clothing accessories registered receipts of $2,140.34 million or 15.0 percent higher than the 1991 level of $1,860.6 million.

Electronics and components, the second biggest dollar earner, generated $1,959.76 million, posting a positive growth of 11.9 percent over the 1991 figure of $1,751.21 million. Garments and electronics include exports on consignment basis, referring to exports in which the buyer supplies the raw materials while labor and processing cost are provided for by the exporter. Together, garments and electronics comprised about 50.0 percent of total exports.

Coconut oil, a major traditional Philippine export, earned $481.16 million representing an increase of 61.2 percent or $182.63 over the past year.

Woodcraft and furniture landed fourth in the list. In 1992, it earned $291.19 million, 0.2 percent lower than the 1991 level of $291.70 million.

Ignition wiring sets first joined the list of top ten export winners in September 1991 and has been moving up ever since. They are used as inputs in vehicles, aircrafts and ships and are mainly exported to the US and Japan. Export receipts from this product amounted to $261.78 million, or 47.2 percent higher than the 1991's $177.89 million.

Exports of fresh shrimps and prawns continued to fall. Nevertheless, despite the 22.8 percent decrease in export value from 1991, fresh shrimps and prawns still managed to be in the seventh slot, though dropping from last year's fifth rank. The country's shipment of this commodity was valued at $207.92 million in 1992 compared to $269.46 million in 1991.

Input or output units used for computers was a new entry to the list of top ten exports. The 1992 earnings of this product amounted to $174.79 million, or a 78.6 percent growth over the 1991 value of $97.88 million.

Other top exports were: Refined copper cathodes ($216.61 million); other consigned products ($160.64 million); and fresh bananas ($157.73 million).

Of the top ten exports in 1992, only five commodities registered growth while the rest performed otherwise. Specifically, coconut oil and input or output units for computers realized growth rates of 61.2 percent and 78.6 percent, respectively. On the other hand, fresh shrimps and prawns suffered the biggest setback.

18.6 Principal Imports

The country's top imports in 1992 totalled $10,482.31 million or 72.2 percent of the total imports. Top ten imports were the following: Mineral fuel, lubricants and related materials; non-electrical machinery and equipment; electronics and components; textile yarn, fabrics, made-up articles and related products; electrical machinery, apparatus and appliances; transport equipment; base metals; organic and inorganic chemicals; plastic in primary and non-primary forms; and cereals and cereal preparations (Table 18.7).

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Imports of mineral fuels and lubricants, the consistent number one import, posted an increase of $265.35 million or 14.9 percent to $2,049.64 million in 1992 due mainly to higher demand for crude petroleum and other petroleum products. The second biggest import was non-electrical machinery and equipment with a value of $1,803.61 million, or 50.1 percent up over 1991 figure of $1,201.50 million. Electronics and components posted an 11.5 percent increase from its 1991 import receipt of $1,406.58 million. Ranking fourth was textile yarn, fabrics, made up articles and related products with value of $1,143.22 million also up by 8.6 percent.

Other top import commodity groups during the year were electrical machinery, apparatus and appliances including telecommunications and sound recording and reproducing apparatus and equipment ($978.81 million); transport and equipment ($908.68 million); base metals ($885.20 million); organic and inorganic chemicals ($466.42 million); plastic in primary and non-primary forms ($376.19 million); and cereals and cereal preparations ($301.04 million).

18.7 Trade by Port

The Philippine shorelines are dotted with hundreds of ports. However, not all these are open to foreign trade activities. Of the 42 principal ports of entry, 20 are in Luzon, 10 in Visayas and 12 in Mindanao. Although the bulk of trade transactions are loaded/unloaded in public ports, a few of these are private ports open exclusively to foreign trade activities of selected traders, mostly engaged in oil and petroleum industry, mining industry and agriculture industry. Commodities handled here are in bulk and mostly intended for oil, iron and fruit industries. Presented in Table 18.4 are the different ports of the country.

The bulk of the country's foreign trade transactions were in the ports of Luzon with total trade valued at $17.290 billion and $20.667 billion for 1991 and 1992, respectively, accounting for 82.76 and 84.90 percent of the total trade value shipped during the respective periods. This meant a growth of 19.54 percent over the 1991 level. Among the ports of entry in Luzon, the port of Manila (South Harbor), the Manila International Container Port (MICP), the Ninoy Aquino International Port and the Port of Batangas were the busiest ports on the island. These four ports together accounted for more than 89 percent of the total transactions in Luzon in 1991. Moreover, it comprised 73.94 percent and 76.16 percent of the country's total trade in 1991 and 1992, respectively.

The ports of Visayas recorded the second highest turnout of $1.984 billion in 1991 and $2.006 billion in 1992, representing a relatively small increment of 1.11 percent. Cebu, Lapu-lapu, Mactan International Airport and Tacloban are the most active ports in the area registering a combined trade value of $1.737 billion in 1991 (87.56 percent) and $1.815 billion in 1992 (90.47 percent).

Among the ports in Mindanao, Cagayan de Oro had the highest trade transactions in 1991 valued at $436.562 million but this was cut down to $424.884

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million or 2.67 percent in 1992. Shipments handled in Cagayan de Oro Port consisted mostly of consumer goods like fruits and vegetables; iron and steel; animal feeds; cane molasses; fertilizer; corn and corn products; and lumber, plywood and veneer.

18.7.1 Entrances of Ships Engaged in Foreign Trade

A total of 7,545 entrances of overseas vessels engaged in foreign trade was recorded in 1992 with 34.137 million tons of imported goods. These figures were 4.3 percent and 11.9 percent higher, respectively compared with 1991 level.

Table 18.8 shows that the bulk of goods entered in the ports of Luzon. An aggregate of 4,465 ship calls was registered in this area with 25.987 million tons of goods. Manila South Harbor remained as the busiest port in Luzon with 1,869 ship calls and inward cargo of 6.104 million tons. The port of Batangas recorded 215 ship entrances only but volume-wise, a total of 9.645 million tons of imported products was discharged. About 94 percent of the goods were composed of mineral fuels, lubricants and related products.

Total number of ships that berthed or anchored in Mindanao ports was 1,964 with cargo weighing 5.5 million tons. The number of vessels that arrived in Davao del sur (702) was higher compared to Misamis Oriental (458) but the latter recorded a larger volume of merchandise cargo.

Moreover, the ships that docked in Visayas ports totalled 1,116 with 2,592 million tons of inward cargo. See Table 18.8.

18.7.2 Clearances of Vessels Engaged in Foreign Trade

The number of clearances of foreign vessels in 1992 reached 7,553, up by 311 or 4.6 percent compared to 7,222 registered in 1991. In contrast, cargo loaded declined from 14.334 million tons in 1991 to 11.745 milliom tons. This was due to the decrease in the exportation of bulk commodities such as iron ore agglomerates, fertilizer and coconut products.

As can be gleaned from Table 18.9, Luzon accounted for nearly 60 percent of the total clearances and only 28.7 percent of the aggregate outward gross cargo. Manila South Harbor continued to have the country's highest port traffic with 1,873 shipcalls in 1992 from 1,567 in 1991. However, based on quantity, Manila International Container Port (MICP) handled export shipments amounting to 1,007 million tons, 65 thousand tons lower than 1,072 logged in the previous year. Port statistics in Manila South Harbor dropped due to the continued transfer of container operations to the MICP, mainly due to its modern cargo handling.

Volume-wise, Mindanao ports recorded the highest with 6,349 million tons of outbound goods. Almost 90 percent of the goods shipped were iron ore agglomerates. However, there were only 1,936 vessels that exited in this area.

Ports in Visayas followed the same trend as in Luzon. From 1,062 clearances in 1991, they rose to 1,117 but the goods exported decreased to 2,037 million tons from 2,556 in 1991. Cebu remained as the major exit point in Visayas.

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18.8 Government Assistance to Foreign Trade

Today's vision of the government is toward the development of Philippine exports in terms of "product-quality". This implies that Philippine industries have to be more efficient and competitive in producing better quality goods at a reasonable price to attract foreign markets. Thus, government programs were geared towards improvement of investment climate; promoting export by producing quality products; creating efficient domestic trade system; and providing basics needed by small businesses to start and expand. These programs are channelled through the International Trade Group of the Department of Trade and Industry (DTI) comprising the following:

The Bureau of Export Trade Promotion (BETP) is the DTI agency that provides framework to develop, expand and diversify Philippine exports. The Bureau works to simplify export procedures, regulations and documentation.

In February 1992, it served as the secretariat to the Export and Investment Development Council (EIDC). The EIDC worked for the abolition of the five percent import levy, and creation of the One-Stop-Shop Inter-Agency Tax Credit and Duty Drawback Center.

The Bureau of International Trade Relations (BITR) takes charge of the bilateral and multilateral trade relations with partner/target countries. Its main concern is to improve the access of Philippine products to overseas markets.

In 1992, the Bureau worked to ease trade barriers on Philippine products such as bananas, carrageenan, mango, shrimps, tuna, solo papaya, and floppy disk drives.

The Center for International Trade Exposition and Missions (CITEM) coordinates with the private sector regarding export promotions through participation and organization of trade fairs and missions here and abroad.

The Foreign Trade Service Corps (FTSC) carries out promotional activities overseas through investment and export promotion, and commercial intelligence. In 1992, the FTSC identified 538 new exportable products and market segments that can be tapped.

The Garments and Textile Export Board (GETB) is engaged in negotiating and overseeing the implementation of trade agreements on garments and textile manufactures. In 1992, GETB worked to attain extension of the memorandum of understanding between the Philippines and Canada. Another extension of agreement was made between the Philippines and the European Community.

The International Coffee Organization-Certifying Agency (ICO-CA) is the government agency responsible for negotiating coffee quotas and overseeing the implementation of agreements. Stiff competitions from other coffee-supplying countries made 1992 a difficult year for coffee exporters. Exporters of green coffee beans diverted production to the domestic market to get better prices.

The Philippine International Trading Corporation (PITC) is a government-owned trading firm which has been active in improving the country's trading capacity through countertrade. The purpose is to tap new export opportunities; encourage capital and technology inflows to help revitalize the economy.

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The Philippine Shippers Bureau (Shipperbu)'s task is to protect and promote the interest of Philippine shippers. In 1992, the bureau assisted 1,980 shippers through consultancy and shipping services, seminars/workshops/clinics and assistance in freight/cargo booking.

The Philippine Trade Training Center (PTTC) is responsible for developing the knowledge and skills of Filipino exporters in international marketing, making them more responsive, knowlegeable and competitive exporters to meet the challenges of the world market. About 147 training programs were conducted in 1992. These programs addressed the most common problems of exporters such as pricing, negotiating and tapping of market information.

The Product Development and Design Center of the Philippines (PDDCP)'s main task is to improve the quality and competitiveness of Philippine products through design. It offers consultancy services to small and medium-scale producers.

18.9 List of Member Countries of Different Economic Blocs as of 1992

General Agreement on Tarriffs and Trade (GATT - 103)

1. Antigua and Barbuda
2. Argentina
3. Australia
4. Austria
5. Bangladesh (East Pakistan)
6. Barbados
7. Belgium
8. Belize
9. Benin
10. Bolivia
11. Botswana
12. Brazil
13. Burkina Faso (Upper Volta)
14. Burundi
15. Cameroon
16. Canada
17. Central African Republic
18. Chad
19. Chile
20. Colombia
21. Congo
22. Costa Rica
23. Cote de' Ivoire (Ivory Coast)
24. Cuba
53. Kuwait
54. Lesotho
55. Luxembourg
56. Macau
57. Madagascar
58. Malawi
59. Malaysia
60. Maldives
61. Malta
62. Mauritania
63. Mauritius
64. Mexico
65. Morocco
66. Myanmar (Burma)
67. Netherlands
68. New Zealand
69. Nicaragua
70. Niger
71. Nigeria
72. Norway
73. Pakistan (West Pakistan)
74. Peru
75. Philippines
76. Poland

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25. Cyprus
26. Czechoslovakia
27. Denmark
28. Dominican Republic
29. Egypt
30. El Salvador
31. Finland
32. France
33. Gabon
34. Gambia
35. Germany, Federal Republic of
36. Ghana
37. Greece
38. Guatemala
39. Guyana
40. Haiti
41. Hong Kong
42. Hungary
43. Iceland
44. India
45. Indonesia
46. Ireland
47. Israel
48. Italy
49. Jamaica
50. Japan
51. Kenya
52. Korea, Republic of
77. Portugal
78. Romania
79. Rwanda
80. Senegal
81. Sierra Leone
82. Singapore
83. South Africa
84. Spain
85. Sri Lanka
86. Surinam
87. Sweden
88. Switzerland
89. Tanzania
90. Thailand
91. Togo
92. Trinidad and Tobago
93. Tunisia
94. Turkey
95. Uganda
96. United Kingdom of Great Britain
97. United States of America
98. Uruguay
99. Venezuela
100. Yugoslavia
101. Zaire
102. Zambia
103. Zimbabwe (Southern Rhodesia)

Economic and Social Commission for Asia and the Pacific (ESCAP - 30)

1. Afghanistan
2. Australia
3. Bhutan
4. China, Republic of (Taiwan)
5. France
6. India
7. Indonesia
8. Iran
9. Japan
10. Democratic Kampuchea
11. Korea, Republic of
12. Laos
13. Malaysia
14. Mongolia
16. Nauru, Republic of
17. Nepal
18. Netherlands
19. New Zealand
20. Pakistan, Islamic Republic of
21. Philippines
22. Singapore
23. Sri Lanka (Ceylon)
24. Thailand
25. Tonga
26. United Kingdom of Great Britain
27. Union of Soviet Socialist Republics
28. United States of America
29. Vietnam

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15. Myanmar (Burma)
30. West Samoa

Association of Southeast Asian Nations (ASEAN - 6)

1. Brunei Darussalam
2. Indonesia
3. Malaysia
4. Philippines
5. Singapore
6. Thailand

European Community (EC - 12)

1. Belgium
2. Denmark
3. France
4. Germany, Federal Republic of
5. Greece
6. Ireland
7. Italy
8. Luxembourg
9. Netherlands
10. Portugal
11. Spain
12. United Kingdom of Great Britain

Generalized System of Preferences Donor Countries (GSP - 27)

1. Australia
2. Austria
3. Belgium
4. Bulgaria
5. Canada
6. Czechoslovakia
7. Denmark
8. Finland
9. France
10. Germany, Federal Republic of
11. Greece
12. Hungary
13. Ireland
14. Italy
15. Japan
16. Luxembourg
17. Netherlands
18. New Zealand
19. Norway
20. Poland
21. Portugal
22. Spain
23. Sweden
24. Switzerland
25. Union of Soviet Socialist Republics
26. United Kingdom of Great Britain
27. United States of America

Organization for Economic Cooperation and Development (OECD - 24)

1. Australia
2. Austria
3. Belgium
4. Canada
5. Denmark
6. Finland
7. France
8. Germany, Federal Republic of
9. Greece
10. Iceland
11. Ireland
13. Japan
14. Luxembourg
15. Netherlands
16. New Zealand
17. Norway
18. Portugal
19. Spain
20. Sweden
21. Switzerland
22. Turkey
23. United Kingdom of Great Britain

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12. Italy
24. United States of America

European Free Trade Association (EFTA - 7)

1. Austria
2. Finland
3. Iceland
4. Liechtenstein
5. Norway
6. Sweden
7. Switzerland

Latin American Free Trade Association (LAFTA - 11)

1. Argentina
2. Bolivia
3. Brazil
4. Chile
5. Colombia
6. Ecuador
7. Mexico
8. Paraguay
9. Peru
10. Uruguay
11. Venezuela

Association of African States and Malagasy (AASM - 18)

1. Benin
2. Burkina Faso (Upper Volta)
3. Burundi
4. Cameroon
5. Central African Empire
6. Chad
7. Congo
8. Cote de' Ivoire (Ivory Coast)
9. Gabon
10. Madagascar
11. Mali
12. Mauritania
13. Niger
14. Rwanda
15. Senegal
16. Somalia
17. Togo
18. Zaire

Sources:

18.1 Jose Encarnacion, et. al. Philippine Economic Problem in Perspective, University of the Philippines, Diliman, Quezon City, 1976; Central Bank Annual Reports 1988-1991; National Statistics Office, Trade Division.

18.2-18.9 National Statistics Office, Trade Statistics Division. Foreign Trade Statistics of the Philippines; Department of Trade and Industry, Bureau of Export Trade Promotion.

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Figure 18.1 Trade Trend of the Philippines: 1982-1992

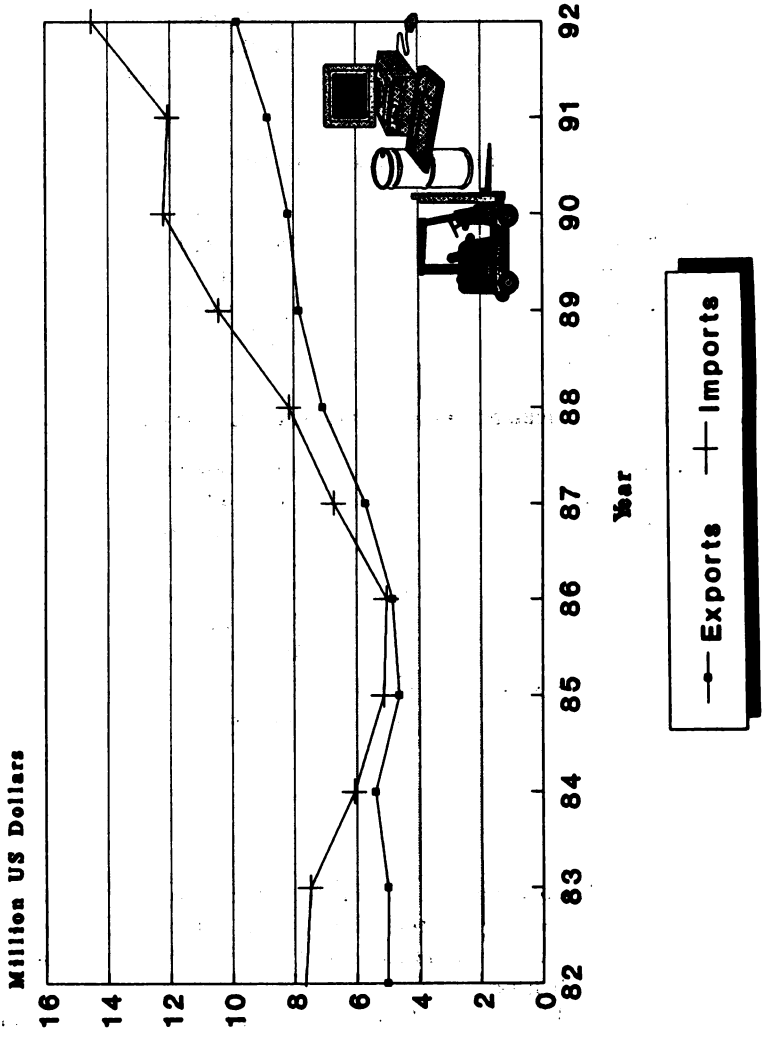

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Table 18.1 Foreign Trade of the Philippines: 1880, 1900, 1920, 1930-1992
(F.O.B. value in million U.S. dollars)

Year	Total trade	Exports [1] Value	Exports Percent to total trade	Exports Average exchange rate	Imports Value	Imports Percent to total trade	Imports Average exchange rate	Balance of trade favorable (+) unfavorable (-)
1880	24.47	11.73	47.94	2.000	12.74	52.06	2.000	1.01 -
1900	47.85	22.99	48.05	2.000	24.86	51.95	2.000	1.87 -
1920	300.56	151.12	50.28	2.000	149.44	49.72	2.000	1.68 +
1930	256.26	133.17	51.97	2.000	123.09	48.03	2.000	10.08 +
1931	203.15	103.97	51.18	2.000	99.18	48.82	2.000	4.79 +
1932	179.78	100.37	55.83	2.000	79.41	44.17	2.000	20.96 +
1933	177.99	110.62	62.15	2.000	67.37	37.85	2.000	43.25 +
1934	199.86	116.24	58.16	2.000	83.62	41.84	2.000	32.62 +
1935	187.47	101.93	54.37	2.000	85.54	45.63	2.000	16.39 +
1936	248.81	147.68	59.35	2.000	101.13	40.65	2.000	46.55 +
1937	275.99	166.96	60.49	2.000	109.03	39.51	2.000	57.93 +
1938	279.62	147.00	52.57	2.000	132.62	47.43	2.000	14.38 +
1939	280.45	157.89	56.30	2.000	122.56	43.70	2.000	35.33 +
1940	290.65	155.92	53.65	2.000	134.73	46.35	2.000	21.19 +
1941	296.72	161.13	54.30	2.000	135.59	45.70	2.000	25.54 +
1942	a	a	a	a	a	a	a	a
1943	a	a	a	a	a	a	a	a
1944	a	a	a	a	a	a	a	a
1945	29.60	0.67	2.26	2.000	28.93	97.74	2.000	28.26 -

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Table 18.1 Foreign Trade of the Philippines: 1880, 1900, 1920, 1930-1992 (continued)
(F.O.B. value in million U.S. dollars)

Year	Total trade	Exports [1] Value	Exports Percent to total trade	Average exchange rate	Imports Value	Imports Percent to total trade	Average exchange rate	Balance of trade favorable (+) unfavorable (-)
1946	360.05	64.19	17.83	2.000	295.86	82.17	2.000	231.67 -
1947	776.90	265.55	34.18	2.000	511.35	65.82	2.000	245.80 -
1948	887.41	319.21	35.97	2.000	568.20	64.03	2.000	248.99 -
1949	824.54	255.85	31.03	2.000	568.69	68.97	2.000	312.84 -
1950	688.88	332.70	48.30	2.000	356.18	51.70	2.000	23.48 -
1951	895.26	415.74	46.44	2.000	479.52	53.56	2.000	63.78 -
1952	778.52	352.41	45.27	2.000	426.11	54.73	2.000	73.70 -
1953	847.95	400.61	47.24	2.000	447.34	52.76	2.000	46.73 -
1954	863.73	412.09	47.71	2.000	451.64	52.29	2.000	39.55 -
1955	955.60	419.26	43.87	2.000	536.34	56.13	2.000	117.08 -
1956	982.29	472.68	48.12	2.000	509.61	51.88	2.000	36.93 -
1957	1,052.05	430.66	40.94	2.000	621.39	59.06	2.000	190.73 -
1958	1,013.09	459.81	45.39	2.000	553.28	54.61	2.000	93.47 -
1959	1,026.50	505.54	49.25	2.000	520.96	50.75	2.000	15.42 -
1960	1,159.96	535.44	46.16	2.000	624.52	53.84	2.000	89.08 -
1961	1,162.92	540.75	46.50	2.000	622.17	53.50	2.000	81.42 -
1962	1,170.51	580.28	49.57	3.430	590.23	50.43	3.820	9.95 -
1963	1,415.93	770.57	54.42	3.708	645.36	45.58	3.854	125.21 +
1964	1,581.42	779.38	49.28	3.900	802.04	50.72	3.874	22.66 -
1965	1,630.99	795.74	48.79	3.900	835.25	51.21	3.874	39.51 -

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Table 18.1 Foreign Trade of the Philippines: 1880, 1900, 1920, 1930-1992 (continued)
(F.O.B. value in million U.S. dollars)

Year	Total trade	Exports [1] Value	Exports Percent to total trade	Exports Average exchange rate	Imports Value	Imports Percent to total trade	Imports Average exchange rate	Balance of trade favorable (+) unfavorable (-)
1966	1,751.02	877.41	50.11	3.900	873.61	49.89	3.890	3.80 +
1967	1,952.45	891.50	45.66	3.900	1,060.95	54.34	3.902	169.45 -
1968	2,157.25	962.11	44.60	3.900	1,195.14	55.40	3.913	233.03 -
1969	2,164.95	983.17	45.41	3.900	1,181.78	54.59	3.913	98.61 -
1970	2,301.49	1,142.19	49.63	5.729	1,159.30	50.37	5.764	17.11 -
1971	2,450.08	1,189.25	48.54	6.305	1,260.83	51.46	6.391	71.58 -
1972	2,502.03	1,168.43	46.70	6.682	[b]1,333.60	53.30	6.605	165.17 -
1973	3,433.81	1,837.19	53.50	6.755	1,596.62	46.50	6.754	240.57 +
1974	5,868.25	2,724.99	46.44	6.791	3,143.26	53.56	6.772	418.27 -
1975	5,753.65	2,294.47	39.88	7.238	3,459.18	60.12	7.230	1,164.71 -
1976	6,207.16	2,573.68	41.46	7.384	3,633.48	58.54	7.466	1,059.80 -
1977	7,065.65	3,150.89	44.59	7.346	3,914.76	55.41	7.436	763.87 -
1978	8,157.07	3,424.87	41.99	7.314	4,732.20	58.01	7.392	1,307.33 -
1979	10,742.92	4,601.19	42.83	7.323	6,141.73	57.17	7.400	1,540.54 -
1980	13,514.70	5,787.79	42.83	7.454	7,726.91	57.17	7.508	1,939.12 -
1981	13,666.08	5,720.40	41.87	7.834	7,945.68	58.13	7.856	2,225.28 -
1982	12,687.51	5,020.59	39.57	8.463	7,666.92	60.43	8.484	2,646.33 -
1983	12,491.92	5,005.29	40.07	11.125	7,486.63	59.93	10.989	2,481.34 -
1984	11,460.26	5,390.65	47.04	16.568	6,069.61	52.96	16.701	678.96 -
1985	9,739.62	4,628.95	47.52	18.535	5,110.67	52.47	18.738	481.72 -

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Table 18.1 Foreign Trade of the Philippines: 1880, 1900, 1920, 1930-1992 (concluded)
(F.O.B. value in million U.S. dollars)

Year	Total trade	Exports [1] Value	Exports [1] Percent to total trade	Average exchange rate	Imports Value	Imports Percent to total trade	Average exchange rate	Balance of trade favorable (+) unfavorable (-)
1986	9,885.38	4,841.78	48.98	20.259	5,043.60	51.02	20.403	201.82 -
1987	12,457.21	5,720.24	45.92	20.418	6,736.97	54.08	20.631	1,016.73 -
1988	15,233.57	7,074.19	46.44	20.949	8,159.38	53.56	21.131	1,085.19 -
1989	18,239.53	7,820.71	42.88	21.600	10,418.82	57.12	21.787	2,598.11 -
1990	20,392.19	8,186.03	40.14	24.183	12,206.16	59.86	24.397	4,020.13 -
1991	20,890.88	8,839.51	42.31	27.333	12,051.36	57.69	27.273	3,211.85 -
1992	24,343.24	9,824.31	40.36	25.283	14,518.93	59.64	25.324	4,694.61 -

[a] Japanese occupation.
[b] Includes late entries submitted to Customs in 1972, by Elizalde Steel Rolling Mills, Inc., aggregating 34,944,351 (1968 - $1,907,807; 1969 - $7,965,874; 1970 - $12,558,442; 1971 - $12,512,228); by Calinog-Lambunao Sugar Mill Integrated Farming, Inc., aggregating $9,399,699 (1969 - $8,737,599; 1970 - $220,129; 1971 - $441,971) and by Dacongcogon Sugar and Rice Milling Co. Inc., aggregating $393,069 (1970 - $300,506; 1971 - $92,563).
[1] Sum of domestic exports and re-exports.

Source: National Statistics Office, Trade Statistics Division.

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Table 18.2 Foreign Trade of the Philippines by Country: 1992
(F.O.B. value in U.S. Dollars)

Country	Total trade	Percent share	Export	Percent share	Import	Percent share	Balance of trade
Total	24,343,242,213	100.00	9,824,314,301	100.00	14,518,927,912	100.00	4,694,613,611 -
Algeria	7,748,738	0.03	1,228,048	0.01	6,520,690	0.04	5,292,642 -
American Samoa	154,012	a	154,012	a	-	-	154,012+
Antigua	53,534	a	53,534	a	-	-	53,534+
Argentina	12,466,401	0.05	3,843,841	0.04	8,6560	0.06	4,778,719 -
Aruba	4,052,773	a	4,052,773	0.04	-	-	4,052,773+
Australia	519,252,448	2.13	112,596,267	1.15	406,656,181	2.80	294,059,914 -
Austria	26,868,468	0.11	11,195,163	0.11	15,673,305	0.11	4,478,142 -
Bahamas	668,819	a	471,469	a	197,350	a	274,119+
Bahrain	8,358,904	0.03	5,621,814	0.06	2,737,090	0.02	2,884,724+
Bangladesh	12,470,803	0.05	4,653,897	0.05	7,816,906	0.05	3,163,009 -
Belgium	166,937,002	0.69	76,801,068	0.78	90,135,934	0.62	13,334,866 -
Belize	501,693	a	487,453	a	14,240	a	473,213+
Benin, People's Republic of	420,867	a	3,475	a	417,392	a	413,917 -
Bermuda	231,229	a	230,788	a	441	a	230,347+
Bhutan	6,680	a	6,680	a	-	-	6,680+
Bolivia	9,537	a	9,537	a	-	-	9,537+
Brazil	184,351,050	0.76	4,354,932	0.04	179,996,118	1.24	175,641,186 -
Brunei Darussalam	93,964,446	0.39	2,127,662	0.02	91,836,784	0.63	89,709,122 -
Bulgaria	11,648,137	0.05	-	-	11,648,137	0.08	11,648,137 -
Cameroon	58,128	a	58,128	a	-	-	58,128+
Canada	360,624,874	1.48	159,830,494	1.63	200,794,380	1.38	40,963,886 -
Canary Islands	4,998,551	0.02	4,998,551	0.05	-	-	4,998,551+
Cayman Islands	6,131	a	5,593	a	538	a	5,055+
Chile	64,276,923	0.26	17,475,924	0.18	46,800,999	0.32	29,325,075 -

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Table 18.2 Foreign Trade of the Philippines by Country: 1992 (continued)
(F.O.B. value in U.S. Dollars)

Country	Total trade	Percent share	Export	Percent share	Import	Percent share	Balance of trade
China, People's Republic of	297,640,151	1.22	113,895,093	1.16	183,745,058	1.27	69,849,965 -
Colombia	772,542	a	207,248	a	565,294	a	358,046 -
Congo, Rep. of (Brazzaville	12,061	a	12,061	a	-	-	12,061+
Cook Islands	34,303	a	34,303	a	-	-	34,303+
Costa Rica	643,284	a	203,560	a	439,724	a	236,164 -
Croatia	66,076	a	-	-	66,076	a	66,076 -
Cyprus	947,282	a	917,590	0.01	29,692	a	887,898+
Czechoslovakia	5,719,987	0.02	701,928	0.01	5,018,059	0.03	4,316,131 -
Denmark	52,741,732	0.22	20,290,023	0.21	32,451,709	0.22	12,161,686 -
Djibouti	9,526	a	9,526	a	-	-	9,526+
Dominican Republic	139,312	a	139,312	a	-	-	139,312 -
Ecuador	160,384	a	76,488	a	83,896	a	7,408 -
Egypt Arab Republic	11,831,100	0.05	9,741,061	0.10	2,090,039	0.01	7,651,022+
El Salvador	48,000	a	44,400	a	3,600	a	40,800+
Ethiopia	2,771	a	2,771	a	-	-	2,771+
Fiji	953,126	a	953,126	0.01	-	-	953,126+
Finlan	27,286,154	0.11	7,446,686	0.08	19,839,468	0.14	12,392,782 -
France	390,681,855	1.60	178,885,841	1.82	211,796,014	1.46	32,910,173 -
French Pacific Islands	52,311	a	52,311	a	-	-	52,311+
French Polynesia	291,307	a	291,307	a	-	-	291,307+
French West Indies	370,441	a	370,441	a	-	-	370,441+
Germany, Federal Rep. of	1,191,660,642	4.90	521,739,618	5.31	669,921,024	4.62	148,181,406 -
Ghana	124,457	a	1,080	a	123,377	a	122,297 -
Gibraltar	44,313	a	44,313	a	-	-	44,313+
Greece	6,835,072	0.03	5,266,653	0.05	1,568,419	0.01	3,698,234+
Guadeloupe	83,981	a	83,981	a	-	-	83,981+
Guam	16,879,167	0.07	16,135,228	0.16	743,939	0.01	15,391,289+

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Table 18.2 Foreign Trade of the Philippines by Country: 1992 (continued)
(F.O.B. value in U.S. Dollars)

Country	Total trade	Percent share	Export	Percent share	Import	Percent share	Balance of trade
Guatemala	184,549	a	184,549	a	-	-	184,549+
Guinea	138,936	a	138,936	a	-	-	138,936+
Guinea Bissau, Republic	100	a	100	a	-	-	100+
Guyana (British Guinea	227,319	a	227,319	a	-	-	227,319+
Haiti	3,550	a	3,550	a	-	-	3,550+
Honduras, Republic of	9,060	a	9,060	a	-	-	9,060+
Hong Kong	1,184,510,350	4.87	463,656,959	4.72	720,853,391	4.96	257,196,432 -
Hungary	4,083,269	0.02	2,038,572	0.02	2,044,697	0.01	6,125 -
Iceland	965,981	a	341,471	a	624,510	a	283,039 -
India	93,475,703	0.38	8,594,987	0.09	84,880,716	0.58	76,285,729 -
Indonesia	221,401,289	0.91	40,272,569	0.41	181,128,720	1.25	140,856,151 -
Iran	167,421,425	0.69	472,951	a	166,948,472	1.15	166,475,519 -
Ireland	38,681,569	0.16	9,410,786	0.10	29,270,783	0.20	19,859,997 -
Israel	105,959,278	0.44	6,172,083	0.06	99,787,195	0.69	93,615,112 -
Italy	219,840,306	0.90	99,611,316	1.01	120,228,990	0.83	20,617,674 -
Ivory Coast	632,858	a	17,174	a	615,684	0.00	598,510 -
Jamaica	49,179	a	49,179	a	-	-	49,179+
Japan	4,832,211,416	19.85	1,745,423,797	17.77	3,086,787,619	21.26	1,341,363,822 -
Jordan	7,686,467	0.03	1,608,545	0.02	6,077,922	0.04	4,469,377 -
Kampuchea, Democratic	589,663	a	589,663	0.01	-	-	589,663+
Kenya	916,421	a	76,896	a	839,525	0.01	762,629 -
Korea, Democratic People's Republic of	4,240,693	0.02	-	-	4,240,693	0.03	4,240,693 -
Korea, Republic of	872,652,110	3.58	175,823,988	1.79	696,828,122	4.80	521,004,134 -
Kuwait	89,599,437	0.37	6,882,940	0.07	82,716,497	0.57	75,833,557 -
Laos	92,988	a	781	a	92,207	a	91,426 -
Latvia	37,042	a	37,042	a	-	-	37,042+

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Table 18.2 Foreign Trade of the Philippines by Country: 1992 (continued)
(F.O.B. value in U.S. Dollars)

Country	Total trade	Percent share	Export	Percent share	Import	Percent share	Balance of trade
Lebanon	1,792,519	0.01	1,772,219	0.02	20,300	a	1,751,919+
Lesotho	14,585	a	14,585	a	-	-	14,585+
Liberia	366,271	a	352,909	a	13,362	a	339,547+
Libyan Arab Jamahiriya	309,114	a	309,114	a	-	-	309,114+
Lithuania	1,182,857	a	-	-	1,182,857	0.01	1,182,857 -
Luxembourg	1,165,292	a	42,994	a	1,122,298	0.01	1,079,304 -
Macau	839,384	a	175,699	a	663,685	a	487,986 -
Malawi	5,928,276	0.02	-	-	5,928,276	0.04	5,928,276 -
Malaysia	514,919,588	2.12	127,819,146	1.30	387,100,442	2.67	259,281,296 -
Maldives	27,451	a	27,451	a	-	-	27,451+
Mali	240	a	240	a	-	-	240+
Malta and Gozo	6,433,157	0.03	5,831,114	0.06	602,043	a	5,229,071+
Marshall Is., Rep. of	130,726	a	130,726	a	-	-	130,726+
Martinique	156,924	a	156,924	a	-	-	156,924+
Mauritius	1,115,188	a	1,115,188	0.01	-	-	1,115,188+
Mexico	28,450,639	0.12	21,325,469	0.22	7,125,170	0.05	14,200,299+
Monaco	30,171	a	30,171	a	-	-	30,171+
Morocco	6,466,656	0.03	798,884	0.01	5,667,772	0.04	4,868,888 -
Mozambique	20,437,924	0.08	3,481,812	0.04	16,956,112	0.12	13,474,300 -
Myanmar	683,153	a	52,193	a	630,960	a	578,767 -
Namibia	3,264	a	3,264	a	-	-	3,264+
Nauru, Republic of	120,795	a	120,795	a	-	-	120,795+
Nepal	2,122	a	2,122	a	-	-	2,122+
Netherlands	586,616,441	2.41	406,262,123	4.14	180,354,318	1.24	225,907,805+
Netherlands Antilles	23,829,975	0.10	23,829,975	0.24	-	-	23,829,975+
New Caledonia	153,958	a	153,958	a	-	-	153,958+
New Zealand	105,969,484	0.44	12,520,062	0.13	93,449,422	0.64	80,929,360 -

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Table 18.2 Foreign Trade of the Philippines by Country: 1992 (continued)
(F.O.B. value in U.S. Dollars)

Country	Total trade	Percent share	Export	Percent share	Import	Percent share	Balance of trade
Nicaragua	51,050	a	51,050	a	-	-	51,050+
Nigeria	1,916,784	0.01	1,914,729	0.02	2,055	a	1,912,674+
Norway	9,280,799	0.04	6,046,672	0.06	3,234,127	0.02	2,812,545+
Oman	1,667,440	0.01	1,665,604	0.02	1,836	a	1,663,768+
Pakistan, Islamic Republic of	29,994,063	0.12	1,230,186	0.01	28,763,877	0.20	27,533,691 -
Palau, Republic of	299,846	a	299,846	a	-	-	299,846+
Panama	47,846,094	0.20	47,431,666	0.48	414,428	a	47,017,238+
Papua New Guinea	61,075,603	0.25	4,222,393	0.04	56,853,210	0.39	52,630,817 -
Paraguay	672,646	a	672,646	0.01	-	-	672,646+
Peru	15,578,324	0.06	140,255	a	15,438,069	0.11	15,297,814 -
Poland	51,790,338	0.21	1,486,606	0.02	50,303,732	0.35	48,817,126 -
Portugal	11,271,148	0.05	9,122,192	0.09	2,148,956	0.01	6,973,236+
Puerto Rico	14,365,645	0.06	9,021,208	0.09	5,344,437	0.04	3,676,771+
Qatar	73,439,077	0.30	390,490	a	73,048,587	0.50	72,658,097 -
Reunion	237,680	a	237,680	a	-	-	237,680+
Romania	15,470,143	0.06	566,053	0.01	14,904,090	0.10	14,338,037 -
Russia Federation	91,927,154	0.38	7,750,729	0.08	84,176,425	0.58	76,425,696 -
Saudi Arabia	930,611,804	3.82	57,036,566	0.58	873,575,238	6.02	816,538,672 -
Senegal	10,560,873	0.04	23,664	a	10,537,209	0.07	10,513,545 -
Seychelles Republic	58,518	a	58,518	a	-	-	58,518+
Singapore	803,174,093	3.30	252,323,171	2.57	550,850,922	3.79	298,527,751 -
Slovenia	8,824	a	8,824	a	-	-	8,824+
Solomon Island	2,887,164	0.01	195,176	a	2,691,988	0.02	2,496,812 -
Somalia Democratic Republic	12,800	a	12,800	a	-	-	12,800+
South Africa	30,251,213	0.12	8,411,884	0.09	21,839,329	0.15	13,427,445 -
Spain	127,882,086	0.53	64,663,479	0.66	63,218,607	0.44	1,444,872+
Spanish Africa	599,518	a	599,518	0.01	-	-	599,518+

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Table 18.2 Foreign Trade of the Philippines by Country: 1992 (continued)
(F.O.B. value in U.S. Dollars)

Country	Total trade	Percent share	Export	Percent share	Import	Percent share	Balance of trade
Sri Lanka	3,432,543	0.01	2,592,091	0.03	840,452	0.01	1,751,639+
Sudan	140,559	a	-	-	140,559	a	140,559 -
Swaziland	79,622	a	79,416	a	206	a	79,210+
Sweden	51,067,488	0.21	23,622,064	0.24	27,445,424	0.19	3,823,360 -
Switzerland	105,889,457	0.43	21,579,270	0.22	84,310,187	0.58	62,730,917 -
Syrian Arab Republic	384,888	a	384,888	a	-	-	384,888+
Taiwan	1,246,334,600	5.12	286,789,311	2.92	959,545,289	6.61	672,755,978 -
Tanzania, United Republic of	2,814,571	0.01	63,088	a	2,751,483	0.02	2,688,395 -
Thailand	236,602,675	0.97	98,433,794	1.00	138,168,881	0.95	39,735,087 -
Togo	5,671,661	0.02	229,961	a	5,441,700	0.04	5,211,739 -
Trinidad and Tobago	43,817	a	43,817	a	-	-	43,817+
Trust Territory of Pacific Islands	12,204,986	0.05	5,777,178	0.06	6,427,808	0.04	650,630 -
Tunisia	332,342	a	322,819	a	9,523	a	313,296+
Turkey	33,181,948	0.14	6,351,885	0.06	26,830,063	0.18	20,478,178 -
Turks & Caicos Islands	500	a	500	a	-	-	500+
Ukraine	26,175	a	6,175	a	20,000	a	13,825 -
United Arab Emirates	369,308,844	1.52	110,543,427	1.13	258,765,417	1.78	148,221,990 -
United Kingdom of Great Britain	766,565,776	3.15	466,757,614	4.75	299,808,162	2.06	166,949,452+
United States of AmeriCA	6,451,752,232	26.50	3,831,548,175	39.00	2,620,204,057	18.05	1,211,344,118 +
Virgin Islands (U.S.A.)	2,709,372	0.01	2,709,372	0.03	-	-	2,709,372 +
Uruguay	1,372,288	0.01	650,369	0.01	721,919	a	71,550 -
Vanuatu	12,771	a	12,771	a	-	-	12,771 +
Venezuela	4,329,149	0.02	4,263,009	0.04	66,140	a	4,196,869 +
Vietnam	42,375,692	0.17	29,702,366	0.30	12,673,326	0.09	17,029,040 +
Virgin Islands (British)	371	a	371	a	-	-	371 +

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Table 18.2 Foreign Trade of the Philippines by Country: 1992 (concluded)
(F.O.B. value in U.S. Dollars)

Country	Total trade	Percent share	Export	Percent share	Import	Percent share	Balance of trade
Western Samoa	35,705	a	35,705	a	-	-	35,705+
Yemen Arab Republic	114,087	a	114,087	a	-	-	114,087+
Yemen, People's Democratic Republic of	102,307	a	102,307	a	-	-	102,307+
Yugoslavia	1,830,212	0.01	206,353	a	1,623,859	0.01	1,417,506 -
Zaire, Republic of	14,564	a	8,300	a	6,264	a	2,036+
Zambia	42,653	a	1,170	a	41,483	a	40,313 -
Zimbabwe	32,619,034	0.13	17,639	a	32,601,395	0.22	32,583,756 -

a Less than 0.01 percent.
[1] Includes Okinawa.
[2] Includes Sabah and Sarawak.
[3] Includes Canal Zone.
[4] Includes Alaska and Hawaii but excludes Guam and U.S. Virgin Islands.
[5] Includes Northern Ireland.

Source: National Statistics Office, Trade Statistics Division.

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Table 18.2a Foreign Trade of the Philippines by Top Trading Country: 1985-1992
(F.O.B. value in thousand U.S. dollars)

Country[1] and year	Total trade value	Percent share	Exports[2] value	Percent share	Imports value	Percent share	Balance of favorable(+) unfavorable (-)
Total Trade							
1985	9,739,628		4,628,954		5,110,673		481,719 -
1986	9,885,378		4,841,780		5,043,597		201,817 -
1987	12,457,207		5,720,238		6,736,969		1,016,730 -
1988	15,233,567		7,074,190		8,159,378		1,085,188 -
1989	18,239,533		7,820,713		10,418,821		2,598,108 -
1990	20,392,188		8,186,027		12,206,161		4,020,134 -
1991	20,890,877		8,839,514		12,051,363		3,211,849 -
1992	24,343,242		9,824,314		14,518,928		4,694,614 -
United States of America[3]							
1985	2,935,590	30.14	1,653,501	35.72	1,282,089	25.09	371,412 +
1986	2,972,712	30.07	1,716,757	35.46	1,255,955	24.90	460,802 +
1987	3,552,277	28.52	2,064,389	36.09	1,487,888	22.08	576,501 +
1988	4,230,924	27.77	2,515,856	35.56	1,715,068	21.02	800,788 +
1989	4,924,885	27.00	2,945,612	37.66	1,979,273	19.00	966,339 +
1990	5,460,120	26.78	3,094,588	37.80	2,365,532	19.38	729,056 +
1991	5,569,931	26.66	3,143,653	35.56	2,426,278	20.13	717,374 +
1992	6,451,752	26.50	3,831,548	39.00	2,620,204	18.05	1,211,344 +
Japan[4]							
1985	1,609,144	16.52	874,635	18.90	734,508	14.37	140,127 +
1986	1,719,342	17.39	851,084	17.58	868,258	17.22	17,174 -
1987	2,102,658	16.88	981,492	17.16	1,121,166	16.64	139,674 -
1988	2,841,683	18.65	1,420,374	20.08	1,421,309	17.42	944 -
1989	3,629,081	19.90	1,585,857	20.28	2,043,224	19.61	457,368 -

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Table 18.2a Foreign Trade of the Philippines by Top Trading Country: 1985-1992 (continued)
(F.O.B. value in thousand U.S. dollars)

Country[1] and year	Total trade value	Percent share	Exports[2] value	Percent share	Imports value	Percent share	Balance of favorable(+) unfavorable (-)
1990	3,880,526	19.03	1,621,992	19.81	2,258,534	18.50	636,542 -
1991	4,144,180	19.84	1,771,301	20.04	2,372,879	19.69	601,578 -
1992	4,832,211	19.85	1,745,424	17.77	3,086,788	21.26	1,341,364 -
Taiwan							
1985	264,009	2.71	86,099	1.86	177,909	3.48	91,810 -
1986	403,329	4.08	123,666	2.55	279,663	5.55	155,997 -
1987	516,819	4.15	144,389	2.52	372,430	5.53	228,042 -
1988	711,572	4.67	200,834	2.84	510,738	6.26	309,904 -
1989	912,097	5.00	210,298	2.69	701,799	6.74	491,501 -
1990	1,014,832	4.98	209,263	2.56	805,570	6.60	596,307 -
1991	1,034,319	4.95	209,722	2.37	824,597	6.84	614,875 -
1992	1,246,335	5.12	286,789	2.92	959,545	6.61	672,756 -
Germany, Federal Republic of							
1985	316,662	3.25	174,806	3.78	141,856	2.78	32,950 +
1986	461,948	4.67	241,602	4.99	220,346	4.37	21,256 +
1987	574,349	4.61	292,709	5.12	281,640	4.18	11,068 +
1988	618,221	4.06	297,886	4.21	320,335	3.93	22,449 -
1989	743,142	4.07	334,855	4.28	408,287	3.92	73,431 -
1990	922,506	4.52	390,373	4.77	532,132	4.36	141,759 -
1991	967,838	4.63	502,393	5.68	465,444	3.86	36,949 +
1992	1,191,661	4.90	521,740	5.31	669,921	4.62	148,181 -

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Table 18.2a Foreign Trade of the Philippines by Top Trading Country: 1985-1992 (continued)
(F.O.B. value in thousand U.S. dollars)

Country[1] and year	Total trade value	Percent share	Exports[2] value	Percent share	Imports value	Percent share	Balance of favorable(+) unfavorable (-)
Hong Kong							
1985	385,030	3.95	187,378	4.05	197,653	3.87	10,275 -
1986	480,411	4.86	222,482	4.60	257,929	5.11	35,448 -
1987	591,286	4.75	279,209	4.88	312,078	4.63	32,869 -
1988	720,231	4.73	346,368	4.90	373,863	4.58	27,495 -
1989	785,914	4.31	304,784	3.90	481,130	4.62	176,346 -
1990	885,048	4.34	330,470	4.04	554,578	4.54	224,108 -
1991	987,609	4.73	391,620	4.43	595,989	4.95	204,369 -
1992	1,184,510	4.87	463,657	4.72	720,853	4.96	257,196 -
Saudi Arabia							
1985	307,470	3.16	39,130	0.85	268,340	5.25	229,210 -
1986	262,522	2.66	44,043	0.91	218,479	4.33	174,437 -
1987	269,233	2.16	56,627	0.99	212,606	3.16	155,979 -
1988	160,368	1.05	49,137	0.69	111,231	1.36	62,095 -
1989	307,938	1.69	57,099	0.73	250,839	2.41	193,740 -
1990	610,189	2.99	63,951	0.78	546,238	4.48	482,288 -
1991	702,319	3.36	59,458	0.67	642,862	5.33	583,404 -
1992	930,612	3.82	57,037	0.58	873,575	6.02	816,539 -
Korea, Republic of (South)							
1985	275,349	2.83	71,670	1.55	203,678	3.99	132,008 -
1986	282,302	2.86	112,243	2.32	170,059	3.37	57,816 -
1987	306,044	2.46	107,798	1.88	198,247	2.94	904,849 -
1988	491,447	3.23	160,548	2.27	330,899	4.06	170,351 -
1989	598,104	3.28	175,246	2.24	422,859	4.06	247,613 -
1990	707,497	3.47	229,504	2.80	477,993	3.92	248,489 -

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Table 18.2a Foreign Trade of the Philippines by Top Trading Country: 1985-1992 (continued)
(F.O.B. value in thousand U.S. dollars)

Country[1] and year	Total trade value	Percent share	Exports[2] value	Percent share	Imports value	Percent share	Balance of favorable(+) unfavorable ( )
1991	836,558	4.00	227,921	2.58	608,637	5.05	380,716 -
1992	872,652	3.58	175,824	1.79	696,828	4.80	521,004 -
Singapore							
1985	384,556	3.95	250,099	5.40	134,457	2.63	115,642 +
1986	282,023	2.85	157,628	3.26	124,394	2.47	33,234 +
1987	428,858	3.40	196,611	3.44	232,246	3.45	35,635 -
1988	559,069	3.67	223,949	3.17	335,120	4.11	111,171 -
1989	713,345	3.91	220,795	2.82	492,550	4.73	271,755 -
1990	726,292	3.56	239,632	2.93	486,660	3.99	247,027 -
1991	684,729	3.28	229,454	2.60	455,275	3.78	225,820 -
1992	803,174	3.30	252,323	2.57	550,851	3.79	298,528 -
United Kingdom of Great Britain[5]							
1985	270,027	2.77	167,104	3.61	102,923	2.01	64,181 +
1986	338,934	3.43	230,062	4.75	108,872	2.16	121,189 +
1987	396,859	3.19	246,343	4.31	150,516	2.23	95,827 +
1988	488,995	3.21	327,649	4.63	161,347	1.98	116,302 +
1989	499,408	2.74	328,591	4.20	170,817	1.64	157,774 +
1990	598,417	2.93	350,531	4.28	247,886	2.03	102,645 +
1991	586,572	2.81	371,642	4.20	214,930	1.78	156,712 +
1992	766,566	3.15	466,758	4.75	299,808	2.06	166,949 +
Netherlands (Holland)							
1985	187,490	1.93	145,211	3.14	42,280	0.83	102,931 +
1986	317,958	3.22	246,647	5.09	71,311	1.41	175,337 +
1987	402,481	3.23	310,554	5.43	91,927	1.37	218,627 +

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Table 18.2a Foreign Trade of the Philippines by Top Trading Country: 1985-1992 (continued)
(F.O.B. value in thousand U.S. dollars)

Country[1] and year	Total trade value	Percent share	Exports[2] value	Percent share	Imports value	Percent share	Balance of favorable(+) unfavorable (-)
1988	443,685	2.91	316,051	4.47	127,634	1.56	118,417 +
1989	532,336	2.92	329,224	4.21	203,112	1.95	126,112 +
1990	527,302	2.59	357,081	4.36	170,221	1.39	186,860 +
1991	482,592	2.31	338,416	3.83	144,176	1.20	194,240 +
1992	586,616	2.41	406,262	4.14	180,354	1.24	225,908 +
Australia							
1985	239,554	2.46	80,546	1.74	159,007	3.11	78,461 -
1986	214,179	2.17	69,170	1.43	145,009	2.88	75,840 -
1987	290,594	2.33	88,790	1.55	201,804	3.00	113,015 -
1988	393,383	2.58	110,601	1.56	282,782	3.47	172,180 -
1989	471,669	2.59	124,338	1.59	347,331	3.33	222,992 -
1990	465,817	2.28	96,382	1.18	369,435	3.03	273,052 -
1991	484,065	2.32	103,898	1.18	380,167	3.15	276,270 -
1992	519,252	2.13	112,596	1.15	406,656	2.80	294,060 -
Malaysia[6]							
1985	542,882	5.57	173,324	3.74	369,558	7.23	196,233 -
1986	240,945	2.44	97,059	2.01	143,886	2.85	46,828 -
1987	256,839	2.06	118,010	2.06	138,829	2.06	20,819 -
1988	276,948	1.82	116,303	1.64	160,646	1.97	44,343 -
1989	240,162	1.32	98,478	1.26	141,683	1.36	43,205 -
1990	296,463	1.45	125,263	1.53	171,200	1.40	45,937 -
1991	421,171	2.01	123,266	1.39	297,905	2.47	174,639 -
1992	514,920	2.12	127,819	1.30	387,100	2.67	259,281 -

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Table 18.2a Foreign Trade of the Philippines by Top Trading Country: 1985-1992 (continued)
(F.O.B. value in thousand U.S. dollars)

Country[1] and year	Total trade value	Percent share	Exports[2] value	Percent share	Imports value	Percent share	Balance of favorable(+) unfavorable (-)
France							
1985	158,807	1.63	86,978	1.88	71,829	1.41	15,148 +
1986	193,616	1.96	111,461	2.30	82,155	1.63	29,306 +
1987	251,841	2.02	125,801	2.20	126,040	1.87	239 -
1988	286,763	1.88	165,309	2.34	121,454	1.49	43,856 +
1989	318,149	1.74	152,154	1.95	165,995	1.59	13,841 -
1990	295,168	1.45	143,946	1.76	151,222	1.24	7,275 -
1991	305,114	1.46	164,845	1.86	140,269	1.16	24,576 +
1992	390,682	1.60	178,886	1.82	211,796	1.46	32,910 -
United Arab Emirates[7]							
1985	87,588	0.90	8,548	0.18	79,039	1.55	70,491 -
1986	57,743	0.58	11,766	0.24	45,977	0.91	34,211 -
1987	104,301	0.84	11,736	0.21	92,565	1.37	80,830 -
1988	197,881	1.30	17,930	0.25	179,951	2.02	162,020 -
1989	320,458	1.76	41,720	0.53	278,738	2.68	237,017 -
1990	448,767	2.20	44,186	0.54	404,580	3.31	360,394 -
1991	329,888	1.58	64,697	0.73	265,190	2.20	200,493 -
1992	369,309	1.52	110,543	1.13	258,765	1.78	148,222 -
Canada							
1985	104,816	1.08	73,961	1.60	30,856	0.60	43,105 +
1986	106,285	1.08	68,882	1.42	37,403	0.74	31,479 +
1987	167,850	1.35	83,382	1.46	84,468	1.25	1,086 -
1988	188,639	1.24	107,712	1.52	80,927	0.99	26,786 +
1989	285,608	1.56	127,424	1.63	158,184	1.52	30,760 -
1990	290,385	1.42	122,895	1.50	167,490	1.37	44,595 -

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Table 18.2a Foreign Trade of the Philippines by Top Trading Country: 1985-1992 (continued)
(F.O.B. value in thousand U.S. dollars)

Country[1] and year	Total trade value	Percent share	Exports[2] value	Percent share	Imports value	Percent share	Balance of favorable(+) unfavorable (-)
1991	304,429	1.46	145,668	1.65	158,761	1.32	13,093 -
1992	360,625	1.48	159,830	1.63	200,794	1.38	40,964 -
China, People's Republic of (PROC)							
1985	355,878	3.65	79,793	1.72	276,085	5.40	196,292 -
1986	215,375	2.18	104,689	2.16	110,686	2.20	5,997 -
1987	293,512	2.36	87,950	1.54	205,562	3.05	117,611 -
1988	309,085	2.03	66,802	0.94	242,282	2.97	175,480 -
1989	271,339	1.49	50,235	0.64	221,105	2.12	170,870 -
1990	223,866	1.10	61,764	0.75	162,102	1.33	100,338 -
1991	351,267	1.68	127,769	1.45	223,499	1.85	95,730 -
1992	297,640	1.22	113,895	1.16	183,745	1.27	69,850 -
Thailand							
1985	138,585	1.42	88,116	1.90	50,470	0.99	37,646 -
1986	96,314	0.97	67,297	1.39	29,017	0.58	38,278 +
1987	172,194	1.38	125,593	2.20	46,602	0.69	78,991 +
1988	175,003	1.15	123,344	1.74	51,659	0.63	71,685 +
1989	237,086	1.30	154,972	1.98	82,114	0.79	72,858 +
1990	293,624	1.44	156,449	1.91	137,176	1.12	19,273 +
1991	315,012	1.51	220,815	2.50	94,197	0.78	126,618 +
1992	236,603	0.97	98,434	1.00	138,169	0.95	39,735 -
Indonesia							
1985	203,016	2.09	18,280	0.40	184,736	3.62	166,456 -
1986	156,261	1.58	27,933	0.58	128,328	2.54	100,394 -
1987	154,677	1.24	65,425	1.14	89,253	1.33	23,828 -

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Table 18.2a Foreign Trade of the Philippines by Top Trading Country: 1985-1992 (continued)
(F.O.B. value in thousand U.S. dollars)

Country[1] and year	Total trade value	Percent share	Exports[2] value	Percent share	Imports value	Percent share	Balance of favorable(+) unfavorable (-)
1988	111,233	0.73	27,165	0.38	84,069	1.03	56,904 -
1989	214,008	1.17	56,182	0.72	157,826	1.51	101,644 -
1990	242,500	1.19	60,937	0.74	181,563	1.49	120,626 -
1991	204,170	0.98	41,943	0.47	162,227	1.35	120,284 -
1992	221,401	0.91	40,272	0.41	181,129	1.25	140,856 -
Italy							
1985	60,220	0.62	28,536	0.62	31,684	0.62	3,149 -
1986	48,143	0.49	24,738	0.51	23,405	0.46	1,333 +
1987	70,754	0.57	35,493	0.62	35,260	0.52	233 +
1988	152,559	1.00	40,066	0.57	112,493	1.38	72,428 -
1989	115,021	0.63	47,980	0.61	67,041	0.64	19,060 -
1990	149,008	0.73	61,009	0.75	87,998	0.72	26,989 -
1991	180,156	0.86	78,497	0.89	101,659	0.84	23,162 -
1992	219,840	0.90	99,611	1.01	120,229	0.83	20,618 -
Brazil							
1985	40,245	0.41	1,247	0.03	38,997	0.76	37,750 -
1986	68,108	0.69	610	0.01	67,498	1.34	66,887 -
1987	80,441	0.65	1,251	0.02	79,191	1.18	77,940 -
1988	114,908	0.75	1,067	0.02	113,840	1.40	112,773 +
1989	228,298	1.25	3,867	0.05	224,431	2.15	220,564 +
1990	206,888	1.01	1,609	0.02	205,279	1.68	203,670 -
1991	185,447	0.89	5,144	0.06	180,303	1.50	175,159 -
1992	184,351	0.76	4,355	0.04	179,996	1.24	175,641 -

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Table 18.2a Foreign Trade of the Philippines by Top Trading Country: 1985-1992 (concluded)
(F.O.B. value in thousand U.S. dollars)

Country[1] and year	Total trade value	Percent share	Exports[2] value	Percent share	Imports value	Percent share	Balance of favorable(+) unfavorable (-)
Other countries							
1985	868,735	8.92	361,233	7.80	507,502	9.93	146,269 -
1986	932,204	9.43	313,674	6.48	618,531	12.26	304,857 -
1987	1,454,474	11.68	318,112	5.56	1,136,362	16.87	818,250 -
1988	1,757,880	11.54	465,354	6.58	1,292,526	15.84	827,172 -
1989	1,893,917	10.38	510,338	6.52	1,383,580	13.28	873,242 -
1990	1,911,282	9.37	483,145	5.90	1,428,137	11.70	944,992 -
1991	1,806,033	8.65	596,642	6.74	1,210,391	10.04	613,749 -
1992	2,162,530	8.89	570,711	5.80	1,591,822	10.96	1,021,111 -

[1] Based on 1992 ranking.
[2] Sum of domestic exports and re-exports.
[3] Includes the original 48 states, Alaska, Hawaii and the District of Columbia.
[4] Includes Okinawa.
[5] Includes Northern Ireland.
[6] Includes Sabah and Sarawak.
[7] Includes Abu Dhabi and Dubai.

Source: National Statistics Office, Trade Statistics Division.

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Table 18.2b Philippine Foreign Trade by Economic Bloc: 1985-1992 (F.O.B. value in U.S. dollars)

Economic bloc [1] and year	Total trade	Exports [2]	Imports	Balance of trade favorable (+) unfavorable (-)	
General Agreement on Tariffs and Trade (GATT - 103) [3]					
1985	8,010,847,291	4,028,141,512	3,982,705,779	45,435,733	+
1986	7,802,866,983	4,113,043,112	3,689,823,871	423,219,241	+
1987	11,172,683,107	5,202,978,801	5,969,704,306	766,725,505	-
1988	13,061,693,956	6,386,937,938	6,674,756,018	287,818,080	-
1989	15,626,187,274	7,137,803,704	8,488,383,570	1,350,579,866	-
1990	17,198,061,938	7,541,392,768	9,656,669,170	2,115,276,402	-
1991	17,691,042,128	8,143,057,257	9,547,984,871	1,404,927,614	-
1992	19,681,165,215	8,847,881,121	10,833,284,094	1,985,402,973	-
Economic and Social Commission for Asia and the Pacific (ESCAP - 30) [4]					
1985	7,527,811,657	3,903,380,292	3,624,431,365	278,948,927	+
1986	7,448,080,418	3,804,973,099	3,643,107,319	161,865,780	+
1987	8,982,165,669	4,549,635,420	4,432,530,249	117,105,171	+
1988	11,431,893,825	5,753,777,071	5,678,116,754	75,660,317	+
1989	13,807,922,406	6,330,015,360	7,477,907,046	1,147,891,686	-
1990	14,985,452,423	6,618,134,374	8,367,318,049	1,749,183,675	-
1991	15,483,859,980	6,938,373,276	8,545,486,704	1,607,113,428	-
1992	17,745,352,496	7,659,933,623	10,085,418,873	2,425,485,250	-
Generalized System of Preferences Donor Countries (GSP - 27)					
1985	6,131,321,817	3,384,160,539	2,747,161,278	636,999,261	+
1986	6,608,959,920	3,599,173,400	3,009,786,520	589,386,880	+
1987	8,168,338,031	4,297,532,365	3,870,805,666	426,726,699	+
1988	10,163,285,250	5,405,539,387	4,757,745,863	647,793,524	+
1989	12,023,824,416	6,053,666,998	5,970,157,418	271,808,826	-
1990	13,164,292,166	6,360,769,093	6,803,523,073	442,753,980	-
1991	13,713,913,736	6,824,940,692	6,888,973,044	64,032,352	-
1992	16,080,572,417	7,676,850,767	8,403,721,650	726,870,883	-
Organization for Economic Cooperation and Development (OECD - 24)					
1985	5,828,405,178	3,270,768,401	2,557,636,777	713,131,624	+
1986	6,354,195,768	3,530,984,537	2,823,211,231	707,773,306	+
1987	7,772,176,253	4,173,465,784	3,598,710,469	574,755,315	+
1988	9,649,648,851	5,262,115,511	4,387,533,340	874,532,171	+
1989	11,385,224,417	5,892,809,284	5,492,415,133	400,394,151	+
1990	12,534,276,366	6,243,649,042	6,290,626,324	46,977,282	-
1991	13,628,947,493	6,811,862,977	6,817,084,516	5,221,539	-
1992	15,949,551,461	7,671,566,288	8,277,985,173	606,418,885	-
European Community (EC - 12)					
1985 [a]	1,081,622,365	648,376,678	433,245,687	215,130,991	+
1986	1,482,672,497	913,990,269	568,682,228	345,308,041	+
1987	1,864,114,965	1,082,242,893	781,872,072	300,370,821	+
1988	2,288,772,177	1,248,917,156	1,039,855,021	209,062,135	+

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Table 18.2b Philippine Foreign Trade by Economic Bloc: 1985-1992 (F.O.B. value in U.S. dollars) (continued)

Economic bloc [1] and year	Total trade	Exports [2]	Imports	Balance of trade favorable (+) unfavorable (-)
1989	2,498,059,733	1,326,133,537	1,171,926,196	154,207,341 +
1990	2,813,861,803	1,448,728,024	1,365,113,779	83,594,245 +
1991	2,889,322,302	1,641,673,791	1,247,648,511	394,025,280 +
1992	3,560,878,921	1,858,853,707	1,702,025,214	156,828,493 +
Association of Southeast Asian Nations (ASEAN - 6)				
1985	1,284,754,883	530,752,325	754,002,558	223,250,233 -
1986	862,163,952	351,410,362	510,753,590	159,343,228 -
1987	1,194,700,740	507,303,297	687,397,443	180,094,146 -
1988	1,245,758,551	491,717,302	754,041,249	262,323,947 -
1989	6,573,977,107	3,183,807,130	3,390,169,977	206,362,847 -
1990	1,772,425,705	584,774,431	1,187,651,274	602,876,843 -
1991	1,721,559,669	616,522,651	1,105,037,018	488,514,367 -
1992	1,772,801,103	520,092,281	1,252,708,822	732,616,541 -
Latin American Free Trade Association (LAFTA - 11)				
1985	55,485,492	6,910,045	48,575,447	41,665,402 -
1986	95,448,093	12,471,472	82,976,621	70,505,149 -
1987	104,802,114	5,282,507	99,519,607	94,237,100 -
1988	147,113,211	6,771,525	140,341,686	133,570,161 -
1989	329,203,378	28,697,276	300,506,102	271,808,826 -
1990	317,969,385	17,415,816	300,553,569	283,137,753 -
1991	290,764,852	33,431,279	257,333,573	223,902,294 -
1992	312,439,883	53,019,718	259,420,165	206,400,447 -
European Free Trade Association (EFTA - 7)				
1985	428,169,988	234,108,690	194,061,298	40,047,392 +
1986	497,349,640	286,142,158	211,207,482	74,934,676 +
1987	601,665,620	304,457,994	297,207,626	7,250,368 +
1988	712,075,077	405,516,219	306,558,858	98,957,361 +
1989	735,816,969	412,722,131	323,094,838	89,627,293 +
1990	871,591,204	443,765,100	427,826,104	15,938,996 +
1991	226,793,531	68,177,126	158,616,405	90,439,279 -
1992	221,358,347	70,231,326	151,127,021	80,895,695 -
Association of African States and Malagasy (AASM - 18)				
1985	2,661,977	1,325,298	1,336,679	11,381 -
1986	5,667,058	1,447,620	4,219,438	2,771,818 -
1987	18,704,947	2,051,359	16,653,588	14,602,229 -
1988	30,578,659	2,542,763	28,035,896	25,493,133 -
1989	33,924,805	2,388,770	31,536,035	29,147,265 -
1990	23,544,847	716,191	22,828,656	22,112,465 -
1991	20,123,866	828,752	19,295,114	18,466,362 -
1992	17,384,052	365,803	17,018,249	16,652,446 -

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Table 18.2b Philippine Foreign Trade by Economic Bloc: 1985-1992 (F.O.B. value in U.S. dollars) (concluded)

[a] Figures include trade with Portugal (Export - $619,428; Import - $639,186), and Spain (Export - $16,988,565; Import - $7,616,374).

[1] See list of member countries in text.
[2] Sum of domestic exports and re-exports.
[3] Excludes countries that accede provisionally and those with pending applications. Includes Guatemala as 103rd member in 1992.
[4] Excludes associate members.

Source: National Statistics Office, Trade Statistics Division.

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Table 18.2c Philippine Trade by Regional Bloc: 1990-1992
(F.O.B. value in million US dollars)

Region	1990 Exports	1990 Imports	1990 Balance of trade	1991 Exports	1991 Imports	1991 Balance of trade	1992 Exports	1992 Imports	1992 Balance of trade
Total	8,186.03	12,206.16	(4,020.13)	8,839.51	12,051.36	3,211.85	4,150.40	3,087.58	1,062.82
America	3,320.47	2,840.65	479.82	3,407.23	2,847.90	559.33	4,019.26	2,827.09	1,192.18
North America	3,244.43	2,539.19	705.24	3,313.33	2,590.32	723.01	69.97	8.00	61.97
Central America	47.68	11.38	36.30	58.58	77.33	51.25	28.65	0.20	28.45
Carribean countries	18.91	0.41	18.50	15.01	0.22	14.79	32.52	252.29	(219.78)
South America	9.44	289.66	(280.22)	20.32	250.04	(229.72)			
Europe	1,532.41	1,601.97	(69.56)	1,735.64	1,508.08	227.56	1,947.78	2,024.67	(76.89)
European Community (EC)	1,448.74	1,365.13	83.60	1,641.67	1,247.64	394.03	1,858.85	1,702.03	156.83
Eastern Europe	21.09	84.09	(63.00)	24.57	101.82	(77.25)	12.79	170.92	(158.13)
Western Europe	62.58	152.74	(90.16)	69.39	158.62	(89.22)	76.14	151.72	(75.59)
Japan, Australasia, Oceania and other territories	1,736.45	2,772.32	(1,035.87)	1,897.76	2,896.23	(998.47)	1,882.97	3,652.87	(1,769.89)
ASEAN and other Asian countries	1,433.78	3,432.96	(1,999.18)	1,621.62	3,494.46	(1,872.83)	1,608.77	4,050.66	(2,441.89)
ASEAN countries	584.77	1,187.65	(602.88)	615.53	1,021.21	(405.68)	520.98	1,349.09	(828.11)
Other Asian countries	849.01	2,245.31	(1,396.30)	1,006.09	2,473.24	(1,467.15)	1,087.79	2,701.57	(1,613.78)
Middle East and Africa	161.81	1,558.26	(1,396.45)	177.25	1,304.69	(1,127.43)	234.38	1,703.08	(1,468.70)
Middle East	130.88	1,477.37	(1,346.49)	147.14	1,245.09	(1,097.95)	209.78	1,592.63	(1,382.85)
African countries	30.92	80.89	(49.96)	30.11	59.60	(29.49)	24.60	110.45	(85.85)

Sources: Department of Trade and Industry, Bureau of Export Trade Promotion; National Statistics Office, Trade Statistics Division.

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Table 18.3 Philippine Foreign Trade by Major Product Group: 1991 and 1992
(F.O.B. value in thousand U.S. dollars)

Product group	1992 Exports	1992 Imports	1992 Balance of trade	1991 Exports	1991 Imports	1991 Balance of trade
Total	9,824,314	14,518,928	(4,694,614)	8,839,514	12,051,363	(3,211,849)
Consumer manufactures	3,120,672	474,206	2,646,466	2,746,156	390,708	2,355,448
Garments	2,014,314	14,246	2,000,068	1,740,278	10,064	1,730,214
Gifts, toys and houseware	390,097	36,831	353,266	336,210	30,304	305,906
Fashion accessories and leathergoods	277,464	20,176	257,288	256,085	21,256	234,829
Furniture	181,175	7,933	173,242	177,228	4,380	172,848
Footwear	143,949	27,818	116,131	141,086	28,857	112,229
Other consumer manufactures	113,673	367,202	(253,529)	95,269	295,846	(200,577)
Food and food preparations	1,141,410	1,016,925	124,485	1,245,133	809,082	436,051
Processed food	523,649	629,524	(105,875)	518,823	509,160	9,663
Fresh food	617,761	387,401	230,360	726,310	299,922	426,388
Resource-based products	1,112,989	753,301	359,688	927,012	712,362	214,650
Coconut products	431,670		431,670	274,212	1,681	272,531
Mineral products	306,046	181,587	124,459	285,268	192,178	93,090
Forest products	58,268	59,805	(1,537)	73,490	27,071	46,419
Tobacco	43,057	102,799	(59,742)	69,633	81,805	(12,172)
Other resource-based commodities	273,948	409,110	(135,162)	224,409	409,627	(185,218)
Industrial manufactures	4,184,211	12,005,377	(7,821,166)	3,649,838	9,829,201	(6,179,363)
Electronics	2,970,934	3,294,504	(323,570)	2,419,843	2,582,956	(163,113)
Construction materials	87,289	216,808	(129,519)	111,876	155,419	(43,543)

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Table 18.3 Philippine Foreign Trade by Major Product Group: 1991 and 1992 (concluded)
(F.O.B. value in thousand U.S. dollars)

Product group	1992 Exports	1992 Imports	1992 Balance of trade	1991 Exports	1991 Imports	1991 Balance of trade
Metal manufactures	330,691	880,120	(549,429)	357,601	735,921	(378,320)
Chemicals	269,150	1,488,061	(1,218,911)	305,021	1,325,055	(1,020,034)
Machinery and transport equipment	94,261	2,338,778	(2,244,517)	73,053	1,722,670	(1,649,617)
Textile yarns and fabrics	90,191	1,133,755	(1,043,564)	72,408	1,048,012	(975,604)
Nonmetallic mineral manufactures	24,044	60,872	(36,828)	26,354	38,722	(12,368)
Petroleum products	267,668	2,054,120	(1,786,452)	232,188	1,787,179	(1,554,991)
Other industrial manufactures	49,983	538,359	(488,376)	51,493	433,267	(381,774)
Special transactions	265,031	269,119	(4,088)	271,373	310,010	(38,637)

Sources: Department of Trade and Industry, Bureau of Export Trade Promotion;
National Statistics Office, Trade Statistics Division.

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Table 18.3a Philippine Merchandise Trade by Major Product Group and Sub-Group: 1991 and 1992 (F.O.B. value in U.S. dollars)

Product group	1992 Export Value	1992 Export Percent share	1992 Import Value	1992 Import Percent share	1991 Export Value	1991 Export Percent share	1991 Import Value	1991 Import Percent share
Total	9,824,314,301	100.00	14,518,927,912	100.00	8,839,513,852	100.00	12,051,363,160	100.00
Consumer Manufactures	3,120,672,716	31.76	474,205,788	3.27	2,746,156,387	31.07	390,707,563	3.24
Garments	2,014,313,916	20.50	14,245,634	0.10	1,740,277,599	19.69	10,063,965	0.08
Men's wear	528,571,836	5.38	3,020,088	0.02	444,820,751	5.03	1,605,693	0.01
Women's wear	165,843,723	1.69	1,530,688	0.01	155,839,009	1.76	832,285	0.01
Infants' wear	396,250,727	4.03	50,063	0.00	364,691,986	4.13	22,318	0.00
Underwear	108,244,655	1.10	275,970	0.00	104,747,498	1.18	71,842	0.00
Nightwear/bathrobes	66,831,315	0.68	277,197	0.00	52,031,476	0.59	142,028	0.00
Swimwear	6,178,202	0.06	67,378	0.00	4,547,053	0.05	25,052	0.00
Articles of apparel and clothing	742,393,458	7.56	9,024,250	0.06	613,599,826	6.94	7,364,747	0.06
Gifts, toys and houseware	390,096,901	3.97	36,831,523	0.25	336,210,340	3.80	30,304,416	0.25
Basketwork (wickerwork)	126,139,237	1.28	195,499	0.00	117,704,685	1.33	132,134	0.00
Shellcraft and other carving materials	31,084,625	0.32	231,127	0.00	31,096,720	0.35	210,719	0.00
Woodcraft	49,444,251	0.50	709,384	0.00	47,513,556	0.54	1,383,044	0.01
Articles of textiles materials	21,946,366	0.22	7,014,799	0.05	22,220,380	0.25	3,161,138	0.03
Christmas decorations	74,585,697	0.76	1,808,573	0.01	46,273,999	0.52	1,255,528	0.01
Ceramics/stoneware	40,113,008	0.41	1,544,190	0.01	31,976,642	0.36	1,315,989	0.01
Toys and dolls	30,499,229	0.31	5,645,101	0.04	24,636,729	0.28	4,477,176	0.04
Artificial flowers	6,456,622	0.07	1,745,780	0.01	7,065,269	0.08	3,137,840	0.03
Brassware/metal, n.e s.	3,232,077	0.03	1,564,454	0.01	2,650,034	0.03	1,177,810	0.01
Articles made of paper	1,044,106	0.01	7,148,865	0.05	1,202,024	0.01	6,637,428	0.06
Articles made of glass including glasswares	848,657	0.01	5,239,592	0.04	915,679	0.01	4,459,454	0.04

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Table 18.3a Philippine Merchandise Trade by Major Product Group and Sub-Group: 1991 and 1992 (continued)
(F.O.B. value in U.S. dollars)

Product group	1992				1991			
	Export		Import		Export		Import	
	Value	Percent share	Value	Percent share	Value	Percent share	Value	Percent share
Other manufactured materials	4,703,026	0.05	3,984,159	0.03	2,954,623	0.03	2,956,156	0.02
Fashion accessories & leathergoods	277,464,394	2.82	20,175,773	0.14	256,085,503	2.90	21,256,107	0.18
Leather and nonleather gloves	142,582,969	1.45	120,103	0.00	142,253,677	1.61	163,563	0.00
Precious jewelry	7,741,278	0.08	681,538	0.00	7,431,992	0.08	765,472	0.01
Costume jewelry	39,211,255	0.40	3,650,715	0.03	32,538,980	0.37	4,875,230	0.04
Travel goods	34,898,941	0.36	1,724,797	0.01	31,942,585	0.36	1,328,967	0.01
Handbags and belts	16,796,024	0.17	3,282,902	0.02	14,152,686	0.16	2,707,950	0.02
Hat and other headgear	6,630,061	0.07	346,840	0.00	5,467,636	0.06	206,711	0.00
Other accessories	29,603,866	0.30	10,368,878	0.07	22,297,947	0.25	11,208,214	0.09
Furniture	181,175,337	1.84	7,932,871	0.05	177,227,586	2.00	4,379,531	0.04
Rattan furniture	115,575,690	1.18			118,239,267	1.34	501	0.00
Wood furniture	30,976,818	0.32	1,207,267	0.01	25,474,872	0.29	908,679	0.01
Parts of furniture	5,421,433	0.06	984,348	0.01	7,671,639	0.09	496,756	0.00
Bamboo furniture	1,836,159	0.02			1,932,578	0.02		
Furnishings	2,470,281	0.03	1,032,925	0.01	2,295,634	0.03	181,911	0.00
Metal furniture	8,145,269	0.08	1,965,525	0.01	4,692,352	0.05	851,880	0.01
Plastic furniture	17,010	0.00	367,299	0.00	29,960	0.00	258,453	0.00
Buri furniture	6,218,661	0.06			7,474,246	0.08		
Stone furniture	9,222,837	0.09	41,680	0.00	6,905,445	0.08		
Furniture of other materials	1,291,179	0.01	2,333,827	0.02	2,511,593	0.03	1,681,351	0.01
Footwear	143,949,302	1.47	27,818,016	0.19	141,086,482	1.60	28,857,129	0.24
Footwear with protective metal toe-cap	1,121,120	0.01	2,329	0.00	929,180	0.01	59,746	0.00
Sports footwear	49,397,186	0.50	907,163	0.01	61,571,593	0.70	935,767	0.01

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Table 18.3a Philippine Merchandise Trade by Major Product Group and Sub-Group: 1991 and 1992 (continued)
(F.O.B. value in U.S. dollars)

Product group	1992 Export Value	1992 Export Percent share	1992 Import Value	1992 Import Percent share	1991 Export Value	1991 Export Percent share	1991 Import Value	1991 Import Percent share
Footwear with soles/uppers of rubber	11,640,033	0.12	1,001,549	0.01	8,858,260	0.10	135,398	0.00
Footwear with soles/uppers of leather	34,138,453	0.35	1,472,544	0.01	18,716,846	0.21	1,340,706	0.01
Footwear with soles/uppers of plastic	22,041,148	0.22	600,763	0.00	25,283,194	0.29	527,156	0.00
Other footwear and footwear parts, n.e.s	25,611,362	0.26	23,833,668	0.16	25,727,409	0.29	25,858,356	0.21
Other consumer manufactures	113,672,866	1.16	367,201,971	2.53	95,268,877	1.08	295,846,415	2.45
Bags and Synthetic Materials			1,473,132	0.01			1,250,097	0.01
Mechanical and similar lighters	16,567,485	0.17	8,392,444	0.06	18,801,987	0.21	7,003,048	0.06
Sporting goods	12,218,881	0.12	10,324,558	0.07	11,542,538	0.13	6,042,930	0.05
Medical/Optical goods	14,109,268	0.14	26,700,044	0.18	13,390,505	0.15	24,120,031	0.20
Umbrellas and sunshades	828,402	0.01	2,281,605	0.02	599,863	0.01	1,968,861	0.02
Musical instruments	7,006,947	0.07	15,299,292	0.11	6,474,867	0.07	17,855,205	0.15
Others (other consumer mftrs)	62,941,883	0.64	302,730,896	2.09	44,459,117	0.50	237,606,243	1.97
Food and Food Preparations	1,141,410,589	11.62	1,016,924,990	7.00	1,245,133,175	14.09	809,082,363	6.71
Processed food	523,649,258	5.33	629,524,312	4.34	518,823,274	5.87	509,159,882	4.22
Meat and meat preparations	58,707	0.00	581,365	0.00	31,810	0.00	367,308	0.00
Dairy products and birds' eggs (processed)	314,098	0.00	251,776,639	1.73	298,226	0.00	209,900,209	1.74
Marine products (processed)	104,691,713	1.07	3,696,989	0.03	114,717,710	1.30	3,187,388	0.03
Cereals and cereal preparations	3,477,340	0.04	53,271,230	0.37	3,930,666	0.04	49,749,982	0.41
Vegetables and fruits (processed)	337,171,353	3.43	23,710,034	0.16	314,480,008	3.56	14,973,448	0.12
Sugar, sugar preparations & honey	22,243,647	0.23	20,088,090	0.14	21,290,496	0.24	11,712,612	0.10
Coffee (processed)	1,722,867	0.02	16,094	0.00	1,377,104	0.02	56,290	0.00
Cocoa, tea, spices & mftrs. thereof	13,035,044	0.13	17,439,337	0.12	18,926,698	0.21	8,580,958	0.07
Feeding stuff for animals	5,410,605	0.06	185,688,166	1.28	4,744,674	0.05	152,975,177	1.27

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Table 18.3a Philippine Merchandise Trade by Major Product Group and Sub-Group: 1991 and 1992 (continued)
(F.O.B. value in U.S. dollars)

Product group	1992 Export Value	1992 Export Percent share	1992 Import Value	1992 Import Percent share	1991 Export Value	1991 Export Percent share	1991 Import Value	1991 Import Percent share
Beverages	10,751,961	0.11	26,765,646	0.18	16,605,933	0.19	22,982,057	0.19
Miscellaneous edible products and preparation	24,771,923	0.25	46,490,722	0.32	22,419,949	0.25	34,674,453	0.29
Fresh food	617,761,331	6.29	387,400,678	2.67	726,309,901	8.22	299,922,481	2.49
Live animals chiefly for food	369,175	0.00	22,566,025	0.16	306,761	0.00	12,312,791	0.10
Meat (fresh)	87,993	0.00	22,946,265	0.16	1,109,986	0.01	16,562,450	0.14
Dairy products and birds' eggs (fresh)	14,721	0.00	996,569	0.01	5,616	0.00	731,160	0.01
Marine products (fresh)	287,480,928	2.93	57,432,989	0.40	351,490,857	3.98	59,005,834	0.49
Cereals (fresh)	9,253,281	0.09	242,704,115	1.67	5,775,900	0.07	173,431,017	1.44
Vegetables and fruits (fresh)	231,050,084	2.35	32,071,712	0.22	247,924,293	2.80	22,977,621	0.19
Sugar and honey (fresh)	87,711,338	0.89	2,280	0.00	114,623,495	1.30	27,432	0.00
Coffee (fresh)	1,427,229	0.01			4,698,952	0.05	5,531	0.00
Cocoa, tea, and spices (fresh)	366,582	0.00	8,680,723	0.06	374,041	0.00	14,868,645	0.12
Resource-Based Products	1,112,989,408	11.33	753,301,464	5.19	927,012,406	10.49	712,362,131	5.91
Coconut products	431,670,304	4.39			274,212,299	3.10	1,680,680	0.01
Copra	11,181,550	0.11			18,552,331	0.21		
Coconut oil, crude	420,488,754	4.28			255,659,968	2.89	1,680,680	0.01
Mineral Products	306,046,476	3.12	181,586,659	1.25	285,268,101	3.23	192,178,158	1.59
Nickel and nickel ores and concentrates	18,237,382	0.19	1,123,555	0.01	30,856,448	0.35	1,769,664	0.01
Gold from copper ores & copper CU	134,243,483	1.37			64,454,746	0.73	3,755	0.00
Chrome ores	13,755,249	0.14	4,541	0.00	15,610,917	0.18	1,260	0.00
Copper concentrates	139,810,362	1.42	180,445,519	1.24	174,345,990	1.97	190,319,956	1.58

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Table 18.3a Philippine Merchandise Trade by Major Product Group and Sub-Group: 1991 and 1992 (continued)
(F.O.B. value in U.S. dollars)

Product group	1992 Export Value	1992 Export Percent share	1992 Import Value	1992 Import Percent share	1991 Export Value	1991 Export Percent share	1991 Import Value	1991 Import Percent share
Other base metal ores and concentrate			13,044	0.00			83,523	0.00
Forest products	58,268,086	0.59	59,805,144	0.41	73,490,458	0.83	27,070,892	0.22
Logs	137	0.00	48,169,644	0.33	3,578	0.00	23,414,275	0.19
Lumber	21,148,820	0.22	10,760,116	0.07	22,694,391	0.26	2,540,801	0.02
Plywood and veneer	36,476,642	0.37	862,606	0.01	50,140,088	0.57	986,546	0.01
Pulpwood unmanufactured abaca fibers	642,487	0.01	12,778	0.00	652,401	0.01	129,270	0.00
Tobacco	43,056,670	0.44	102,799,455	0.71	69,632,643	0.79	81,804,861	0.68
Tobacco, manufactures	9,228,119	0.09	10,309,505	0.07	27,114,359	0.31	10,477,896	0.09
Tobacco, unmanufactured	33,828,551	0.34	92,489,950	0.64	42,518,284	0.48	71,326,965	0.59
Other resource-based commodities	273,947,872	2.79	409,110,206	2.82	224,408,905	2.54	409,627,540	3.40
Natural fibers	1,469,524	0.01	317,869	0.00	3,074,542	0.03		
Natural oils, fats and waxes	74,741,662	0.76	33,506,951	0.23	55,915,686	0.63	20,342,060	0.17
Unmanufctured Abaca Fibers	21,213,645	0.22			16,596,537	0.19	15,750	0.00
Natural rubber	9,345,614	0.10	750,160	0.01	13,017,497	0.15	239,582	0.00
Seaweeds	37,463,939	0.38	538,979	0.00	44,205,765	0.50	227,510	0.00
Marbles	8,390,069	0.09	302,148	0.00	9,558,406	0.11	398,325	0.00
Cutflowers/Ornamental plants	1,733,157	0.02	963,516	0.01	1,500,553	0.02	202,477	0.00
Others (Other resource-based)	119,590,262	1.22	372,730,583	2.57	80,539,919	0.91	388,201,836	3.22
Industrial Manufactures	4,184,210,518	42.59	12,005,376,654	82.69	3,649,838,552	41.29	9,829,201,132	81.56

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Table 18.3a Philippine Merchandise Trade by Major Product Group and Sub-Group: 1991 and 1992 (continued)
(F.O.B. value in U.S. dollars)

Product group	1992				1991			
	Export		Import		Export		Import	
	Value	Percent share	Value	Percent share	Value	Percent share	Value	Percent share
Electronics	2,970,933,694	30.24	3,294,504,324	22.69	2,419,842,858	27.38	2,582,956,205	21.43
Semi-conductor devices	2,013,640,430	20.50	1,939,020,000	13.36	1,767,336,509	19.99	1,675,387,771	13.90
Electrical machineries, apparatus and appliances, n.e.s.,	354,838,870	3.61	563,549,477	3.88	239,436,748	2.71	427,091,206	3.54
Telecommunications/sound & video apparatus	408,509,861	4.16	435,260,217	3.00	306,164,338	3.46	337,197,130	2.80
Electronic office and automatic data processing machines	193,944,533	1.97	356,674,630	2.46	106,905,263	1.21	143,280,098	1.19
Construction materials	87,288,987	0.89	216,808,061	1.49	111,876,424	1.27	155,418,907	1.29
Joineries and builders' woodwork	63,304,514	0.64	381,036	0.00	69,402,770	0.79	302,747	0.00
Sanitary wares and toilet accessories	5,500,125	0.06	16,407,786	0.11	6,230,860	0.07	17,086,454	0.14
Clay and ceramic materials	4,367,767	0.04	14,970,504	0.10	3,219,960	0.04	12,080,369	0.10
Aluminum products	713,707	0.01	11,317,978	0.08	531,538	0.01	9,694,893	0.08
Iron and steel	7,563,972	0.08	128,306,898	0.88	26,311,310	0.30	110,515,459	0.92
Cement and cement products	45,406	0.00	36,804,926	0.25	81,832	0.00	738,187	0.01
Asbestos materials	3,431	0.00	1,140,406	0.01	6,349	0.00	783,741	0.01
Other construction materials	5,790,065	0.06	7,478,527	0.05	6,091,805	0.07	4,217,057	0.03
Metal manufactures	330,690,918	3.37	880,120,046	6.06	357,601,351	4.05	735,920,875	6.11
Iron and steel	17,748,489	0.18	553,994,424	3.82	29,243,189	0.33	458,945,712	3.81
Copper	222,116,074	2.26	49,335,715	0.34	227,112,547	2.57	31,914,588	0.26
Iron agglomerates	62,871,268	0.64	57,859,298	0.40	78,368,450	0.89	70,890,001	0.59
Others (metal mftrs)	27,955,087	0.28	218,930,609	1.51	22,877,165	0.26	171,170,574	1.45

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Table 18.3a Philippine Merchandise Trade by Major Product Group and Sub-Group: 1991 and 1992 (continued)
(F.O.B. value in U.S. dollars)

Product group	1992 Export Value	1992 Export Percent share	1992 Import Value	1992 Import Percent share	1991 Export Value	1991 Export Percent share	1991 Import Value	1991 Import Percent share
Chemicals	269,149,681	2.74	1,488,061,216	10.25	305,021,064	3.45	1,325,055,038	11.00
Organic chemicals	45,895,918	0.47	306,256,285	2.11	50,631,129	0.57	278,775,895	2.31
Inorganic chemicals	19,631,828	0.20	160,198,533	1.10	41,202,086	0.47	159,014,326	1.32
Fertilizers, manufactured	88,210,895	0.90	144,849,077	1.00	115,861,334	1.31	130,669,088	1.08
Artificial resins, plastic materials, and cellulose esters and ethers	37,881,531	0.39	376,046,283	2.59	30,922,648		326,874,493	2.71
Activated carbon	26,570,332	0.27	1,634,001	0.01	22,676,491	0.26	1,795,752	0.01
Others (Chemicals)	50,959,177	0.52	499,077,037	3.44	43,727,376	0.49	427,925,484	3.55
Machinery and transport equipment	94,260,578	0.96	2,338,778,051	16.11	73,053,374	0.83	1,722,670,279	14.29
Power generation and specialized machines	31,286,170	0.32	1,417,418,749	9.76	26,886,480	0.30	1,035,621,975	8.59
Non-electrical office machines			12,676,677	0.09	118	0.00	7,398,437	0.06
Transport equipments	62,974,408	0.64	908,682,625	6.26	46,166,776	0.52	679,649,867	5.64
Textile yarns and fabrics	90,191,277	0.92	1,133,754,563	7.81	72,408,494	0.82	1,048,011,701	8.70
Nonmetallic mineral manufactures	24,043,673	0.24	60,871,536	0.42	26,353,732	0.30	38,721,847	0.32
Petroleum products	267,668,384	2.72	2,054,119,679	14.15	232,188,448	2.63	1,787,179,266	14.83
Other industrial manufactures	49,983,326	0.51	538,359,178	3.71	51,492,807	0.58	433,267,014	3.60
Accessories/parts of footwear, garments and other articles of fashion accessories and gifts & houseware	4,234,960	0.04	14,048,231	0.10	3,081,081	0.03	8,601,954	0.07
Automobile and truck tires of all sizes, new	7,865,843	0.08	211,342,428	1.46	13,495,500	0.15	168,109,120	1.39
V-belts of vulcanized rubber	2,450,586	0.02	1,266,855	0.01	2,257,820	0.03	1,188,091	0.01

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Table 18.3a Philippine Merchandise Trade by Major Product Group and Sub-Group: 1991 and 1992 (concluded)
(F.O.B. value in U.S. dollars)

Product group	1992				1991			
	Export		Import		Export		Import	
	Value	Percent share	Value	Percent share	Value	Percent share	Value	Percent share
Containers, wrapper, boxes & other packing containers	16,131,215	0.16	29,760,546	0.20	14,835,550	0.17	28,758,858	0.24
Others (Other industrial manufactures)	19,300,722	0.20	281,941,118	1.94	17,822,856	0.20	226,608,991	1.88
Special Transactions	265,031,070	2.70	269,119,016	1.85	271,373,332	3.07	310,009,971	2.57

Source: Department of Trade and Industry, Bureau of Export Trade Promotion; National Statistics Office, Trade Statistics Division.

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Table 18.4 Foreign Trade of the Philippines by Port: 1990-1992
(F.O.B. value in thousand U.S. dollars)

Port	1990 Total trade	1990 Exports [1]	1990 Import	1991 Total trade	1991 Exports [1]	1991 Imports	1992 Total trade	1992 Exports [1]	1992 Imports
Total	20,392,188	8,186,027	12,206,161	20,890,877	8,839,514	12,051,363	24,343,242	9,824,314	14,518,928
Luzon	16,881,702	5,868,373	11,013,329	17,289,734	6,588,008	10,701,728	20,667,311	7,507,756	13,159,554
Aparri, Cagayan	996	504	492	71	71	-	450	353	98
Gaang, Currimao, Ilocos Norte	830	830	-	1,189	1,189	-	888	888	-
Cabugao, Ilocos Sur	79	-	79	8	8	-	415	415	-
Dagupan City, Pangasinan	-	-	-	-	-	50	-	50	-
San Fernando, La Union	493,186	220,925	272,261	601,722	256,127	345,595	752,528	341,010	411,518
Masinloc, Zambales	84,805	79,012	5,793	65,374	61,612	3,763	70,200	65,189	5,011
Limay, Bataan	952,427	96,644	855,783	829,039	109,566	719,473	913,437	81,261	832,175
Mariveles, Bataan	232,269	127,992	104,277	248,768	139,457	109,311	255,542	149,986	105,556
Manila (South Harbor)	4,830,498	1,420,445	3,410,053	3,467,202	763,906	2,703,296	4,616,335	882,666	3,733,669
Manila International Container Port (MICP)	5,154,478	1,968,531	3,185,948	6,640,063	3,105,788	3,534,275	7,886,961	3,620,127	4,266,834
Batangas City, Batangas	1,273,433	167,252	1,106,181	1,369,445	199,602	1,169,843	1,522,888	178,419	1,344,469
Puerto Princesa City, Palawan	18,301	17,619	682	20,387	19,313	1,073	54,309	54,072	237
Siain, Quezon	24,612	5,337	19,275	18,250	5,022	13,228	21,609	6,838	14,771
Jose Panganiban, Camarines Norte	15,993	15,993	-	24,119	24,119	-	22,297	22,297	-
Legaspi City, Albay	15,743	15,472	271	21,329	20,346	984	26,330	25,231	1,099
Tabaco, Albay	15,388	3,791	11,597	7,760	6,651	1,109	6,824	3,351	3,472
Masbate, Masbate	1,017	1,017	-	4,755	4,755	-	3,212	3,212	-

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Table 18.4 Foreign Trade of the Philippines by Port: 1990-1992 (continued)
(F.O.B. value in thousand U.S. dollars)

Port	1990 Total trade	1990 Exports [1]	1990 Import	1991 Total trade	1991 Exports [1]	1991 Imports	1992 Total trade	1992 Exports[1]	1992 Imports
Ninoy Aquino International Airport (NAIA)	3,767,609	1,726,997	2,040,611	3,970,253	1,870,476	2,099,778	4,513,036	72,441611	2,072,441
Clark Airbase	12	-	12	-	-	-	-	-	-
Visayas	1,895,122	1,231,259	663,864	1,983,804	1,258,809	724,996	2,005,822	1,235,432	1,770,391
San Jose, Northern Samar	15	15	-	a	a	-	544	75	469
Catbalogan, Western Samar	1,840	1,688	152	1,842	1,797	46	1,926	1,846	81
Iloilo City, Iloilo	109,671	70,795	38,877	98,942	56,994	41,948	76,585	37,869	38,716
Pulupandan, Negros Occidental	65,758	65,743	16	55,311	55,100	211	52,491	50,674	1,817
Dumaguete City, Negros Oriental	69,927	67,801	2,126	90,281	87,209	3,072	59,439	57,277	2,162
Cebu City, Cebu	610,987	396,242	214,746	584,229	392,383	191,846	725,000	429,302	295,698
Danao, Cebu	-	-	-	a	a	-			
Lapu-lapu City, Cebu	113,187	44,002	69,184	144,326	84,682	59,643	169,963	117,845	52,118
Tacloban City, Leyte	661,397	418,387	243,009	713,065	409,397	303,668	616,104	346,804	269,300
Maasin, Southern Leyte	8	8	-	294	294	-	151	151	-
Mactan International Airport, Cebu	262,332	166,578	95,754	295,514	170,953	124,562	303,619	193,589	110,030
Mindanao	1,615,363	1,086,395	528,968	1,617,337	992,697	624,640	1,670,110	1,081,127	1,588,983
Surigao City, Surigao del Norte	10,986	10,986	-	13,649	13,647	2	7,600	7,278	322
Bislig, Surigao del Sur	35,907	23,461	12,446	29,393	16,963	12,430	21,408	14,289	7,119

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Table 18.4 Foreign Trade of the Philippines by Port: 1990-1992 (concluded)
(F.O.B. value in thousand U.S. dollars)

Port	1990 Total trade	1990 Exports [1]	1990 Import	1991 Total trade	1991 Exports [1]	1991 Imports	1992 Total trade	1992 Exports[1]	1992 Imports
Masao, Lumbocan, Butuan City, Agusan del Norte	12,774	10,302	2,472	5,050	4,502	548	9,596	6,341	3,255
Cagayan de Oro City, Misamis Oriental	419,696	267,093	152,603	436,562	232,833	203,729	424,884	238,953	185,889
Iligan City, Lanao del Norte	355,743	137,998	217,745	331,940	104,004	227,936	342,778	153,9785	188,800
Ozamis City, Misamis Occidental	63,075	62,537	539	55,702	54,046	1,656	81,728	79,914	1,814
Zamboanga City, Zamboanga del Sur	143,449	122,269	21,180	134,819	108,938	25,882	134,425	105,295	29,130
Jolo, Sulu	12	12	-	-	-	-			
General Santos City, South Cotabato	192,495	130,512	61,983	236,220	146,721	89,499	264,667	169,692	94,975
Parang, Maguindanao	6,372	4,456	1,916	4,244	1,729	2,514	1,845	1,457	388
Davao City, Davao del Sur	338,206	280,122	58,084	346,621	286,177	60,444	348,053	270,978	77,075
Mati, Davao Oriental	36,648	36,648	-	23,137	23,137	-	33,126	32,909	217

Note: Details may not add up to totals due to rounding.

[1] Sum of domestic exports and re-exports.

Source: National Statistics Office, Trade Statistics Division.

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Table 18.5 Trade Indices: 1979-1991
(1985 = 100)

Period	Quantum index		Price index		Value index		Net terms of trade	Purchasing power of exports
	Imports	Exports	Imports	Exports	Imports	Exports		
1979	438.5	116.6	31.0	77.6	136.0	90.5	250.2	291.6
1980	366.6	143.2	37.2	82.6	136.2	118.2	222.3	318.3
1981	152.5	137.8	99.5	87.3	151.8	120.3	87.7	120.9
1982	162.4	124.4	92.4	85.2	150.0	105.9	92.2	114.7
1983	155.8	128.2	92.7	82.9	144.4	106.3	89.4	114.6
1984	119.3	138.2	97.3	83.1	116.1	114.9	85.4	118.1
1985	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1986	119.7	116.6	82.3	88.8	98.5	103.6	107.9	125.8
1987	158.0	124.2	82.7	97.7	130.6	121.3	118.1	146.7
1988	191.3	138.2	82.1	107.7	157.1	148.9	131.2	181.3
1989	229.3	155.0	87.2	105.7	199.8	163.8	121.3	187.9
1990	246.4	166.2	94.0	102.7	231.6	170.6	109.3	181.5
1991	250.6	171.6	90.0	106.3	225.4	182.3	118.1	202.4

Source: National Statistics Office, Trade Statistics Division.

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Table 18.6 Principal Exports of the Philippines: 1985-1992
(F.O.B. value in million U.S. dollars)

Commodity[1]	1985	1986	1987	1988	1989	1990	1991	1992
Total exports[2]	4,628.95	4,841.78	5,720.24	7,074.19	7,820.71	8,186.03	8,839.51	9,824.31
Total principal exports[3]	3,397.99	3,564.69	4,122.04	5,133.66	5,444.08	5,784.45	6,527.16	7,317.77
Garments	623.00	751.51	1,097.63	1,317.14	1,574.92	1,776.29	1,860.60	2,140.34
Electronics	1,020.02	909.32	1,093.55	1,318.12	1,387.31	1,522.96	1,751.21	1,959.76
Coconut oil	347.38	332.78	380.54	408.07	376.80	360.75	298.53	481.16
Woodcraft and furniture	48.45	50.17	76.35	110.49	98.26	79.14	291.70	291.19
Ignition wiring sets used in vehicles, aircrafts, ships	a	a	a	a	a	158.13	177.89	261.78
Bars, rods/slabs neither polished nor coated, unworked of copper	167.51	172.32	162.27	295.01	330.37	280.64	217.30	216.61
Shrimps and prawns, fresh, chilled or frozen	62.52	103.83	154.60	249.59	231.21	218.73	269.46	207.92
Input/Output peripheral units	a	a	a	a	a	a	a	174.79
Other products manufactured from materials imported on consignment basis	a	a	a	a	a	a	193.03	160.64
Bananas, fresh	113.49	130.22	121.24	146.01	146.19	149.28	173.00	157.73
Petroleum products	39.42	62.88	88.23	132.19	95.10	154.59	174.66	150.35
Pineapple and pineapple products	88.79	83.52	86.34	83.20	91.26	88.68	158.21	149.75
Transmission apparatus incorporating reception apparatus	a	a	a	a	a	113.39	110.90	142.25
Copper concentrates	84.49	89.87	109.15	216.16	237.37	206.58	174.35	139.81
Gold	99.95	139.91	90.45	118.02	109.41	89.81	64.46	134.24
Footwear	a	a	a	a	a	78.00	121.53	120.99
Tuna	61.09	63.08	69.92	113.19	129.99	117.73	115.24	102.32
Fertilizers, manufactured	a	105.87	52.15	a	80.17	71.93	115.86	88.21
Desiccated coconut	75.67	44.27	75.29	78.29	75.76	60.68	66.24	87.56

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Table 18.6 Principal Exports of the Philippines: 1985-1992
(F.O.B. value in million U.S. dollars) (concluded)

Commodity[1]	1985	1986	1987	1988	1989	1990	1991	1992
Sugar	168.66	86.80	60.32	60.20	88.82	111.38	114.62	87.5
Iron ore agglomerates (sinters)	94.98	85.15	75.88	86.15	75.66	80.63	78.37	a
Bags and basketwork (e.g. bamboo, rattan, etc.)	a	a	a	a	123.14	65.13	a	a
Plywood	50.90	56.54	67.33	78.53	a	a	a	a
Copra oil cake or meal	a	74.76	73.48	63.42	a	a	a	a
Lumber	90.42	103.14	154.20	156.47	136.17	a	a	a
Coffee, not roasted raw or green	69.54	118.76	33.12	48.31	a	a	a	a
Nickel & nickle alloys unwrought, n.e.s	52.49	a	a	a	a	a	a	a
Fatty alcohols	a	a	a	55.11	56.17	a	a	a
Logs	39.23	a	a	a	a	a	a	a

a Not included in the top twenty (20) exports for the year.
1 Based on 1992 ranking
2 Sum of domestic exports and re-exports.
3 Details may not add up to totals due to exclusions and mergings of some commodities.

Source: National Statistics Office, Trade Statistics Division.

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Table 18.6a Philippine Export Performance of Priority Products (Export Winners): 1991 and 1992
(F. O. B. Value in Thousand US Dollars)

Products	1992 Value	% share	1991 Value	% share	Growth Rate
Total Phil. Exports	9,824,314	100.00	8,839,514	100.00	11.14
Total Export Winners	4,828,498	49.15	4,268,509	48.29	13.12
1. Garments	2,014,327	20.50	1,740,278	19.69	15.75
2. Subcontracted Electronics	2,010,594	20.47	1,731,256	19.59	16.13
3. Shrimps and Prawns	208,148	2.12	272,966	3.09	(23.75)
4. Furniture	181,175	1.84	177,228	2.00	2.23
5. Basketworks	126,139	1.28	117,705	1.33	7.17
6. Christmas Decor	74,586	0.76	46,274	0.52	61.18
7. Suncontracted Metal	65,552	0.67	35,574	0.40	84.27
8. Processed Tropical Fruits	54,810	0.56	55,103	0.62	(0.53)
9. Ceramic Tiles and Decor	43,212	0.44	34,658	0.39	24.68
10. Seaweeds and Carageenan	37,464	0.38	44,206	0.50	(15.25)
11. Marble	8,390	0.09	9,558	0.11	(12.22)
12. Fine Jewelry	4,101	0.04	3,703	0.04	10.75

Source: National Statistics Office, Trade Statistics Division.

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Table 18.7 Principal Imports of the Philippines: 1985-1992
(F.O.B. value in million U.S. dollars)

Commodity[1]	1985	1986	1987	1988	1989	1990	1991	1992
Total imports	5,110.67	5,043.60	6,736.97	8,159.38	10,418.82	12,206.16	12,051.36	14,518.93
Total principal imports[2]	4,346.09	4,152.51	5,586.85	6,594.21	8,511.24	10,006.60	10,200.17	12,207.70
Mineral fuel, lubricants a related materials	1,391.61	819.02	1,210.58	1,024.86	1,315.28	1,841.75	1,784.29	2,049.64
Machinery and equipment other than electric	307.04	338.64	461.24	598.16	942.53	1,408.35	1,201.50	1,803.61
Electronics and components[3]	a	a	a	a	a	1,276.92	1,406.58	1,568.66
Textile yarns, fabrics, made-up articles and related products[3]	140.30	207.33	279.10	324.00	452.05	972.97	1,052.27	1,143.22
Electrical machinery apparatus and appliances[4]	293.07	333.51	451.76	578.83	805.86	602.19	752.32	978.81
Transport equipment	45.98	52.83	112.35	228.86	671.12	815.24	679.67	908.68
Base metals	179.02	257.23	427.23	599.15	916.64	748.78	729.71	885.20
Organic and inorganic chemicals	136.73	176.64	234.55	254.53	410.09	439.43	437.12	466.42
Plastic in primary and non-primary forms	94.22	142.19	202.79	230.05	288.87	331.65	326.92	376.19
Cereals and cereal preparations	278.06	168.31	134.41	228.25	338.64	470.87	226.24	301.04
Dairy products and birds' eggs	71.90	98.22	149.54	161.44	216.56	252.84	210.73	252.80
Textile fibers and their waste	75.76	92.25	125.57	156.12	165.27	159.15	171.89	182.72
Miscellaneous manufactured articles, n.e.s.	b	b	b	b	b	b	149.86	182.39
Professional, scientific, photographic instruments and apparatus; optical goods, watches and clocks	b	b	b	b	b	b	147.42	182.01

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Table 18.7 Principal Imports of the Philippines: 1985-1992 (concluded)
(F.O.B. value in million U.S. dollars)

Commodity[1]	1985	1986	1987	1988	1989	1990	1991	1992
Manufactures of metals, n.e.s.	74.74	58.29	63.41	84.90	b	b	146.46	176.29
Medicinal and pharmaceutical products	b	b	b	b	b	b	141.48	170.60
Paper, paperboard and manufactures thereof	b	b	b	b	b	b	b	155.32
Chemical materials and products, n.e.s.	53.19	65.37	97.70	111.94	b	155.72	140.30	152.87
Fertilizers, manufactured	105.59	83.41	89.24	107.74	b	b	131.06	144.89
Non-metallic manufactures, n.e.s	b	b	b	b	b	b	b	126.34
Metalliferous ores and metal scrap	b	b	b	b	156.98	162.44	211.40	b
Feeding stuff for animals (excluding unmilled cereals)	47.04	97.65	87.06	166.50	176.98	173.91	152.95	b

a Lumped in Division 77 of PSCC (Electrical machinery, apparatus and appliances, n.e.s., and electrical parts thereof).
b Not included in the top 20 imports for the year.

[1] Based on 1992 ranking.
[2] May not add up to total due to exclusions and mergings of some commodities.
[3] Includes importations on consignment basis.
[4] Includes telecommunications and sound recording and reproducing apparatus and equipment.

Source: National Statistics Office, Trade Statistics Division.

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Table 18.8 Number of Entrances of Vessels Engaged in Foreign Trade and Quantity of Cargo Discharged by Port: 1990 - 1992 (Inward gross cargo in thousand tons)

Port	1990		1991		1992	
	Number	Inward gross cargo	Number	Inward gross cargo	Number	Inward gross cargo
Total	7,475	31,662	7,235	30,503	7,545	34,136
Luzon	4,286	23,011	4,216	21,366	4,465	25,989
Aparri, Cagayan	25	10	9	-	3	1
Gaang, Currimao, Ilocos Norte	13	5	19	18	11	-
San Fernando, La Union	80	309	64	147	97	344
Masinloc, Zambales	219	807	206	292	156	68
Limay, Bataan	148	5,820	215	5,648	215	6,996
Mariveles, Bataan	23	41	24	42	19	28
Manila (South Harbor)	1,872	6,073	1,577	4,304	1,869	6,104
Manila International Container Port (MICP)	1,024	2,206	1,111	2,332	1,137	2,679
Batangas City, Batangas	714	7,536	847	8,469	852	9,645
Puerto Princesa City, Palawan	54	a	44	a	30	a
Siain, Quezon	32	132	28	111	24	100
Jose Panganiban, Camarines Norte	24	-	31	-	19	-
Legaspi City, Albay	36	-	22	-	18	a
Tabaco, Albay	21	71	14	3	12	22
Masbate, Masbate	1	-	5	-	3	-
Visayas	1,115	2,726	1,060	2,548	1,116	2,594
San Jose, Northern Samar	-	-	-	-	1	-
Catbalogan, Western Samar	5	-	8	-	3	-
Iloilo City, Iloilo	102	313	86	310	89	335
Pulupandan, Negros Occidental	40	-	37	-	48	3
Dumaguete City, Negros Oriental	62	5	62	9	65	7
Cebu City, Cebu	538	656	481	364	579	632
Lapu-Lapu City, Cebu	89	243	47	132	56	152
Tacloban City, Leyte	279	1,510	339	1,734	275	1,464
Mindanao	2,074	5,925	1,959	6,589	1,964	5,554
Surigao City, Surigao del Norte	13	-	14	-	9	-
Bislig, Surigao del Sur	49	46	40	31	35	24
Masao, Agusan del Norte	33	29	15	5	32	32
Cagayan de Oro City, Misamis Oriental	511	4,389	459	5,002	458	3,931
Iligan City, Lanao del Norte	235	899	207	1,034	178	948
Ozamis City, Misamis Occidental	92	3	81	7	85	19

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Table 18.8 Number of Entrances of Vessels Engaged in Foreign Trade and Quantity of Cargo Discharged by Port: 1990 - 1992 (concluded) (Inward gross cargo in thousand tons)

Port	1990		1991		1992	
	Number	Inward gross cargo	Number	Inward gross cargo	Number	Inward gross cargo
Zamboanga City, Zamboanga del Sur	149	56	144	36	126	45
Jolo, Sulu	4	-	1	-	-	-
General Santos City, South Cotabato	221	113	245	108	314	111
Parang, Maguindanao	11	23	10	30	3	-
Davao City, Davao del Sur	725	367	718	335	702	445
Mati, Davao Oriental	31	-	25	-	22	-

a Less than 500 tons.
Note: Details may not add up to totals due to rounding.

Source: National Statistics Office, Trade Statistics Division.

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Table 18.9 Number of Clearances of Vessels Engaged in Foreign Trade and Quantity of Cargo Laden by Port: 1990 - 1992
(Outward gross cargo in thousand tons)

Port	1990		1991		1992	
	Number	Outward gross cargo	Number	Outward gross cargo	Number	Outward gross cargo
Total	7,422	14,112	7,222	14,336	7,533	11,745
Luzon	4,264	3,207	4,195	3,676	4,480	3,360
Aparri, Cagayan	25	1	9	a	3	a
Gaang, Currimao, Ilocos Norte	13	55	18	74	12	50
San Fernando, La Union	77	49	64	34	101	61
Masinloc, Zambales	218	300	1206	252	156	172
Limay, Bataan	146	494	215	580	215	388
Mariveles, Bataan	23	7	23	6	20	2
Manila (South Harbor)	1,862	507	1,567	417	1,873	300
Manila International Container Port (MICP)	1,020	768	1,112	1,072	1,136	1,007
Batangas City, Batangas	712	445	838	547	856	581
Puerto Princesa City, Palawan	54	463	44	488	31	693
Siain, Quezon	32	14	27	10	25	9
Jose Panganiban, Camarines Norte	24	57	31	87	19	40
Legaspi City, Albay	36	40	22	71	18	46
Tabaco, Albay	21	5	14	28	12	5
Masbate, Masbate	1	2	5	10	3	6
Visayas	1,102	2,490	1,062	2,556	1,117	2,036
San Jose, Northern Samar	-	-	-	-	1	-
Catbalogan, Western Samar	5	20	8	27	3	20
Iloilo City, Iloilo	100	305	87	177	89	143
Pulupandan, Negros Occidental	40	172	36	160	44	188
Dumaguete City, Negros Oriental	61	267	63	301	63	206
Cebu City, Cebu	535	765	483	693	585	687
Lapu-Lapu City, Cebu	87	-	48	1	51	-
Tacloban City, Leyte	274	962	337	1,197	281	793
Mindanao	2,056	8,415	1,965	8,104	1,936	6,350
Surigao City, Surigao del Norte	13	305	14	352	9	246
Bislig, Surigao del Sur	49	48	40	31	36	20
Masao, Agusan del Norte	33	27	15	10	26	11
Cagayan de Oro City, Misamis Oriental	504	5,348	463	5,284	452	4,012
Iligan City, Lanao del Norte	234	525	207	364	176	374
Ozamis City, Misamis Occidental	91	270	82	241	85	198

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Table 18.9 Number of Clearances of Vessels Engaged in Foreign Trade and Quantity of Cargo Laden by Port: 1990 - 1992 (concluded)
(Outward gross cargo in thousand tons)

Port	1990		1991		1992	
	Number	Outward gross cargo	Number	Outward gross cargo	Number	Outward gross cargo
Zamboanga City, Zamboanga del Sur	148	268	145	187	125	135
Jolo, Sulu	4	a	1	-	-	-
General Santos City, South Cotabato	221	279	245	347	307	361
Parang, Maguindanao	11	8	9	2	3	3
Davao City, Davao del Sur	717	1,171	719	1,186	695	910
Mati, Davao Oriental	31	167	25	100	22	79

a Less than 500 tons.
Note: Details may not add up to totals due to rounding.

Source: National Statistics Office, Trade Statistics Division.

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Chapter 19
Transportation

The transportation industry is an integral part of the economy. Its development will strengthen the linkages among regions of the country and promote interisland commerce and close interaction among the people. It can also link the country with other nations fostering global understanding and world trade.

The industry's contribution to Gross Domestic Product in 1992 reached P52.84 billion (current prices), an increase of 4.66 percent over the 1991 level of P50.49 billion.

19.1 Land Transport

The static component of the land transportation system is characterized by road and railroad networks. The dynamic component is composed of train and motor vehicle fleets, such as bus, jeepney, taxi and others, which cater to passenger and freight movement around the country.

19.1.1 Rail Transport

The country has two railway lines: the Philippine National Railways (PNR) in Luzon and the Light Rail Transit (LRT) system in Metro Manila.

The Philippine National Railways operation consists of the following lines or services: Mainline North, Mainline South and Metro Rail Commuter. Due to the low availability of rolling stocks, train operations suffered a decline during the period 1991-1992. Two projects, namely, the rehabilitation of railway facilities under the Main Line South Revitalization Project which started in May 1992 and the Improvement and Modernization of Commuter Line (South) which were bidded out, are vital for the upgrading of transport facilities in Metro Manila and the Bicol Region.

On the other hand, the Light Rail Transit (LRT) system with 18 stations, has been operating from Baclaran in Parañaque to Grace Park in Kalookan City since 1985. The system has significantly contributed to the improvement of the traffic situation in Metro Manila.

In 1992, the Governments of Belgium and the Philippines forged the Agreement granting financial assistance for the rehabilitation of the existing LRT Line 1. Rehabilitation works on the system were undertaken using the corporate funds to prevent the system from deteriorating further.

Railways Statistics. Train operations of the PNR include passenger, freight, express and commuter services. Passenger service differs from commuter service in terms of distance travelled. *Commuter service* caters to Metro Manila

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riders/commuters whereas *passenger service* caters to provincial-bound passengers.

The year 1992 was a very difficult year for PNR. The very minimal maintenance of railway tracks and rolling stock contributed to the decline of train operations. Greatly affected was PNR's passenger service. The number of passengers carried decreased from 1.0 million in 1989 to only 402 thousand in 1993. Likewise, the other services rendered by PNR suffered in 1992 but these improved in 1993 because of the arrival of 16 new locomotives during the previous year. The number of commuters carried increased from 2.3 million in 1992 to 4.6 million in 1993. Goods transported continuously decreased from 57,020.5 tons in 1988 to just 4,739.4 tons in 1993, or decreased at an annual rate of 42.46 percent. Commodities transported in 1992 consisted of copra, 77.35 percent; vehicles, equipment and scrap materials, 8.74 percent; sandstones, 7.34 percent; manufactured products, 3.62 percent and logs/poles 2.95 percent. See Tables 19.1 and 19.2 for details.

On the other hand, total passengers carried by LRT in 1993 reached 129.11 million, registering an increase of 7.33 percent over the total of 120.29 million passengers in 1992. The highest monthly ridership of 12.56 million was recorded in December.

Train kilometer run by the system was recorded at 2.97 million kilometers in 1992 or an average of 247,362.08 kilometers per month or 8,245.40 kilometers per day while the passenger-kilometers indicator registered 936.24 million kilometers in one year, averaging 78.02 million kilometers a month or 2.60 million kilometers a day.

In terms of zonal ridership, Zones 1 and 2 (covering the first twelve stations from South Terminal Northward or vice versa) continued to dominate with 114.70 million riders. This accounted for 88.84 percent of the total passengers in 1993 at a fare rate of P6.00 per passenger. Zone 3 (covering the last six stations for each terminal) covered only 14.40 million riders or 11.16 percent of the total at a fare rate of P1.00 per passenger. See Table 19.3.

19.1.2 Road Transport

The Land Transportation Office (LTO). Executive Order No. 125, dated January 30, 1987, abolished the Land Transportation Commission and created the Land Transportation Office (LTO) and the Land Transportation Franchising and Regulatory Board (LTFRB). By virtue of Executive Order No. 125-A, the LTO took over the functions of the former Bureau of Land Transportation. The LTO plans, formulates and implements policies, rules and regulations governing the land transport system of the country. It should efficiently and effectively promote and preserve safety in land travel through the implementation of measures and standard procedures. It is also tasked with the registration of motor vehicles, issuance of drivers' and conductors' licenses, enforcement of land transportation laws and regulations and adjudication of traffic violations.

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The LTO has two service offices, the Law Enforcement Service and Traffic Adjudication Service. In 1992, it maintained 14 regional offices, 140 regular offices, 27 licensing centers, 19 extension offices and two mobile units.

The Land Transportation Franchising and Regulatory Board (LTFRB) absorbed the functions of the defunct Bureau of Transportation (BOT) by virtue of Executive Order No. 226 dated July 25, 1987. Its primary thrusts are the improvement of systems and procedures, particularly on the processing of franchising applicants, and the strengthening of economic-based routes' measured capacities as inputs to the Board's quasi-judicial function. In 1992, the Board received a total of 453,469 petitions of various types. Of the total cases filed, 151,161 or 33.33 percent were related to the issuance and maintenance of franchise, and 302,308 or 66.67 percent on cases incidental to operation. The Board has adjudicated 438,935 cases; 32.89 percent on issuance of franchise. The income generated by the Board as of December 31, 1992 amounted to P82.58 million, which is 1.47 percent more than the amount collected in 1991.

Motor Vehicle Registration. As stipulated in P.D. No. 1958, Executive Order No. 43, signed on August 23, 1986, restructured the private motor vehicle tax. The imposition of the new tax schedule took effect on January 1, 1987.

Batas Pambansa Blg. 43 provides, among others, the issuance of permanent plate numbers to owners of motor vehicles and trailers identification. The numbers and letters in any motor vehicle plate shall be permanent. Motor vehicles for hire and privately-owned vehicles shall bear plates of reflective materials so designed and painted with different colors to distinguish one class from the other.

In 1993, registered motor vehicles reached 2.13 million, an increase of 13.06 percent over the 1992 level of 1.88 million. Of this total, 79.29 percent were private, 18.20 percent for hire, 2.22 percent government, 0.15 percent diplomatic and 0.13 percent tax exempt. By type of vehicle, jeepneys (utility vehicles) contributed the biggest share of 834,168 or 39.25 percent. Other types included motorcycles (25.77 percent), cars (25.00 percent), trucks (7.78 percent), buses (1.16 percent) and trailers (1.04 percent). Other types of vehicles increased from 1992 to 1993 with the motorcycles/tricycles showing the highest increase of 19.33 percent. However, buses showed a 4.74 percent decline in the same period. National Capital Region comprised the biggest percentage (42.41 percent) of registered motor vehicles. Southern Tagalog and Central Luzon followed with 11.37 percent and 10.83 percent, respectively. Refer to Tables 19.4 and 19.5 for more details.

Licensing System. In February 1985, the issuance of credit card-type licenses was launched. In connection with this, all expired licenses automatically have a three-year validity upon payment of P150. A licensee who has not committed traffic violations for the past three years is eligible for a five-year driver's license. This was approved through *Batas Pambansa Blg.* 398 which paved the way for

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the computerization of drivers' and conductors' licenses. In 1992, licenses and permits issued stood at 1.71 million, exceeding 1991's figure by 4.61 percent. The increase could be attributed to the outreach operation in far-flung areas during weekends.

Metro Manila Transit Corporation (MMTC). The Metro Manila Transit Corporation is a government bus operator created to ease the transport problem in Metro Manila. In 1993 its fleet consisted of 485 units, ten more than what it had in 1992, but the number of operational units decreased from 390 to 334 and the average bus run was 234 or 15.8 percent lower than that of 1992.

The MMTC disposed 197 inoperational/junk buses and farmed out 200 shuttle buses to private operators. Right now it is pursuing its privatization program.

Office Of Transport Cooperatives. Executive Order No. 898 reorganized the Committee on Transportation Cooperatives (CTC) into the Office of Transport Cooperatives (OTC). This government agency which is attached to the Department of Transportation and Communications is tasked to supervise, regulate and provide developmental direction and impetus to the activities of transport cooperatives.

With OTC's loan programs such as Boundary *Hulog* Program, PUJ Program and *Koop-Sikap Hulugan,* the number of transport cooperatives all over the country reached 236 in 1993. Of these, 83 are based in Metro Manila and 150 in other areas. The membership reached 36,587 and the number were operating 16,680 franchised vehicles. The cooperative vehicles constituted 8.1 percent of the total franchised vehicles in the country and these were concentrated in Central Luzon, Southern Tagalog and Metro Manila.

Road Network. The Bureau of Maintenance under the Department of Public Works and Highways is responsible for the construction and maintenance of roads and bridges in the country.

As of 1992, existing road network reached 160,843.43 kilometers, of which 54.94 percent were *barangay* roads, 18.13 percent provincial roads, 16.51 percent national roads, 7.97 percent municipal roads and 2.46 percent city roads.

A large portion or 78.39 percent of the country's road network was made of gravel. Other road surface types included concrete (8.32 percent), asphalt (8.00 percent) and earth (5.29 percent). See Table 19.6 for more details.

19.2 Water Transport

The country, which is composed of many islands, is largely dependent on water transportation in moving people and goods from one place to another. Water transportation is not only the most practical but also the most economical mode of transport in the Philippines. Because of its importance, the government continues to exert effort to strengthen the maritime industry and improve port

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management system. Along this line, major reforms and institutional changes were implemented to enhance effective services and upgrade water transport facilities.

19.2.1 Marine Port Network

The port network in the country is composed of five major port district offices (PDOs) under which are 19 port management offices (PMOs) situated nationwide. The PDOs and PMOs are the following: PDO Metro Manila comprising PMOs South Harbor and North Harbor; PDO Luzon, comprising PMOs Batangas, Legazpi, Puerto Princesa and San Fernando; PDO Visayas, comprising PMOs Cebu, Dumaguete, Iloilo and Tacloban; PDO Northern Mindanao, comprising PMOs Cagayan de Oro, Iligan, Nasipit and Surigao; and PDO Southern Mindanao, comprising PMOs Davao, General Santos, Jolo, Polloc and Zamboanga.

Each unit, headed by a port manager, is located in a national port, and serves as a base for the day-to-day management and administration of all ports within the port district. It is a semi-autonomous responsibility center which undertakes operation, engineering and maintenance, finance and commercial development functions, generating revenues and incurring expenses out of its operations. It is also controlled by and accountable to the head office of the Philippine Ports Authority (PPA) on matters of policy execution and performance.

Ports as well as private wharves and piers are spread all over the archipelago, especially in places where there are factories or commercial establishments. National ports are owned by the government, while municipal ports are operated by the municipality with contractors and maintenance appropriated by the national government.

The common facilities found in the Philippine ports are berthing, storage and other port structures. Berthing facilities include a pier, wharf, or both; storage facilities include transit sheds, warehouses, open storages, causeway and port area. Other port structures include breakwater, bulk head, jetty and sea wall.

The Philippine Ports Authority provides ports and other port structures. It facilitates the implementation of an integrated program for the planning, development, financing operations and maintenance of ports/port districts for the entire country. In 1992, there were 390 ports (excluding 58 anchorage areas) in the Philippines. Of these, 203 were private ports, 111 national/municipal ports, 56 terminal ports and 20 base ports. Major ports are located in the cities of Manila, Cagayan de Oro, Cebu, Davao, General Santos, Iloilo, Polloc and Zamboanga. These ports have been expanded and modernized to meet international standards. See Table 19.7.

The Manila port is the major port of entry of ships engaged in cargo and passenger traffic. Majority of the country's total containerized import and export cargoes pass through it.

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19.2.2 Shipping

Shipping includes interisland shipping, overseas shipping, shipbuilding and repair, shipbreaking, deep-sea fishing and other port services. As of 1990, interisland operating fleet totalled 9,591, an increase of 2.12 percent over 9,392 fleets registered in 1989. Gross tonnage reached 1.21 million which increased by 14.81 percent from 1.06 million tons of goods transported the previous year.

The overseas fleet numbered 412 in 1991. This was reduced to 408 and 380 units in 1992 and 1993, respectively. Gross tonnage, on the other hand, was registered at 7.84 million in 1991, and it reached 7.95 million in 1992 and 8.06 million in 1993. More than half or 56.05 percent of the total overseas ships registered were bulk carriers while 90 or 23.68 percent were general cargo. See Tables 19.8 and 19.9.

Number of shipcalls of all vessels at berth and at anchorage increased by 5.17 percent, from 176,379 in 1991 to 185,489 in 1992. Domestic shipcalls accounted for 95.85 percent during the year and 4.15 percent only were made by foreign fleets. A total of 110.84 million metric tons of cargoes and 33.73 million passengers were ferried. See Table 19.10 for details.

Being the center of trading activities, ports in Manila had the biggest volume (38.39 million metric tons) of cargoes handled in 1992 followed by Batangas and Cagayan de Oro ports with 17.61 million and 11.83 million metric tons, respectively. Volume of goods or merchandise handled at Cebu ports totalled 11.10 million metric tons, which was the fourth highest. In terms of passenger traffic, Cebu consistently reported the highest number of passengers and representing 18.25 percent of the total passengers embarked/disembarked in 1992.

Local industries help promote interisland commerce by establishing close interaction between the producers and consumers thus increasing domestic trade transactions. In 1991, 62,070 interisland vessels weighing 29.80 million tons entered and 68,238 vessels weighing 34.62 million tons cleared in the various ports of the country. The port of Cebu had the highest number of entrances and clearances.

The government continues to develop export promotion programs to increase trade relations with other countries and to maximize earnings from exports. Merchandise trade which constitutes the biggest portion of the country's international trade was carried out mostly by means of water transportation. This brought an increase in the number of international vessels that entered (4.28 percent) and cleared (4.31 percent) from the various ports in the country. Of the total number of vessels that entered the country, 39.84 percent or 3,006 vessels weighing 15.55 million tons embarked at the port of Manila. On the other hand, vessels cleared from port of Manila numbered 3,009 and with total tonnage of 15.54 million. These accounted for 39.94 percent of the total vessels cleared from different ports of the country. See Tables 19.12 and 19.13 for more details.

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The Maritime Industry Authority (MARINA). The Maritime Industry Authority was created in 1974 under Presidential Decree No. 474. The MARINA's thrusts are directed towards the development of interisland shipping, overseas shipping, shipbuilding and repair, and maritime manpower.

In terms of promotional development efforts MARINA substantially concretized deregulation/liberalization of domestic shipping with the issuance of Memorandum Circular No. 71 and formulation of an Action Plan which reduced government control into route entry/exit as well as shipping rates.

On overseas shipping, the enactment in May 5, 1992 of R.A. No. 7471, otherwise known as the Philippine Overseas Shipping Development Act, set the foundations for the grant of incentives to overseas shipping operations and thereby make them more competitive in international trades.

For the domestic shipping sector, policy concerns were directed towards maritime safety, fleet modernization and replacement, upgrading of service standards and decentralization/devolution of certain functions.

For the maritime manpower sector, efforts were undertaken to further improve the quality of education and training of Filipino seafarers to make them more competitive and the evolution of more improved shipping technologies. Likewise, activities and projects had rejuvenated the potentials of the shipbuilding and shiprepair sector.

19.3 Air Transport

The Philippines is connected to several cities around the world through its flag carrier, the Philippine Airlines. Other airlines from different parts of the globe also come and go through the country bringing passengers and cargoes. Air transportation makes travel from one place to another fast, safe and comfortable, an advantage enjoyed by businessmen and other travellers.

19.3.1 Civil Aviation Administration and Policy

The economic aspect of civil aviation is administered by the Civil Aeronautics Board (CAB) while the technical aspect is administered by the Air Transportation Office (ATO).

The Civil Aeronautics Board exercises general supervision and regulation of, and jurisdiction and control over air carriers as well as their property rights, equipment, facilities and franchise, in so far as may be necessary for the purpose of carrying out the provisions of Republic Act No. 776.

The CAB is composed of the Secretary of Tourism as chairman, and the Director of Air Transportation Office, the Commanding General of Philippine Air Force and two others appointed by the President of the Philippines as members.

The Board continued to follow a streamlined and procedural system in the processing of petitions/applications and other communications filed by its

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expanding air sector clientele. At year's end, there were 1,935 applications filed. The Board conducted year-round hearings and continued receiving and evaluating applications for CAB permits based on efficient and profitable utilization of air transport services. A total of 46 new entities were accredited, and expired permits of 22 current operators were renewed. The petitions of EVA Air, Silkair (Singapore) PTE Ltd., Alitalia and P.T. Bourag Indonesian Airways to operate scheduled international services were approved. Air services agreements were entered into by the Philippines with the Communist countries such as China, Vietnam, USSR, Yugoslavia, Czechoslovakia, Hungary and Poland, and continuous air talks conducted with Japan, Brunei and with several gulf states.

The Air Transportation Office. The Air Transportation Office (ATO) performs duties and functions relative to the promotion and development of policies, plans, programs and standards for the construction and maintenance of airports and other facilities.

The construction of runways and terminals is the responsibility of the Department of Public Works and Highways while the maintenance of these facilities is the responsibility of the ATO.

The office also maintains and operates 50 radio air navigation facilities, aeronautical communication facilities and electric aids for the speedy and orderly flow of air traffic. Search and Rescue (SAR) operations are made possible through the management and operations of the Manila Rescue Coordination Center (RCC) which is assigned to organize search and rescue task force, draw up plans and coordinate efforts to achieve efficient, effective and economical employment of SAR resources, primarily to respond and render assistance to aircrafts in distress. The RCC also provides services to other distress cases such as surface vessel accidents and airlift missions for persons in need of medical aid.

Aside from managing the country's 86 national airports, ATO was able to handle a total of 3.89 million aeronautical messages, and 1.71 million aircraft operations, issued 4,550 airmen licenses, 360 aircraft airworthiness certificates, 24 aircraft operating certificates, 252 air agency certificates and 1,107 operational permits, and registered, licensed and certificated 362 fixed wing aircrafts and 63 rotary aircrafts as of 1992.

With 89,472 aircraft landings and take-offs, passengers served reached 5.52 million at yearend 1993 which was 8.13 percent higher than the number of passengers served in 1992. Mactan International Airport recorded the largest number both in aircraft operations and passenger traffic aggregating 13,789 and 1.66 million, respectively. Davao (F. Bangoy) which ranked sixth in terms of aircraft operations came in second in number of passengers served. For more details, see Table 19.15.

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19.3.2 The Philippine Airports

The five major classifications of the Philippine airports are international, alternate international, trunkline, secondary and feeder airports.

The *regular international airport* is used for the operation of aircrafts engaged in international air navigation. Its basic runway dimension is 3,354 meters by 60 meters (Ninoy Aquino International Airport).

The *alternate international airport*, on the other hand, is intended to be used for international air navigation in lieu of the regular international airport.

The *trunkline airport* serves as a principal commercial center and is used by medium jets.

Secondary airports serve principal towns and cities with regular traffic densities that warrant the operation of jet-propelled aircrafts.

Feeder airports serve towns and rural communities with limited passenger traffic and is intended for use by piston aircrafts.

There are now 171 airports throughout the country, 86 national and 85 privately owned (Table 19.14).

Of the total national airports in the country, six are international airports and one is an alternate international airport. The rest are either secondary, feeder or trunkline airports.

See Table 19.15 for the scheduled and nonscheduled domestic aircraft movement and passenger traffic by airport for 1991 to 1993, and Table 19.16 for international scheduled aircraft movement, passenger traffic and cargo movement in 1991 to 1993.

19.3.3 The Manila International Airport Authority

Executive Order No. 778 as amended by Executive Order No. 903 mandates the Manila International Airport Authority (MIAA) to formulate and adopt for application in the airport internationally acceptable standards of airport accommodation and service; and upgrade and provide safe and reliable airport facilities and services for international and domestic travel; while maintaining financial viability as an autonomous government entity.

In 1993, the delivery of frontline services in the Ninoy Aquino International Airport (NAIA) improved with the queuing time at check-in counter, baggage retrieval time and the waiting loading time at driveway down to 28, 48 and 14 minutes, respectively. The number of passengers accommodated reached 9.25 million, 8.60 percent more than that of 1992.

Among the development projects completed were detailed engineering of NAIA Terminal 2, drafted terms of reference for the conduct of prefeasibility study and preparation of BOT Bid/Tender Documents for the Proposed New International Cargo Terminal and Multi Level Car Park Facility. Repair/rehabilitation/upgrading projects included conversion of areas at runway 06 from nonload bearing to load-bearing, excavation and investigation of leaking fuel line at IPT apron area. One of the improvements in service areas

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was the privatization of porterage service at the International Passenger Terminal.

Future plans include the construction of New International Cargo Terminal for the increasing volume of air cargo, New International Passenger Terminal to decongest the existing International Passenger Terminal and to accommodate the steadily growth volume of international passengers.

19.3.4 The Philippine Airlines (PAL)

The Philippine Airlines is the oldest airline in the Far East. It is the flag carrier of the Philippines and the only scheduled domestic airline.

As the Philippine flag carrier, PAL operates flights from Manila to other cities around the world. The points served internationally are Abu Dhabi, Bandar Seri Begwan, Bangkok, Brisbane, Dhahran, Dubai, Frankfurt, Fukuoka, Guam, Ho Chi Minh, HongKong, Honolulu, Jakarta, Kota Kinabalu, Kuala Lumpur, London, Los Angeles, Melbourne, New York, Paris, Riyadh, Rome, Saipan, San Francisco, Seoul, Singapore, Sydney, Taipei, Tokyo and Xiamen.

See Table 19.17 for the domestic and international operations of PAL from 1988 to 1993.

Sources:

19.1 Philippine National Railways (PNR); Light Rail Transit Authority (LRT); Land Transportation Office (LTO); Land Transportation Franchising and Regulatory Board (LTFRB); Metro Manila Transit Corporation (MMTC); Department of Transportation and Communication (DOTC); Office of Transport Cooperatives (OTC); Department of Public Works and Highways (DPWH).

19.2 Philippine Ports Authority (PPA); Maritime Industry Authority (MARINA).

19.3 Civil Aeronautics Board (CAB); Air Transportation Office (ATO); Manila International Airport Authority (MIAA); Philippine Airlines (PAL).

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Table 19.1 Philippine National Railways Traffic Profile: 1988-1993

Train operations	1988	1989	1990	1991	1992	1993
Passenger services						
Number of trains run	2,572	2,355	1,824	1,479	1,335	831
Train-kilometers ('000)	883	867	723	585	537	343
Passengers carried ('000)	985	1,005	928	655	467	402
Passenger-kilometers ('000)	230,076	250,071	270,954	182,103	120,998	101,770
Commuter service						
Number of trains run	4,939	5,096	13,955	9,117	6,603	11,669
Train-kilometers ('000)	228	214	488	338	235	410
Number of commuters carried ('000)	1,182	980	5,561	4,315	2,303	4,639
Passenger-kilometers ('000)	19,783	17,185	70,251	59,553	30,419	63,487
Freight service						
Number of trains run	329	339	245	123	46	185
Train-kilometers	102,083	84,247	49,347	25,402	11,736	53,518
Number of cars loaded	2,374	2,404	1,554	581	247	937
Tons loaded	57,020	53,182	32,171	11,629	4,932	17,541
Express service						
Baggage car-kilometers ('000)	860	793	636	539	478	525
Tons loaded	22,812	21,847	16,769	10,310	8,460	7,325

Source: Philippine National Railways.

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Table 19.2 Railway Freight Transported and Revenue: 1988-1992
(Revenue in pesos)

Commodity	1988		1989		1990		1991		1992	
	Tonnage	Revenue	Tonnage	Revenue	Tonnage	Revenue	Tonnage	Revenue	Tonnage	Revenue
Total	57,020.5	7,994,379	51,971.6	6,710,249	32,143.7	3,860,297	11,161.8	1,984,460	4,739.4	731,120
Agricultural products	15,412.8	1,551,084	18,150.8	1,960,655	14,236.4	1,414,311	7,588.0	1,265,934	3,666.0	503,386
Copra	9,953.0	884,611	12,496.0	1,137,195	13,120.5	1,205,517	7,528.0	1,255,597	3,666.0	503,386
Rice/palay	2,433.8	295,021	2,458.6	359,376	860.0	161,880	60.0	10,337	-	-
Corn	3,026.0	371,452	856.2	159,672	255.9	46,914	-	-	-	-
Sugarcane	-	-	2,340.0	304,412	-	-	-	-	-	-
Mineral products	3,422.2	384,742	6,437.0	649,308	4,279.0	417,273	635.5	87,055	348.0	29,083
Ball/white	762.2	62,609	2,690.0	311,675	1,840.0	224,505	90.0	22,815	-	-
Silica quartz	2,302.0	307,909	2,007.0	269,293	1,680.0	150,600	270.0	30,712	-	-
Sandstones	358.0	14,224	1,740.0	68,340	759.0	42,168	275.5	33,528	348.0	29,083
Forest products	14,167.6	1,741,914	8,466.8	1,065,970	4,704.0	541,197	824.4	177,273	140.0	44,701
Firewood	5,574.0	683,990	4,288.8	558,048	3,154.0	389,892	135.0	59,095	-	-
Charcoal	358.1	44,705	128.0	15,996	-	-	-	-	-	-
Logs/poles	-	-	75.0	12,185	-	-	-	-	140.0	44,701
Lumber	8,235.5	1,013,219	3,975.0	479,741	1,550.0	151,305	689.4	118,178	-	-
Manufactured products	16,439.4	3,056,824	15,639.0	2,465,080	6,778.0	1,157,789	1,865.9	389,070	171.4	46,276
Cement	965.0	84,805	1,366.6	100,506	1,105.0	73,952	500.0	73,211	80.0	20,040
Sugar	91.3	16,110	298.9	53,615	20.0	4,020	-	-	-	-
Flour/starch	1,276.1	200,878	275.8	44,591	175.0	29,536	-	-	16.0	5,436
Salt	2,312.7	404,347	2,747.8	447,369	1,250.0	210,496	405.6	115,559	75.4	20,800
Cigarettes	-	-	-	-	-	-	181.0	30,948	-	-
Beer, wine	8,452.7	1,774,946	8,092.0	1,372,336	2,016.3	477,118	-	-	-	-

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Table 19.2 Railway Freight Transported and Revenue: 1988-1992 (concluded)
(Revenue in pesos)

Commodity	1988		1989		1990		1991		1992	
	Tonnage	Revenue	Tonnage	Revenue	Tonnage	Revenue	Tonnage	Revenue	Tonnage	Revenue
Plywood	-	-	100.0	16,466	1,380.0	241,365	131.3	30,709	-	-
Gasoline	1,295.7	193,987	1,198.3	178,349	458.7	68,687	-	-	-	-
Fertilizer	1,161.0	224,973	1,147.6	178,571	40.0	7,560	236.0	56,411	-	-
Steel/GI sheets	-	-	-	-	333.0	45,055	412.0	82,232	-	-
Reinforcement materials	865.9	153,480	412.0	73,277	-	-	-	-	-	-
Others	19.0	3,298	-	-	-	-	-	-	-	-
Miscellaneous categories	7,578.5	1,259,815	3,278.0	569,236	2,146.3	329,727	248.0	65,128	414.0	107,674
Vehicles, equipment and scrap materials	4,069.5	744,057	3,278.0	569,236	2,146.3	329,727	248.0	65,128	414.0	107,674
Less carload (LCL)	-	-	-	-	-	-	-	-	-	-
Plywood	2,909.0	435,280	-	-	-	-	-	-	-	-
Rice hush	600.0	80,478	-	-	-	-	-	-	-	-

Source: Philippine National Railways.

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Table 19.3 Metrorail Operations Statistics by Month: 1991 - 1993

Month	Train trips	Train kilometers run	Passenger kilometers (actual)	Ridership			Average kilometer per passenger
				Zones 1 and 2	Zone 3	Total passengers	
1993							
Total	151,658	2,258,917	461,360,305	114,704,344	14,403,138	129,107,482	-
January	17,419	258,919	81,472,644	9,736,385	1,183,216	10,919,601	7.46
February	16,065	238,393	76,951,453	8,862,105	1,117,867	9,979,972	7.71
March	17,830	266,121	78,309,885	9,637,483	1,205,417	10,842,900	7.22
April	15,663	232,477	70,215,428	7,980,657	899,618	8,880,275	7.91
May	16,626	248,751	75,784,532	8,616,054	966,625	9,582,679	7.91
June	16,407	245,989	78,626,363	9,237,155	1,164,619	10,401,774	7.56
July	17,340	257,518	n.a.	9,796,364	1,284,795	11,081,159	n.a.
August	16,894	252,855	n.a.	9,833,410	1,277,257	11,110,667	n.a.
September	17,414	257,894	n.a.	10,061,452	1,305,433	11,366,885	n.a.
October	n.a.	n.a.	n.a.	9,766,151	1,255,497	11,021,648	n.a.
November	n.a.	n.a.	n.a.	10,045,467	1,311,385	11,356,852	n.a.
December	n.a.	n.a.	n.a.	11,131,661	1,431,409	12,563,070	n.a.
1992							
Total	204,563	2,968,345	936,243,861	107,876,047	12,413,496	120,289,543	7.78
January	18,030	268,498	77,390,251	9,013,856	935,434	9,949,290	7.78
February	16,706	248,126	74,133,651	8,207,111	924,683	9,131,794	8.12
March	17,541	244,699	80,442,366	9,258,630	989,887	10,248,517	7.85
April	15,690	218,877	69,840,356	7,877,219	783,241	8,660,460	8.06
May	16,548	230,846	73,204,758	8,282,306	847,486	9,129,792	8.02
June	16,510	230,309	77,602,138	8,740,142	965,836	9,705,978	8.00

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Table 19.3 Metrorail Operations Statistics by Month: 1991 - 1993 (concluded)

Month	Train trips	Train kilometers run	Passenger kilometers (actual)	Ridership			Average kilometer per passenger
				Zones 1 and 2	Zone 3	Total passengers	
July	17,142	239,126	77,091,862	9,257,547	1,123,809	10,381,356	7.43
August	17,168	255,405	79,561,676	9,234,867	1,144,024	10,378,891	7.67
September	16,977	254,189	80,059,537	9,164,485	1,158,135	10,322,620	7.76
October	17,390	258,673	82,181,994	9,394,951	1,177,409	10,572,360	7.77
November	16,425	244,801	77,685,598	9,147,070	1,158,213	10,305,283	7.54
December	18,436	274,796	87,049,674	10,297,863	1,205,339	11,503,202	7.57
1991							
Total	184,745	2,767,466	926,742,670	109,510,875	10,617,723	120,128,598	7.71
January	18,473	277,395	82,760,463	9,708,597	960,414	10,669,011	7.76
February	16,589	248,798	75,796,864	8,894,812	924,792	9,819,604	7.72
March	16,051	242,828	77,837,935	9,011,885	860,932	9,872,817	7.88
April	15,937	236,969	80,404,102	9,270,547	774,336	10,044,883	8.00
May	14,084	210,456	77,011,104	8,850,508	763,835	9,614,343	8.01
June	15,507	217,092	75,114,305	8,706,109	837,734	9,543,843	7.87
July	14,098	213,209	75,565,720	9,690,336	990,467	10,680,803	7.07
August	13,032	198,596	78,100,489	9,271,371	967,456	10,238,827	7.63
September	11,498	176,067	72,134,203	8,496,388	863,014	9,359,402	7.71
October	14,817	225,408	76,612,651	8,916,501	900,000	9,816,501	7.80
November	15,908	241,037	76,264,430	9,144,002	840,281	9,984,283	7.64
December	18,751	279,611	79,140,404	9,549,819	934,462	10,484,281	7.55

Source: Light Railway Transit Authority.

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Figure 19.1 Number of Motor Vehicles Registered by Type: 1992-1993

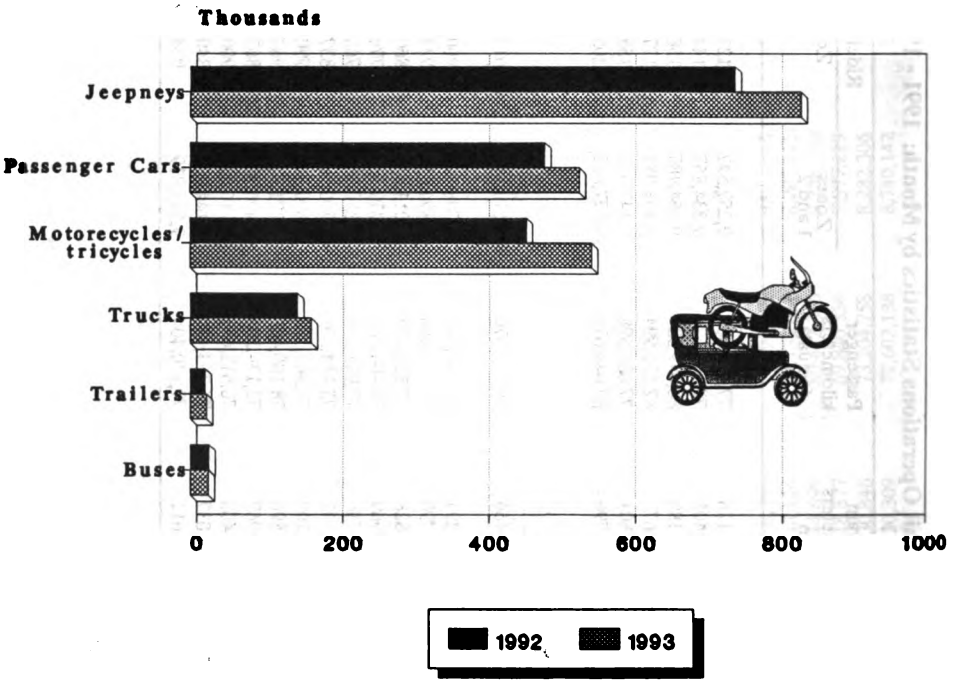

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Table 19.3a Metrorail Operations (Passengers) Statistics by Month: 1990 - 1993

Month	1990	1991	1992	1993
Total	**127,822,427**	**120,128,598**	**120,289,543**	**129,107,482**
January	10,865,217	10,669,011	9,949,290	10,919,601
February	9,878,552	9,819,604	9,131,794	9,979,972
March	10,705,292	9,872,817	10,248,517	10,842,900
April	8,722,968	10,044,883	8,660,460	8,880,275
May	10,249,998	9,614,343	9,129,792	9,582,679
June	10,377,179	9,543,843	9,705,978	10,401,774
July	9,730,314	10,680,803	10,381,356	11,081,159
August	11,254,048	10,238,827	10,378,891	11,110,667
September	11,383,114	9,359,402	10,322,620	11,366,885
October	11,963,253	9,816,501	10,572,360	11,021,648
November	10,980,410	9,984,283	10,305,283	11,356,852
December	11,712,082	10,484,281	11,503,202	12,563,070

Source: Light Railway Transit Authority.

Table 19.4 Comparative Statistics on Motor Vehicles by Type of Vehicle:1989 - 1993

Type of vehicle	1989	1990	1991	1992	1993
Total	**1,431,464**	**1,620,242**	**1,715,366**	**1,879,563**	**2,125,115**
Cars	412,998	454,554	456,606	483,622	531,240
Jeepneys (UV)	536,405	615,603	670,848	744,190	834,168
Buses	16,950	18,341	20,690	25,827	24,603
Trucks	118,382	130,973	138,138	146,689	165,280
Trailers	15,754	18,345	18,957	20,297	22,169
Motorcycles/ tricycles	330,975	382,426	410,127	458,938	547,655

Note: UV refers to utility vehicles such as owner-type jeeps.

Source: Land Transportation Office.

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Table 19.5 Registered Motor Vehicles by Denomination and by Region: 1991-1993

Region	Total 1991	Total 1992	Total 1993	Private 1991	Private 1992	Private 1993	Government 1991	Government 1992	Government 1993
Philippines	1,715,366	1,879,563	2,125,115	1,370,084	1,518,767	1,685,080	44,759	43,363	47,185
National Capital Region (NCR)	721,776	799,754	901,312	620,060	694,705	772,074	16,620	15,447	17,594
Cordillera Administrative Region (CAR)	20,829	21,971	24,682	14,990	15,394	16,818	876	872	1,019
I. Ilocos	79,577	86,644	96,890	56,890	62,232	66,558	1,836	1,763	1,792
II. Cagayan Valley	42,482	44,493	51,472	28,861	29,630	32,051	1,916	1,810	2,014
III. Central Luzon	200,827	208,985	230,168	145,684	163,087	176,711	2,667	2,686	2,721
IV. Southern Tagalog	178,648	206,619	241,608	142,815	163,949	184,643	2,527	2,503	2,693
V. Bicol	38,366	43,147	47,992	24,212	27,906	30,195	2,127	1,981	2,030
VI. Western Visayas	87,294	97,176	108,020	70,965	76,569	82,362	2,366	2,434	2,718
VII. Central Visayas	115,651	126,793	148,925	91,729	100,759	118,476	3,154	3,265	3,185
VIII. Eastern Visayas	26,364	29,313	32,992	19,100	21,131	23,629	1,880	1,886	1,816
IX. Western Mindanao	35,921	39,891	44,083	25,680	28,921	31,735	1,629	1,392	1,547
X. Northern Mindanao	52,969	54,062	58,421	41,552	42,243	44,689	2,478	2,575	2,668
XI. Southern Mindanao	83,283	89,245	104,908	64,195	69,156	80,847	2,751	2,787	3,182
XII. Central Mindanao	31,379	31,470	33,642	23,351	23,085	24,292	1,932	1,962	2,206

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Table 19.5 Registered Motor Vehicles by Denomination and by Region: 1991-1993 (concluded)

Region	For hire 1991	For hire 1992	For hire 1993	Diplomatic 1991	Diplomatic 1992	Diplomatic 1993	Tax exempt 1991	Tax exempt 1992	Tax exempt 1993
Philippines	280,254	307,887	386,777	6,205	3,227	3,241	14,064	6,319	2,832
National Capital Region (NCR)	78,203	82,865	105,590	3,564	3,063	3,225	3,329	3,674	2,829
Cordillera Administrative Region (CAR)	4,963	5,705	6,845	-	-	-	-	-	-
I. Ilocos	20,844	22,648	28,536	7	1	2	-	-	2
II. Cagayan Valley	11,704	13,053	17,405	1	-	2	-	-	-
III. Central Luzon	39,117	40,420	50,736	2,624	147	-	10,735	2,645	-
IV. Southern Tagalog	33,306	40,167	54,272	-	-	-	-	-	-
V. Bicol	12,027	13,254	15,763	-	6	4	-	-	-
VI. Western Visayas	13,963	18,173	22,940	-	-	-	-	-	-
VII. Central Visayas	20,768	22,769	27,264	-	-	-	-	-	-
VIII. Eastern Visayas	5,382	6,293	7,545	2	3	2	-	-	-
IX. Western Mindanao	8,612	9,578	10,799	-	-	1	-	-	1
X. Northern Mindanao	8,934	9,238	11,059	5	6	5	-	-	-
XI. Southern Mindanao	16,337	17,302	20,879	-	-	-	-	-	-
XII. Central Mindanao	6,094	6,422	7,144	2	1	-	-	-	-

Source: Land Transportation Office.

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Table 19.6 Existing Road Network by System Classification and by Surface Type: 1988-1992 (Kilometers)

Item	1988	1989	1990	1991	1992
By system classification	157,447.53	159,059.49	160,560.12	160,709.97	160,843.42
National	26,070.05	26,110.08	26,272.03	26,421.88	26,554.43
Provincial	29,173.52	29,143.72	29,156.25	29,156.25	29,156.25
Municipal	12,626.50	12,706.90	12,819.48	12,819.48	12,819.48
City	3,982.13	3,949.38	3,949.38	3,949.38	3,949.28
Barangay	85,595.33	87,149.41	88,362.98	88,362.98	88,363.98
By surface type	157,447.53	159,059.49	160,560.12	160,709.97	160,843.43
Concrete	9,804.29	10,146.25	10,357.63	10,682.01	13,388.59
Asphalt	12,524.25	12,602.17	12,753.16	13,113.22	12,864.47
Gravel	126,050.84	127,679.50	128,952.72	128,401.23[a]	126,086.68[b]
Earth	9,068.15	8,631.57	8,496.61	8,513.51	8,503.69

[a] Includes 87,340.64 kilometers of barangay roads with surface type of gravel and earth.
[b] Includes 84,829.67 kilometers of barangay roads with surface type of gravel and earth.

Source: Department of Public Works and Highways.

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Table 19.7 Philippine Port System by Port Management Office: 1992

Port management office	Total ports	Base ports	Terminal ports	Other national/ municipal ports	Private ports	Anchorage areas
Philippines	448	20	56	111	203	58
Manila	20	3	2	3	9	3
Batangas	39	1	5	10	20	3
Legazpi	20	1	6	8	3	2
Puerto Princesa	14	1	3	-	5	5
San Fernando	12	1	2	1	6	2
Cebu	58	1	7	18	32	-
Dumaguete	25	1	3	5	11	5
Iloilo	51	1	4	8	32	6
Tacloban	34	1	7	15	8	3
Cagayan de Oro	36	1	-	13	17	5
Iligan	19	1	2	4	12	-
Nasipit	14	1	2	2	9	-
Surigao	24	1	2	15	3	3
Davao	37	1	2	3	14	17
General Santos	6	1	-	-	5	-
Jolo	5	1	3	1	-	-
Polloc	6	1	2	-	3	-
Zamboanga	28	1	4	5	14	4

Source: Philippine Ports Authority, Management and Information Services Department.

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Table 19.8 Philippine Domestic Operating Fleet by Type of Vessel: 1987-1990

Type of vessel	1987 Number	1987 Gross tonnage	1988 Number	1988 Gross tonnage	1989 Number	1989 Gross tonnage	1990 Number	1990 Gross tonnage
Total	8,805	946,079	8,707	1,012,786	9,392	1,056,614	9,591	1,213,104
Passenger ferry	310	63,070	415	76,534	420	75,746	490	51,342
Passenger cargo	206	35,562	103	107,884	98	98,412	137	166,323
General cargo	2,103	275,331	2,478	318,845	2,737	318,748	2,763	352,329
Semi-container	-	-	-	-	-	-	-	-
Container	18	42,428	26	64,533	24	62,580	40	109,950
RORO (roll-on-roll-off)	1	465	-	-	-	-	-	-
Bulk carrier	-	-	-	-	-	-	-	-
Lighterage	65	22,435	41	10,773	40	11,127	29	8,189
Barging	534	214,531	465	193,052	450	188,359	487	219,122
Oil tanker	126	93,406	119	89,049	117	87,255	132	103,760
Parcel tanker	-	-	-	-	-	-	-	-
Towing	500	29,102	376	26,679	365	25,873	460[a]	40,010[a]
Pleasure	46	3,518	35	1,594	36	1,675	33	1,811
Pilotage	16	455	18	154	17	141	20	168
Salvage	2	155	-	-	-	-	-	-
Passenger/container	2	1,125	-	-	-	-	-	-
Others	19	2,405	80	4,147	82	3,998	90	2,795
No information	36	4,081	23	2,365	31	2,394	13	1,621
Fishing	4,821	158,010	4,528	117,177	4,975	180,306	4,897	155,684

[a] Towing/salvage.
Source: Maritime Industry Authority, Management Information System.

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Table 19.9 Philippine Registered Overseas Fleet by Type of Vessel: 1989-1993

Type of vessel	1989		1990		1991		1992		1993	
	Number	Gross tonnage	Number	Gross tonnage	Number	Gross tonnage	Number	Gross tonnage	Number	Gross tonnage
Total	427	8,447,216	406	7,988,450	412	7,837,785	408	7,945,801	380	8,058,824
General cargo	76	796,547	78	893,319	86	966,413	92	1,158,128	90	1,481,411
Bulk carrier	269	6,515,436	248	6,089,951	246	5,865,580	239	5,745,942	213	5,567,628
Tanker	13	396,141	10	345,566	11	346,265	9	338,859	11	360,843
Log carrier	1	22,851	1	19,900	1	19,900	2	58,744	2	77,688
Multi-purpose	9	122,221	12	119,100	12	119,100	13	126,952	12	110,393
OBO (oil bulk/ore)	1	85,310	1	47,541	1	47,541	2	56,041	2	18,511
RORO (roll-on-roll-off)	6	29,926	3	13,096	2	9,978	3	14,205	6	32,013
Reefer	10	78,633	12	87,937	11	78,426	10	64,942	10	64,942
Livestock	10	21,593	10	21,052	12	42,149	13	76,587	14	86,568
Car carrier	19	270,572	17	197,020	16	188,465	12	153,451	10	136,594
General cargo/container	9	57,794	10	103,776	10	103,776	10	103,776	8	91,115
Passenger cargo	1	27,090	1	27,090	1	27,090	1	27,090	1	27,090
Dry cargo	2	21,084	2	21,084	2	21,084	2	21,084	1	4,028
LPG carrier	1	2,018	1	2,018	1	2,018	-	-	-	-

Source: Maritime Industry Authority, Management Information System.

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Table 19.10 Comparative Shipping, Cargo and Passenger Statistics Nationwide at Berth and at Anchorage: 1988-1992

Particulars	1988	1989	1990	1991	1992
Number of shipcalls	146,148	153,041	157,698	176,379	185,489
Domestic	139,984	145,841	150,228	168,942	177,782
Foreign	6,164	7,200	7,470	7,437	7,707
Gross regular tonnage	133,057,383	153,194,900	166,007,035	174,965,600	176,716,911
Domestic	74,397,544	88,190,395	97,068,943	103,366,528	101,776,580
Foreign	58,659,839	65,004,505	68,938,092	71,599,072	74,940,331
Length (meter)	6,476,971	7,424,696	7,565,498	8,288,991	8,431,513
Domestic	5,646,786	6,455,161	6,601,512	7,318,323	7,414,182
Foreign	830,185	969,535	963,986	970,668	1,017,331
Waiting time (hours)	308,025	350,373	228,911	221,337	230,740
Domestic	263,409	290,013	143,776	139,341	152,967
Foreign	44,616	60,360	85,135	81,996	77,773
Service time (hours)	5,909,852	6,335,757	7,000,707	7,143,020	7,212,775
Domestic	5,428,132	5,756,201	6,317,227	6,630,351	6,652,348
Foreign	481,720	579,556	683,480	512,669	560,427
Cargo throughput (metric tons)	88,223,040	96,711,370	98,900,708	105,569,873	110,835,158
Domestic	51,534,740	54,679,884	57,956,401	58,634,411	61,845,505
Inward	27,931,864	30,333,456	30,289,812	30,680,694	31,821,369
Outward	23,602,876	24,346,428	27,666,589	27,953,717	30,024,136
Foreign	36,688,300	42,031,486	40,944,307	46,935,462	48,989,653
Import	24,374,703	28,706,762	29,565,151	31,149,791	34,867,910
Export	12,313,597	13,324,724	11,379,156	15,785,671	14,121,743
Passenger traffic	24,393,219	26,208,007	29,820,025	31,715,983	33,734,547
Disembarked	12,741,088	13,674,744	15,219,981	16,171,498	17,156,189
Embarked	11,652,131	12,533,263	14,600,044	15,544,485	16,578,358

Source: Philippine Ports Authority.

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Table 19.11 Cargo Tonnage and Passenger Traffic by Port Management Office: 1991 and 1992

Port management office	Grand total	Cargo tonnage handled (metric tons)						Passenger traffic		
		Total	Domestic Inward	Domestic Outward	Foreign Total	Foreign Import	Foreign Export	Total	Disembarked	Embarked
1992										
Total	110,835,158	61,845,505	31,821,369	30,024,136	48,989,653	34,867,910	14,121,743	33,734,547	17,156,189	16,578,358
Manila	38,386,548	19,520,706	10,251,572	9,269,134	18,865,842	15,645,352	3,220,490	3,303,574	1,823,389	1,480,185
Cagayan de Oro	11,826,217	3,274,596	2,043,597	1,230,999	8,551,621	4,311,659	4,239,962	1,560,252	767,302	792,950
Batangas	17,605,642	6,726,639	1,987,305	4,739,334	10,879,003	10,103,242	775,761	2,272,264	1,149,450	1,122,814
Cebu	11,099,988	9,582,087	5,238,830	4,343,257	1,517,901	739,372	778,529	6,204,906	3,131,738	3,073,168
Iloilo	6,122,537	5,409,288	3,099,280	2,310,008	713,249	400,840	312,409	4,652,092	2,346,720	2,305,372
Davao	3,972,410	2,465,087	1,440,424	1,024,663	1,507,323	428,233	1,079,090	319,594	167,675	151,919
Iligan	3,841,399	2,385,438	921,387	1,464,051	1,455,961	898,152	557,809	5,338,136	2,680,474	2,657,662
Zamboanga	1,829,479	1,555,212	999,740	555,472	274,267	46,236	228,031	2,225,808	1,135,021	1,090,787
San Fernando	1,283,154	734,030	617,499	116,531	549,124	362,391	186,733	-	-	-
Tacloban	5,370,062	2,722,210	1,458,366	1,263,844	2,647,852	1,695,030	952,822	2,425,398	1,207,126	1,218,272
General Santos	1,643,453	1,157,028	516,707	640,321	486,425	113,138	373,287	91,258	31,599	59,659
Surigao	1,248,902	952,394	340,270	612,124	296,508	27,836	268,672	566,201	293,642	272,559
Dumaguete	1,260,707	1,015,139	600,100	415,039	245,568	17,810	227,758	1,578,214	769,675	808,539
Nasipit	1,129,158	1,082,956	461,573	621,383	46,202	27,681	18,521	605,633	299,773	305,860
Legazpi	1,834,517	1,693,839	1,050,554	643,285	140,678	28,220	112,458	1,356,674	704,168	652,506
Polloc	1,072,940	1,046,544	499,385	547,159	26,396	22,479	3,917	429,935	222,393	207,542
Puerto Princesa	1,105,920	320,187	181,094	139,093	785,733	239	785,494	140,239	56,238	84,001
Jolo	202,125	202,125	113,686	88,439	-	-	-	664,369	369,806	294,563

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Table 19.11 Cargo Tonnage and Passenger Traffic by Port Management Office: 1991 and 1992 (concluded)

Port management office	Grand total	Cargo tonnage handled (metric tons)						Passenger traffic		
		Total	Domestic Inward	Domestic Outward	Foreign Total	Foreign Import	Foreign Export	Total	Disembarked	Embarked
1991										
Total	105,569,873	58,634,411	30,680,694	27,953,717	46,935,462	31,149,791	15,785,671	31,715,983	16,171,498	15,544,485
Manila	34,510,037	18,480,244	9,875,039	8,605,205	16,029,793	12,727,321	3,302,472	3,308,912	1,763,982	1,544,930
Cagayan de Oro	13,622,405	3,171,113	1,892,862	1,278,251	10,451,292	5,310,088	5,141,204	776,594	367,168	409,426
Batangas	15,161,366	5,332,179	1,903,563	3,428,616	9,829,187	8,719,414	1,109,773	2,596,716	1,461,991	1,134,725
Cebu	10,903,867	9,616,303	5,105,834	4,510,469	1,287,564	594,139	693,425	5,942,443	2,991,935	2,950,508
Iloilo	5,709,788	5,070,195	2,912,266	2,157,929	639,593	302,219	337,374	4,390,065	2,208,734	2,181,331
Davao	4,191,228	2,584,912	1,401,526	1,183,386	1,606,316	354,552	1,251,764	332,833	169,514	163,319
Iligan	4,223,125	2,695,432	1,066,856	1,628,576	1,527,693	1,012,702	514,991	4,550,226	2,270,581	2,279,645
Zamboanga	1,912,610	1,614,286	997,221	617,065	298,324	61,760	236,564	2,386,047	1,211,175	1,174,872
San Fernando	1,256,677	847,661	675,059	172,602	409,016	186,100	222,916	-	-	-
Tacloban	5,520,917	2,661,533	1,628,117	1,033,416	2,859,384	1,653,525	1,205,859	2,321,219	1,166,781	1,154,438
General Santos	1,504,401	1,046,056	395,506	650,550	458,345	109,414	348,931	106,528	42,928	63,600
Surigao	1,251,006	834,941	284,622	550,319	416,065	37,524	378,541	597,013	289,617	307,396
Dumaguete	1,180,929	844,759	540,709	304,050	336,170	27,882	308,288	1,433,686	712,199	721,487
Nasipit	1,000,803	981,763	451,849	529,914	19,040	4,916	14,124	489,530	250,082	239,448
Legazpi	1,778,329	1,582,014	988,341	593,673	196,315	10,307	186,008	1,209,425	604,215	605,210
Polloc	731,784	691,331	268,564	422,767	40,453	37,557	2,896	382,074	190,929	191,145
Puerto Princesa	917,289	386,377	197,250	189,127	530,912	371	530,541	158,159	78,186	79,973
Jolo	193,312	193,312	95,510	97,802	-	-	-	734,513	391,481	343,032

Source: Philippine Ports Authority.

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Table 19.12 Number and Tonnage of Vessels Entered in Selected Ports: 1987-1992
(Tonnage in net thousand tons)

Number of vessels/tonnage	Total	Domestic trade				
		Manila	Cebu	Iloilo	Zamboanga	Others
1987						
No. of vessels	72,678	9,259	9,662	4,570	6,546	42,641
Tonnage	28,964	6,667	3,636	1,826	1,652	15,183
1988						
No. of vessels	74,282	9,912	9,611	4,485	6,545	43,729
Tonnage	30,652	7,321	4,029	1,834	2,004	15,464
1989						
No. of vessels	80,753	10,244	10,640	5,195	7,768	46,906
Tonnage	35,483	7,350	5,328	2,725	2,270	17,810
1990						
No. of vessels	81,725	10,967	10,866	5,213	8,353	46,326
Tonnage	38,642	8,071	6,313	2,712	2,457	19,089
1991						
No. of vessels	62,070	1,759	8,256	4,824	5,093	42,138
Tonnage	29,805	1,338	6,294	3,009	1,759	17,405

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Table 19.12 Number and Tonnage of Vessels Entered in Selected Ports: 1987-1992 (concluded)
(Tonnage in net thousand tons)

Number of vessels/tonnage	Total	International trade				
		Manila	Cebu	Iloilo	Zamboanga	Others
1987						
No. of vessels	5,970	2,141	436	60	143	3,190
Tonnage	38,631	11,186	2,149	340	1,123	23,833
1988						
No. of vessels	6,230	2,138	511	62	132	3,387
Tonnage	38,910	11,118	2,268	315	911	24,298
1989						
No. of vessels	7,148	2,604	579	93	153	3,719
Tonnage	42,073	12,838	2,721	356	786	25,372
1990						
No. of vessels	7,475	2,896	627	102	149	3,701
Tonnage	46,041	15,523	2,827	464	811	26,416
1991						
No. of vessels	7,235	2,688	481	86	144	3,836
Tonnage	44,248	14,086	2,037	423	676	27,026
1992						
No. of vessels	7,545	3,006	579	89	126	3,745
Tonnage	44,814	15,554	2,671	533	641	25,415

Source: National Statistics Office, Trade Statistics Division.

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Table 19.13 Number and Tonnage of Vessels Cleared in Selected Ports: 1987-1992
(Tonnage in net thousand tons)

Number of vessels/tonnage	Total	Manila	Cebu	Domestic trade Iloilo	Zamboanga	Others
1987						
No. of vessels	72,601	9,324	9,729	4,517	6,683	42,348
Tonnage	28,915	6,690	3,674	1,830	1,677	15,044
1988						
No. of vessels	74,413	9,926	9,616	4,447	6,775	43,649
Tonnage	30,321	7,292	4,031	1,964	1,742	15,292
1989						
No. of vessels	80,467	10,256	10,654	5,117	7,724	46,716
Tonnage	35,195	7,334	5,249	2,770	2,294	17,548
1990						
No. of vessels	81,641	10,764	10,872	5,136	8,673	46,196
Tonnage	38,404	8,208	6,319	2,802	2,311	18,763
1991						
No. of vessels	68,238	8,222	8,369	4,884	5,043	41,720
Tonnage	34,617	6,428	6,109	3,254	1,758	17,068

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Table 19.13 Number and Tonnage of Vessels Cleared in Selected Ports: 1987-1992 (concluded)
(Tonnage in net thousand tons)

Number of vessels/tonnage	Total	Manila	International trade Cebu	Iloilo	Zamboanga	Others
1987						
No. of vessels	5,895	2,114	423	61	129	3,168
Tonnage	38,304	10,932	2,098	341	1,047	23,886
1988						
No. of vessels	6,197	2,114	505	62	131	3,385
Tonnage	38,743	10,986	2,222	315	915	24,304
1989						
No. of vessels	7,130	2,579	575	91	152	3,733
Tonnage	41,877	12,760	2,729	350	776	25,261
1990						
No. of vessels	7,422	2,882	622	100	148	3,670
Tonnage	45,596	15,405	2,792	455	802	26,142
1991						
No. of vessels	7,222	2,679	483	87	145	3,828
Tonnage	44,300	14,068	2,054	430	686	27,062
1992						
No. of vessels	7,533	3,009	585	89	125	3,725
Tonnage	44,810	15,539	2,720	533	647	25,371

Source: National Statistics Office, Trade Statistics Division.

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Table 19.14 Number of Airports in Operation: 1965-1993

Year	Total	National	Private
1965	117	74	43
1966	110	75	35
1967	125	77	48
1968	136	77	59
1969	125	77	48
1970	123	75	48
1971	123	75	48
1972	135	76	59
1973	139	77	62
1974	146	78	68
1975	149	78	71
1976	151	78	73
1977	151	79	72
1978	179	82	97
1979	201	85	116
1980	202	86	116
1981	217	86	131
1982	219	82	137
1983	219	82	137
1984	185	85	100
1985	188	85	103
1986	185	85[a]	100[a]
1987	214	76	138
1988	187	75	112
1989	174	86	88
1990[a]	178	86	92
1991	204	86	118
1992	164	86	78
1993	171	86	85

[a] As of June.

Source: Air Transportation Office.

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Table 19.15 Scheduled and Nonscheduled Domestic Aircraft Movement and Passenger Traffic by Airport: 1991-1993

Airport	Aircraft operations			Passenger traffic		
	1991	1992	1993	1991	1992	1993
Philippines	103,351	101,735	89,472	5,991,075	5,101,480	5,516,477
Alabat	4	6	-	5	4	-
Allah Valley	-	-	-	-	-	-
Antique	48	46	1	186	329	4
Aparri	-	-	-	-	-	-
Bacolod	16,250	14,509	13,448	324,987	324,494	384,657
Bagabag	809	1,016	698	2,076	4,248	2,016
Baguio	1,246	881	976	21,050	16,100	34,480
Baler	25	4	7	4	-	16
Barobo	-	-	-	-	-	-
Butuan (Bancasi)	949	905	202	46,903	50,984	19,052
Basco	375	424	631	13,921	15,834	17,646
Biliran	-	-	-	-	-	-
Bislig	-	-	-	-	-	-
Borongan	-	-	5	-	-	18
Bulan	6	-	-	12	-	-
Busuanga	447	819	742	8,000	17,115	12,039
Cagayan de Oro	3,438	4,349	4,106	246,488	321,403	340,605
Cagayan de Sulu	5	-	-	15	-	-
Calapan	353	376	367	1,040	1,580	1,296
Calbayog	347	323	246	20,932	22,140	19,109
Camiguin	88	142	53	846	3,587	609
Castillejos	282	-	-	635	-	-
Catarman	310	294	193	17,965	19,829	23,864
Catbalogan	16	4	-	57	22	-
Caticlan	2,084	1,897	1,482	32,313	32,866	23,854
Cauayan	493	1,400	1,040	20,774	27,392	23,072
Corregidor	-	-	-	-	-	-
Cotabato	2,680	2,790	1,675	140,892	141,685	96,332
Cuyo	203	149	323	1,845	1,777	2,872
Daet	259	129	108	7,301	3,520	2,726
Davao (F. Bangoy)	5,040	6,296	4,046	401,284	454,096	481,151
Dipolog	1,196	1,043	943	68,943	66,810	78,912
Dolores	-	-	-	-	-	-
Dumaguete	1,459	1,365	1,673	89,743	101,861	125,616
General Santos	1,229	1,463	1,102	55,084	70,511	71,296
Guiuan	52	28	65	155	139	906
Hilongos	56	77	93	186	218	285
Iba	86	61	30	338	212	215
Iligan (Ma. Cristina)	800	74	-	38,143	3,589	-
Iloilo	9,260	9,622	8,286	351,952	419,612	437,185
Ipil	740	391	389	4,001	1,878	1,408
Itbayat	-	-	-	-	-	-
Jolo	933	828	526	57,920	51,088	42,614
Jomalig	18	22	11	107	150	86

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Table 19.15 Scheduled and Nonscheduled Domestic Aircraft Movement and Passenger Traffic by Airport: 1991-1993 (concluded)

Airport	Aircraft operations			Passenger traffic		
	1991	1992	1993	1991	1992	1993
Kalibo	1,438	1,647	2,341	167,245	220,797	215,285
Lahug	2,184	-	-	1,703	-	-
Laoag	1,171	1,464	1,575	17,143	26,764	32,535
Legazpi	1,642	1,839	1,405	137,491	144,260	138,461
Liloy	17	12	1	-	22	-
Lingayen	-	338	430	-	1,253	1,835
Lubang	315	463	466	5,340	5,579	6,361
Lucena	34	36	30	158	178	205
Maasin	45	45	37	190	390	119
Mactan	14,426	14,065	13,789	2,536,297	1,312,040	1,655,916
Malabang	-	420	-	-	-	-
Malaybalay	-	-	-	-	-	-
Mamburao	468	375	398	13,681	10,566	7,828
Marinduque	640	1,943	1,359	23,922	29,066	36,456
Masbate	849	522	483	42,452	39,976	38,078
Mati (I. R. Marcos)	346	236	79	1,429	1,030	314
Naga	652	727	874	40,561	47,334	48,742
Ormoc	466	290	35	4,830	3,979	124
Ozamis	429	442	228	17,981	21,727	10,887
Pagadian	1,058	1,001	861	57,521	60,865	58,346
Palanan	428	406	360	3,213	3,246	2,713
Plaridel	4,647	5,640	5,154	15,811	21,945	21,139
Puerto Princesa	1,770	1,551	1,382	109,020	113,490	126,105
Romblon	458	355	204	11,426	12,803	10,237
Rosales	103	280	101	475	555	362
Roxas	1,282	1,055	980	58,694	68,960	72,103
Sanga-Sanga	235	349	231	13,389	24,519	23,266
San Fernando	873	713	614	8,787	9,824	3,347
San Jose (Antique)	-	-	-	-	-	-
San Jose (Mindoro)	1,147	935	783	50,916	48,453	44,494
Siargao	-	-	-	-	-	-
Siocon	1,017	451	464	5,959	2,855	2,904
Siquijor	-	-	-	-	-	-
Sorsogon	2	-	-	-	-	-
Surigao	510	572	493	21,539	22,781	24,507
Tacloban	1,381	1,209	1,361	199,522	161,309	186,395
Tagbilaran	1,561	1,251	920	67,356	68,050	64,330
Tandag	215	264	158	6,730	9,926	7,412
Tuguegarao	1,196	1,216	697	35,843	42,079	50,103
Ubay	16	28	13	28	35	25
Vigan	220	168	166	1,121	1,055	1,053
Virac	836	714	651	52,767	53,823	50,286
Wasig	13	8	-	39	-	-
Zamboanga	7,675	6,972	6,882	284,393	334,873	330,263

Source: Air Transportation Office.

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Table 19.16 International Scheduled Aircraft Movement, Passenger Traffic and Cargo Movement: 1991-1993
(Cargo in thousand kilograms)

Month	Aircraft movement						Passenger traffic					
	Landing			Take off			Arrival			Departure		
	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
Total	12,886	14,892	[a]12,111	12,942	14,982	[a]12,163	2,116,954	2,519,014	[a]1,999,852	2,412,495	2,716,593	[a]2,252,161
January	1,005	1,174	1,404	1,020	1,181	1,414	147,799	186,841	225,802	200,328	257,747	292,825
February	876	1,132	1,228	885	1,144	1,236	130,145	183,805	186,891	152,367	232,338	229,040
March	1,043	1,165	1,326	1,047	1,178	1,338	183,761	204,952	221,988	188,644	218,391	231,785
April	1,060	1,176	1,370	1,066	1,174	1,373	179,536	208,752	248,340	223,916	242,714	281,031
May	1,124	1,255	1,357	1,133	1,254	1,358	201,515	208,508	246,527	231,359	230,780	266,531
June	904	1,202	1,338	908	1,205	1,344	161,240	211,013	225,164	181,897	217,962	236,827
July	1,111	1,282	1,400	1,115	1,282	1,403	174,150	217,958	229,193	204,734	225,558	231,186
August	1,163	1,278	1,372	1,168	1,280	1,377	173,630	212,116	224,783	220,023	249,842	258,543
September	1,100	1,252	1,316	1,093	1,263	1,320	153,243	183,087	191,164	198,552	221,216	224,393
October	1,149	1,306	n.a.	1,154	1,323	n.a.	172,254	199,872	n.a.	201,454	211,299	n.a.
November	1,132	1,262	n.a.	1,135	1,271	n.a.	187,336	210,060	n.a.	200,373	204,987	n.a.
December	1,219	1,408	n.a.	1,218	1,427	n.a.	252,345	292,050	n.a.	208,848	203,759	n.a.

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Table 19.16 International Scheduled Aircraft Movement, Passenger Traffic and Cargo Movement: 1991-1993 (concluded)
(Cargo in thousand kilograms)

Month	Cargo Movement					
	Incoming			Outgoing		
	1991	1992	1993	1991	1992	1993
Total	89,711.92	101,186.42	[a] 80,283.70	89,968.40	92,727.83	[a] 76,966.90
January	6,116.44	7,132.22	7,951.87	7,209.57	7,953.41	8,143.14
February	5,219.21	7,195.29	8,124.41	6,661.95	7,834.18	7,839.09
March	7,447.97	8,749.85	9,649.25	7,634.58	8,212.54	8,878.16
April	7,354.08	8,045.55	9,152.36	7,751.36	7,660.19	8,317.51
May	8,347.94	8,463.55	10,039.86	7,901.43	7,966.80	8,212.48
June	6,398.09	7,973.43	8,834.90	6,416.63	7,450.89	7,854.48
July	7,824.58	8,379.75	9,520.35	7,401.09	8,005.61	9,074.83
August	7,642.01	8,147.52	8,738.88	7,985.27	7,993.37	9,219.54
September	7,340.40	7,936.38	8,271.82	7,730.19	7,556.11	9,427.67
October	7,978.45	8,965.38	n.a.	8,101.84	7,539.83	n.a.
November	8,421.85	9,585.64	n.a.	7,803.97	7,399.42	n.a.
December	9,620.90	10,611.86	n.a.	7,370.52	7,155.48	n.a.

[a] January to September.

Source: Ninoy Aquino International Airport.

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Table 19.17 Domestic and International Operations of the Philippine Airlines: 1988/1989 - 1992/1993

Operation	1988/89	1989/90	1990/91	1991/92	1992/93
Domestic operations					
Passengers carried	4,033,315	4,097,158	3,776,531	3,896,645	4,058,738
Revenue passenger kms (000)	1,896,901	1,910,797	1,780,013	1,856,438	1,990,972
Available seat kms (000)	2,278,239	2,568,921	2,509,588	2,566,128	2,606,936
Passenger load factor (percent)	83	74	71	72	76
Freight kgs carried	63,349,341	66,293,629	64,072,563	64,466,053	64,360,218
Freight ton kms (000)	35,409	39,484	40,760	42,091	40,516
Revenue passenger ton kms (000)	139,716	142,368	133,350	137,837	145,427
Excess baggage ton kms (000)	696	327	2,633	n.a.	n.a.
Mail ton kms (000)	193	234	905	n.a.	n.a.
Revenue ton kms (000)	176,014	182,413	177,805	181,184	189,689
Available ton kms (000)	240,624	275,473	273,146	262,192	275,316
Overall load factor (percent)	73	66	65	69	69
Revenue hours	60,695	59,735	53,959	55,881	50,576
Revenue kms flown (000)	22,862	23,187	20,946	22,386	21,340
Number of flights (OW)	601,195	62,920	56,206	58,498	52,370
International operations					
Passengers carried	1,796,828	1,749,852	1,635,570	1,985,764	2,130,289
Revenue passenger kms (000)	9,005,878	8,573,901	8,335,411	10,341,338	10,946,453
Available seat kms (000)	11,769,200	11,496,956	11,602,800	14,036,709	15,360,348
Passenger load factor (percent)	77	75	72	74	71
Freight kgs carried	44,457,538	49,265,172	41,763,322	46,800,144	46,080,673
Freight ton kms (000)	284,176	308,922	256,574	277,829	278,637
Revenue passenger ton kms (000)	892,830	856,729	851,889	1,043,428	1,094,781
Excess baggage ton kms (000)	19,672	19,720	17,050	n.a.	n.a.
Mail ton kms (000)	8,536	13,584	17,316	n.a.	n.a.
Revenue ton kms (000)	1,206,214	1,198,955	1,140,756	1,357,978	1,412,035
Available ton kms (000)	1,920,737	1,854,600	1,729,364	2,095,489	2,259,893
Overall load factor (percent)	63	65	60	65	62
Revenue hours	49,699	47,569	46,148	57,075	62,764
Revenue kms flown (000)	37,193	35,588	34,684	42,561	46,698
Number of flights (OW)	8,002	7,785	7,824	9,307	10,614

Source: Philippine Airlines.

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Chapter 20
Communications

20.1 Telecommunications

Telecommunications is the quick transmission of signals, sounds or images over great distances through electromagnetic impulses such as telephone, telegraph, telex, radio and television. Among the forms of communications, it is the most vital to modernization. Through the telecommunications network, all sectors and functions that relate to economic and social development are made to interact with each other.

20.1.1 Development of Telecommunications

The first telecommunication services in the country were made possible through submarine cables installed by the Royal Telegraph Corporation in 1867 when the country was a colony of Spain. Submarine lines were installed connecting Manila to Corregidor and these were later extended to other parts of the country.

In the same year, the Eastern Extension Australasia and the China Telegraph Company, under a 20-year contract with the Spanish government, laid more submarine cables linking Manila to Cebu, Bacolod, Capiz and Iloilo, and developed shortly the country's first overseas telegraph links via submarine cables between Bolinao, Pangasinan and Hongkong.

Communication facilities were expanded when the Americans colonized the country in the 1900s. The American Military Forces installed overland wires and submarine cables. These were later turned over to the Philippine Government under the operations of the Bureau of Posts. A telephone system was established shortly when the Philippine Islands Telephone and Telegraph Company, registered under the laws of the State of Nevada, USA, and with a franchise from the Philippine Commission, started operations in 1905 with more than 400 subscribers in the city of Manila. This company later assumed a new name, the Philippine Telephone and Telegraph Company (PTTC).

Another private telecommunications company was given franchise by the Philippine legislature on November 28, 1928 and this acquired shortly the assets and properties of the PTTC including their entire operations in the South, thereby consolidating all telecommunication systems in the country. This was the Philippine Long Distance Telephone Company (PLDT) which today is the country's biggest telephone company.

The Reorganization Law of 1947 created the Bureau of Telecommunications (BUTEL), now the Telecommunications Office or TELOF, to be respon-

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sible for the operations and maintenance of government telecommunication facilities and services. It took over some 169 telegraph landlines when it started operations on October 4, 1947. The BUTEL established shortly the Government Telephone System (GTS) to reinforce telephone services in government offices.

The invention of communication satellites in the 1960s and eventually its application, has contributed tremendously to the advancement of the country's telecommunication system. The Philippine Communications Satellite (PHILCOMSAT) and the Domestic Communications Satellite (DOMSAT) are the two entities which handle the application of satellites in the country.

In 1979, Executive Order 546 created the Ministry of Transportation and Communications, now the Department of Transportation and Communications (DOTC) and the National Telecommunications Commission (NTC). The DOTC takes the responsibility of formulating the national policies for telecommunications service in the country.

At present, all privately-owned telecommunications carriers handling a major percentage of the country's communication traffic for both telephone (voice) and data (record) are franchised by the government. They operate facilities, provide services and charge rates under specific authorities granted by the National Telecommunications Commission (NTC). The DOTC through the TELOF, also operates telecommunication facilities and offers services. TELOF provides, principally, telephone and telegraph services mainly in areas not served by private carriers. See Table 20.1 for statistics on TELOF's stations.

The Congress of the Philippines is now taking an active role in the development of telecommunications in the country, with both the House of Representatives and Senate having their own committees on telecommunications. Their respective roles are mainly to formulate laws required to initiate as well as support development. Congress is also responsible for the grant of franchises to operating carriers.

The Municipal Telephone Act of 1989 (R.A. 6849) was enacted into law last February 8, 1990. This provides for the installation, operation, and maintenance of public telephones in each municipality in the Philippines. Its enforcement gave rise to several Public Calling Offices (PCOs) in the remote but populated municipalities of Luzon.

The National Telecommunications Development Committee (NTDC) which was created in 1989 has the responsibility to facilitate the resolution of immediate developmental, regulatory and other issues on telecommunications. Members of the NTDC come from both private and government sectors.

In addition, the DOTC, with assistance from both the public and private sectors, undertook the formulation of a National Telecommunications Development Plan (NTDP) nationalizing the telecommunications industry by providing high level guidance regarding the government's development target and the general means of achieving these targets.

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20.1.2 Telecommunication Services

20.1.2.1 Telephone Services

Telephone operators in the country as of 1993 numbered 49, of which 45 were private operators and 4 were government entities. A total of 401 exchanges were utilized by these operators with capacity of 950,342. The Philippine Long Distance Telephone Company, the country's largest telephone company, accounted for 85.06 percent (808,371) of total capacity.

On the other hand, telephone density for 1993 was registered at 2.201 for every 100 population.

By region, Metro Manila accounted for the biggest number of connections with 1,010,532 or 74.01 percent of the total telephone services. Metro Manila also registered the highest telephone density of 13.203 telephones per 100 population. See Tables 20.2 and 20.3 for more details.

20.1.2.2 Data and Record Communication Services

Domestic Record Services are provided by the government Telecommunications Office (TELOF) and six private carriers, namely: Philippine Telephone and Telegraph Co. (PT&T), Radio Communications of the Philippines, Inc., (RCPI), BFC Communications, Clavecilla Radio System, Universal Telecom System (UTS) and Federal Wireless. PT&T had the biggest number of traffic volume numbering 4,600,171 messages in 1993.

On the other hand, domestic telex services are provided by PT&T and RCPI. As of 1993, number of telex subscribers reached 877, with PT&T accounting for 849. See Tables 20.4 and 20.5.

International Record Services are provided by four International Record Carriers (IRCs). These are the Philippine Global Communications (PHILCOM), Eastern Telecommunications Philippines, Inc. (Eastern Telecoms), Globe-Mackay Cable and Radio Communications (GMCR), and Capitol Wireless (CAPWIRE). See Table 20.6.

In addition to telex and telegraph, other international data and record services include telegram and mailgram, data circuits, facsimile/bureaufax, press bulletin service, datel, satellite television broadcast, electronic mail, data access and other packet-switched data communication services. Telex and telegram services are also provided to the maritime world by the IRCs utilizing the Maritime Satellite or International Maritime Satellite MARISAT/INMARSAT system. These allow direct connections between MARISAT/INMARSAT-equipped vessels located in the Atlantic or Pacific Ocean areas and telex subscribers throughout the world.

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20.1.3 Existing Facilities

20.1.3.1. Communication Satellites

The arrival of communication satellites in the country was realized when the Philippines became a member of the International Telecommunication Satellite Organization (INTELSAT) in 1968. The INTELSAT is a worldwide partnership of nations with the purpose of developing a global satellite communication system.

A communication satellite is a repeater in the sky, meaning it reflects radio waves and television signals back to earth over long distances. The first communications satellite INTELSAT 1 or "Early Bird" was put in operation in June 1965 over the Atlantic Ocean. The INTELSAT 2, launched in 1967, was put in operation over the Pacific Ocean. The INTELSAT 3 series was put up shortly over the Atlantic, Pacific and Indian Oceans. INTELSAT has recently launched its INTELSAT VII series of satellites with a capacity of 36,000 simultaneous two-way telephone circuits and three TV channels. These satellites are positioned 35,780 kilometers above the equator in geosynchronous orbit over the Atlantic, Pacific and Indian Oceans. High capacity, multiple access satellites provide full time telephone, telex, data facsimile and television services to more than 180 countries, territories and possessions.

International Satellite Facilities. The Philippine Communications Satellite (PHILCOMSAT) is the government-designated operating entity and signatory for the Philippines in the operating agreement with INTELSAT and the International Maritime Satellite (INMARSAT). PHILCOMSAT provides public telecommunication services through the facilities of IRCs, utilizing these two existing international communications systems.

PHILCOMSAT operates and maintains a total of eight intelsat standard antennas. These are Pinugay-1, Pinugay-2A, Pinugay 3-N, and Pinugay-4. Two other stations PHL 00F1 located in Makati and MLA 01F2 located in Manila provides digital circuits to the USA. PHILCOMSAT also maintains an INTELSAT Business Services (IBS) and a Television Receive Only (TVRO) station geared to serve the needs of the SBMA, Subic Free Port Zone.

Pinugay-2 covers the Indian Ocean Region with 607 fulltime analog and digital circuits, while Pinugay-4A, which was inaugurated only in April 1989, covers the Pacific Ocean Region together with PHL 001F1 and MLA 01F2 with 320 full time analog and digital circuits as of November 1993.

On the other hand, Pinugay-1 which is the original earth station and formerly covered the Pacific Ocean region, now serves as the restoration facilities for Pinugay-2A, and Pinugay-4A and the International Guam-Philippines-Taiwan GPT Fiber Optic Submarine Cable System.

As the need arises for new services, PHILCOMSAT may provide facilities for the following : Maritime; which involves ship-to-shore or ship-to-ship communication/maritime safety requirements; Aeronautical, which involves air-to-

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air communication requirement of airlines; and Land Mobile Systems; INTEL-NET, which is primarily for multidimension data distribution and/or collections' and VISTA, a voice/data circuit which will serve the user's requirements for low density traffic/services; and Video Teleconferencing.

Domestic Satellite Facilities are provided by the Domestic Communications Satellite (DOMSAT), a franchised carrier's carrier.

The DOMSAT System is composed of two major components: the leased segment and the earth stations (E/S) comprising the ground segment. The space segment is the PALAPA, owned by Indonesia while the earth station which is owned and operated by DOMSAT is composed of eleven fixed type E/S. The eleven fixed types, strategically dispersed to cover the total communication needs of the country are located in Laoag, Tuguegarao, Manila, Palawan, Iriga, Bacolod, Tacloban, Cebu, Davao, Cagayan de Oro and Zamboanga. The services offered by DOMSAT include leased voice grade channel which is used for the transmission and reception of voice, record, data, telephone, facsimile and such other signals; television channel, which is a one-way video and accompanying audio channel furnished by DOMSAT either as Manila-outbound television service or a Manila-inbound television service; and program channel which is a one way monoaural channel furnished by DOMSAT as a Manila-outbound or Manila-inbound radio service.

20.1.3.2 International Submarine Cable Systems

Together with communication satellite, submarine cable systems provide the key transmission media supporting long overhaul international communications. Submarine cables are located underneath the oceans stretching from a station located in the country and terminating in a station in another country. The cables are equipped in such a way that transmission of messages are maintained no matter how great the distance.

The Philippines has two submarine cable landing stations: the Currimao Cable Station, and the Baler Cable Station. The Currimao Cable Station operated and maintained by Eastern Telecom is located in Ilocos Norte. It is the landing station of OLUHO (Okinawa-Luzon-Hongkong), ASEAN P-S (Philippine- Singapore) and TAILU (Taiwan-Luzon) submarine cable systems. The Baler Cable Station, operated by Philippine Long Distance Telephone Company is located in the province of Quezon and is the landing station of TPC-1 Philippine-Guam submarine cable system. All of these present coaxial submarine cable systems are capable of carrying telephone, telex, telegraph and data traffic.

The OLUHO Cable System project was started in March 1976 and became operational on August 26, 1977. It has a channel capacity of 1,600 voice circuits in the direction of Okinawa and 1,840 voice circuits to Hongkong from Luzon. This was a $55 million venture between Eastern Telecommunications Philippines Inc., Cable & Wireless Ltd. (C&W) and Kokusai Denshin Denwa Co. Ltd. (KDD) of Japan. The ASEAN P-S submarine cable system is the first

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segment of the ASEAN Submarine Cable network. This network was envisioned not only to enhance the telecommunication system of the region, but also to upgrade the reliability and security of intra-ASEAN telecommunication. This development is one of the most important infrastructures that paved the way for the growth of the region's economy.

The ASEAN P-S, which became operational on October 3, 1978, is a 1,534-nautical mile and 1,380-message channel capacity submarine cable system. The whole system is designed to provide continuous and fault-free service for a minimum of 25 years.

The TAILU Submarine Cable System became operational in 1980. It is a joint venture by Eastern Telecommunications Phils. Inc., and International Telecommunications Development Corporation (ITDC) of Taiwan. The channel capacity of this system is 480 message channels.

The TPC-1 Philippine-Guam Submarine Cable System is the only cable system that lands in Baler. It is a 1,468-nautical mile, 128-message channel capacity cable that was made operational in 1964.

In 1989, there were three international submarine cable projectors completed: Transpacific 3 (TPC-3), Hawaii 4 (MAW) and Guam-Philippines-Taiwan (G-P-T).

A total of 20 ASEAN Pacific, Atlantic and Mediterranean fiber optic submarine cable projects are also planned to be constructed and completed from 1990 to 1997. This multi-participation is expected to further expand and enhance the country's telecommunication links to the major economic and political centers around the world.

20.1.3.3 Switching Facilities

International Switching Facilities. A digital switching exchange (a Siemens EWS-D) is in service handling both national and international traffic with a capacity of 1,230 international circuits and 96 digital switchboards. This facility is augmented by the existing capacity of other exchanges, an ARM Crossbar and an ESK Relay Metric which have capacities of 600 and 345 circuits, respectively.

All three existing switching exchanges of PLDT are operating on CCITT No. 5 signaling with the digital exchange having No. 7 signaling capability. In 1990, a new digital exchange capable of operating Nos. 5 to 7 signaling was acquired.

The four IRCs are authorized to operate their own automatic telex switching exchanges.

National Switching Facilities for Record and Data Services. The two major domestic record carriers in the Philippines, PT&T and RCPI, operate domestic telex switching exchanges.

RCPI operates a stored program controlled telex exchange (ETEX II). This provides line capacity for 1,500 telex subscribers and features such

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capabilities as abbreviated dialing, store-and-forward system, multi-address calls and automatic advice of call duration.

PT&T, on the other hand, makes use of an NEC-NEDIX 103 telex exchange which has a capacity of 3,000 lines expandable to 30,000 lines. It has already completed several services expansion and modernization programs. After it brought in the country's first stored program controlled telex switching exchange in 1983, PT&T introduced the computer-gram service (a "rush" telegram assured of delivery in three hours). This service was made possible by the COMET (Computer Oriented Message Switching Exchange) which utilized a VAX 11/750 with C and W UNCOTEX software. PT&T's Integrated Digital Network (IDN), completed in 1984, makes available high speed digital data communication within the Metro Manila area and major cities in the country. PT&T Digital Data Service (DDS) introduced in 1986, offers low speed, medium speed and high speed data communication services between Manila and major provincial cities in the Philippines. In 1988, PT&T launched its national Datanet service utilizing a Siemens EDX-P packet switching exchange, the country's first public switched data network.

20.1.4 Radio and Television Broadcasting

Radio and television broadcasting are considered the most widely used means of communicating to the public because of the ease by which these two facilities are obtained. Results of the 1990 Census of Population and Housing show that 66.43 percent of total households in the country had radio set, while 32.74 percent owned TV sets.

As of July 1991, there were 386 broadcast radio stations in the country, of which 251 were AM bands and the rest (135) were FM bands. A total of 355 stations were commercial while the remaining 31 were noncommercial stations. Metro Manila had a total of 49 radio stations.

There were also other existing radio services available, such as land mobile, citizens' band, amateur, and others. See Table 20.8. These services were utilized to aid private businesses and individuals and expedite movement of land vehicles, navigation ships and aircrafts. As of August 1993, existing radio stations (including AM, FM, and TV stations) reached 85,025.

On the other hand, there were 112 television stations in the country, of which seven were originating stations (all in Metro Manila); 105 were replay and relay stations. The seven originating stations in Metro Manila were ABS-CBN (Channel 2), PTV 4 (Channel 4), ABC (Channel 5), GMA (Channel 7), RPN (Channel 9), IBC (Channel 13), and SBN (Channel 21). For more details refer to Table 20.9.

20.1.5 Cable Television

Cable television evolved from the CATV (Community Antenna Television), central or master antenna used by a community to receive signals from distant areas, as more programming were added to the original signal

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improvement function of the central antenna system. The first CATV in the country, and in Asia, was established in 1969 in Baguio City.

After 24 years, all the regions of the country had CATV stations. Its number reached 265, with 192 operators, and covering 235 cities/municipalities. Southern Tagalog had the most number with 70, followed by Central Luzon and Ilocos with 32 and 27, respectively. Bicol had the least with two.

20.2 Postal Services

The first regular post office in the country was opened in Cavite aboard a ship which was docked in Manila Bay on July 30, 1898. This post office and other post offices were merely branches of the San Francisco Post Office in California, U.S.A. and were therefore, also under the supervision of the U.S. Post Office Department.

On November 10, 1898, General Aguinaldo created an all-Filipino postal services comprising five provinces in Luzon under his control.

On August 13, 1899, with the capture of Manila, the Spanish general post office at Escolta was taken over by the Americans. On the following day, it was opened for business to the public. In September 1901, a Bureau of Post Office under the Department of Commerce in the Civil Government was legally established.

The present Bureau of Posts was created on September 15, 1902 by Commonwealth Act 462 of the Philippine Commission. On January 30, 1987 the Bureau of Posts was renamed the Postal Services Office under Executive Order No. 125. Republic Act 7354 (the Postal Service Act of 1992) was enacted on April 3, 1992. This converts the Postal Service Office into a government corporation, the Philippine Postal Corporation (Philpost), and gives the agency the needed fiscal autonomy and management flexibility to allow the service to be more responsive to the fast changing needs of the postal market.

Mail services offered by PSO include registered mail (local and foreign), speed airmail service (domestic airmail points only), C.O.D., parcel post service (local and foreign), insured mail service, domestic air parcel service, money order service (domestic and international), international express mail service, Philatelic service, bulk pre-sorted mail service, Post Office lock boxes, business postal cards or reply cards, supermail, postgram and insured parcel post (for Australia, Switzerland, U.S. and possessions only).

In 1992, the PSO focused its activities on improving work standard in mail acceptance, dispatching and handling procedures. Mails for the year reached 1,156,757 thousands, an increase of 17.97 percent over the 1991 level. Mails posted in the Philippines accounted for 82.88 percent of the total mails, while 17.12 percent were mails received from foreign countries. See Tables 20.10 and 20.11 for more details.

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There were 2,147 postal services all over the country, 95.02 percent of which were regular post offices while the remaining 107 were postal stations only.

On the other hand, the postal machinery in the country was manned by a total of 18,382 workforce. Out of this total, 0.65 percent were chief postal services officers; 10.16 percent, postmasters; 47.48 percent, letter carriers; 3.34 percent, postal tellers; 13.44 percent, mail sorters and 1.91 percent, drivers. Refer to Table 20.13 for details.

20.3 The Print Media

Newspapers. The number of newspapers in circulation in 1993-1994 totalled 27. Of this total, tabloids which were in Pilipino language and which enjoyed the widest readership ranked the highest totalling nine, followed by broadsheets, seven; Chinese newspapers, five; business newspapers, four; and trade journals, two.

On the other hand, provincial newspapers numbered 70 in 1993-1994. Region XI (Southern Mindanao) had the biggest number of newspapers totalling 13.

Magazines. The total number of magazines reported in 1993-1994 was 46. Showbiz magazines accounted for the biggest number with 10 or 21.74 percent of the total. Male-oriented and teen-oriented magazines, on the other hand, reported the least number, with one each.

20.4 The Film Media

Film media are projected media such as movies or motion pictures, documentary films and slides. They serve as an effective means of communicating ideas and concepts, instruction, disseminating information, promoting products and issues or as a tool for industry. The popular movies aside from providing entertainment, also communicate values and cultural heritage which are projected in the music setting, costume, dialogue and other things that go into the movie production.

The Movie and Television Review and Classification Board (MTRCB) is the government entity which regulates the production and dissemination of movies and television programs, including advertising materials, with the end view of determining the different levels of audience stability and appreciation.

On the other hand, the video boom in the country in the 80s necessitated the creation of regulatory body for the videogram industry, thus, the creation of the Videogram Regulatory Board (VRB) on October 5, 1985. In summary, the function of the VRB is to oversee the regulation and development of the video industry as a wholesome medium of entertainment for the people. In addition,

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being an administrative agency, it is vested with powers to support its regulatory activity classified as follows:

a) Power of rule-making or the power to promulgate rules and regulations;
b) Power of adjudication or the power to hear and determine or ascertain facts; and
c) Determinative power which is similar to quasi-judicial power.

For more details on MTRCB and VRB, and statistics on movies, videograms, and video establishments, see Section on "The Motion Picture Industry of Chapter 6 - Education and Culture.

20.5 Advertising

Advertising is an integral part of the communications sector and is prevalent in the different communication media, such as radio, television, movies and the print media. It also comes in the form of posters, photo stills, including still frames, newspaper layouts and billboards. In recent years advertising has also become available in vidiwall, which is an audio-visual advertising using advanced professional electronic system, transit advertising, movie link, which is an in-room movie entertainment in selected hotel establishments, cable TV and storecasting, which uses piped-in music facilities to reach shoppers at the point of sale in major supermarkets and department stores.

The advertising industry continued to flourish based on advertising expenditures, which grew by an average of 19.73 percent in the last three years (1990-1992). The highest growth was achieved in 1992 with a growth rate of 28.46 percent, from P5,171.6 million in 1991 to P6,643.3 million in 1992. Television billings remained the top grosser with P4,324.8 million expenditures, or 65.10 percent of the total. See Table 20.17.

Sources:

20.1.1 National Telecommunications Commission; Telecommunications Office. *Philippine Electronics and Communications Federation (PETEF) Yearbook, 1989.* PETEF Facts & Directory, 1993 - 1994.

20.1.2 National Telecommunications Commission; Philippine Long Distance Telephone Company.

20.1.3 *Philippine Electronics and Telecommunications Federation Yearbook 1987-1988;* Philippine Communication Satellite (PHILCOMSAT).

20.1.4 Association of Accredited Advertising Agencies of the Philippines. *Media Factbook, 1993-1994.*

20.1.5 National Telecommunications Commission. Philippine Panorama, May 15, 1994.

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20.2 Postal Services Office.
20.3 Association of Accredited Advertising Agencies of the Philippines. *Media Factbook, 1993-1994.*
20.4 Movie and Television Review and Classification Board; Videogram Regulatory Board.
20.5 *Advertising Media Expenses Report*, 1991-1992; Advertising Board of the Philippines, Inc.

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Table 20.1 Stations Maintained by the Telecommunications Office: 1989 - 1993

Year	Telegraph stations	Telephone exchanges
1989	1,601	45
1990	1,660	27
1991	1,660	27
1992	1,662	27
1993	1,661	20

Source: Telecommunications Office.

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Table 20.2 Telephone Distribution by Major Operator: 1991 - 1993

Operator	Number of central offices (exchanges)	Total capacity
1991		
Total	281	788,930
Philippine Long Distance Telephone Co.	133	690,267
Telecommunications Office	26	10,390
Filphone	16	10,746
Pilipino Telephone Co.	8	19,100
Northern Telephone Co.	8	630
Southern Telephone Co.	8	1,775
Davao City Telephone Co.	7	3,700
Cruz Telephone Co.	6	5,220
Datelcom Corp.	6	5,800
General Telephone System	5	1,600
Other Operators	58	39,702
1992		
Total	349	887,229
Philippine Long Distance Telephone Co.	156	748,033
Telecommunications Office	26	9,500
Pilipino Telephone Co.	8	16,830
Department of Transportation and Communications/ Government Regional Telephone System	65	20,726
Provincial/Government Operators	4	15,500
Other Operators	90	76,640
1993		
Total	401	950,342
Philippine Long Distance Telephone Co.	175	808,371
Regional Development Telephone Program (RTDP/Digitel) 81	19,164	
National Telephone Program (NTP/Digitel)	9	8,250
Telecommunication Office	20	8,250
Cruz Telephone Co.	12	10,300
Pilipino Telephone Co.	8	16,830
Datelcom Corp	6	4,600
Digital Telecommunications Philippines Inc (Digitel)	5	13,142
Provincial/Government Operators	5	13,142
Other Operators	80	48,293

Source: National Telecommunications Commission.

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Table 20.3 Telephone Distribution by Region: December 1993

Region	Capacity	Total connections	Telephone density/ 100 population
Philippines	941,632	1,365,330	2.201
National Capital Region (NCR)	603,996	1,010,532	13.203
I. Ilocos	33,171	26,503	0.624
II. Cagayan Valley	6,492	9,922	0.357
III. Central Luzon	57,936	50,524	0.779
IV. Southern Tagalog	57,483	68,066	0.858
V. Bicol	9,850	9,083	0.219
VI. Western Visayas	33,836	42,362	0.896
VII. Central Visayas	53,596	76,395	0.747
VIII. Eastern Visayas	9,150	8,647	0.291
IX. Western Mindanao	12,302	14,856	0.423
X. Northern Mindanao	17,888	14,961	0.353
XI. Southern Mindanao	35,682	25,070	0.487
XII. Central Mindanao	10,250	8,409	0.222

Source: National Telecommunications Commission.

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Table 20.4 Traffic Volume Transactions of Domestic Telegraph: 1993

Operator	Number of telegraphic stations	Traffic volume (messages)
Total	45	7,961,515
Philippine Telegraph and Telephone Co.	27	4,600,171
Radio Communications of the Philippines, Inc.	n.a.	3,102,062
BFC Communications	n.a.	n.a.
Universal Telecommunication Inc	18	259,282

Source: National Telecommunications Commission.

Table 20.5 Traffic Volume Transactions of Domestic Telex: 1993

Operator	Number of switching centers/ exchanges	Telex lines capacity	Traffic volume (minutes)	Number of subscribers
Total	-	-	1,958,511	877
Philippine Telegraph and Telephone Co.	n.a.	n.a.	998,071	849
Radio Communications of the Philippines, Inc.	n.a.	n.a.	960,440	28

Source: National Telecommunications Commission.

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Table 20.6 Traffic Volume Transactions of International Record Carriers: 1990 - 1993

Operator	Telex subscribers	Telex volume (minutes)	Telegraph (words)	Facsimile (pages)	TV (Minutes)	Mailgram
1990						
Total	5,624	4,584,158	1,392,351	331,137	4,117	302,728
Phil. Global Communications Inc.	2,380	1,862,403	490,060	290,449	4,117	65
Eastern Telecommunications Phils., Inc	2,689	1,815,500	n.a.	31,100	n.a.	298,000
Capitol Wireless Inc.	555	906,255	902,291	9,588	n.a.	4,663
1991						
Total	4,413	4,160,834	897,780	302,221	3,839	175,232
Phil. Global Communications Inc.	2,060	1,584,504	n.a.	[b]291,195	1,509	103
Eastern Telecommunications Phils., Inc.	2,027	1,688,200	n.a.	n.a.	n.a.	170,000
Capitol Wireless Inc.	326	[b]888,130	[b]897,780	[b]11,026	2,330	5,129

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Table 20.6 Traffic Volume Transactions of International Record Carriers: 1990 - 1993 (concluded)

Operator	Telex subscribers	Telex volume (minutes)	Telegraph (words)	Facsimile (pages)	TV (Minutes)	Mailgram
1992						
Total	973	1,315,709	-	481,394	-	48,706
Phil.. Global Comminications Inc.	973	1,315,709	n.a.	[a]481,394	n.a.	71
Eastern Telecommunications Phils., Inc.	n.a	n.a.	n.a.	n.a.	n.a	n.a.
Capitol Wireless Inc.	n.a	n.a.	n.a.	n.a.	n.a	48,635
1993						
Total	4,910	1,576,983.50	660,965.82	608,482	3,740	24
Phil. Global Comminications Inc.	576	1,076,881	19,803	600,660	3,740	24
Eastern Telecommunications Phils., Inc.	4,084	1,060.50	147.82	n.a.	n.a.	n.a
Capitol Wireless Inc.	250	499,042	641,015	7,822	n.a.	n.a

[a] Includes all type of fax services.
[b] Estimates.

Source: National Telecommunications Commission.

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
National Capital Region (NCR)			
AM Band stations			
	DZXL-AM	558 KHZ	Tag./Eng.
	DZBB	594	Tag./Eng.
	DZMM	630	Tag./Eng.
	DZRH	666	Tag./Eng.
	DZAS	702	Tag./Eng.
	DZFM	738	Tag./Eng.
	DWOO	774	English
	DZRJ	810	English
	DZNN	846	Unknown
	DWIZ	882	English
	DZRB	918	Tag./Eng.
	DZEM	954	Tag./Eng.
	DWRT	990	Tag./Eng.
	DZAM	1026	Tag./Eng.
	DZEC	1062	Tag./Eng.
	DWAD	1098	Tag./Eng.
	DWDD	1134	Unknown
	DWAN	1206	Tag./Eng.
	DWBL	1242	English
	DZRM	1278	Tag./Eng.
	DWXI	1314	Tag./Eng.
	DZXQ	1350	English
	DWBC	1422	English
	DWSS	1494	Unknown
	DZUP	1592	Tag./Eng
	DZHH	1566	Tagalog
FM Band stations			
	DWCT-FM	88.3 MHZ	English
	DZMZ	89.1	Unknown
	DWTM	89.9	English
	DZMB	90.7	English
	DWKY	91.5	English
	DWFM	92.3	English
	DWRX	93.1	English
	DWKC	93.9	English
	DWLL	94.7	English
	DWDM	95.5	Tag./Eng.
	DWRK	96.3	English
	DWLS	97.1	English
	DWCD	97.9	English

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993 (continued)

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
	DZFE	98.7	English
	DWRT	99.5	English
	DZRJ	100.3	English
	DWKS	101.1	English
	DZRR	101.9	English
	DWSM	102.7	English
	DWCS	103.5	English
	DWBR	104.3	English
	DZBM	105.1	English
	DWLA	105.9	Unknown
	DWET	106.7	Unknown
	DWNU	107.5	English
	DWBM	2105.1	Unknown
Cordillera Administrative Region (CAR)			
Abra			
Bangued	DZPA-AM	873	Tag./Iloc./Eng.
	DWWM-FM	96.9	English
Benguet			
Baguio	DZWT-AM	540	Tag./Eng.
	DZEQ	999	Tag./Eng.
	DZWX	1035	Tag./Eng.
	DZBS	1368	Tag./Eng.
	DWIM-FM	89.5	English
	DWKS	96.7	Unknown
	DZWR	99.9	Tag./Eng.
	DZYB	102.3	English
	DZRR	103.1	Tag./English
	DWHB	103.9	English
	DWMB	106.3	Unknown
Kalinga-Apayao			
Tabuk	DZRK-AM	1323	Tag./Iloc./Eng.
I. Ilocos			
Ilocos Norte			
Batac	DZRL-AM	639	Tag./Iloc./Eng.
Laoag	DWLW-AM	675	Ilocano
	DZJC	747	Tag./Iloc.
	DWRI	819	Tag./Iloc.Eng.
	DZEA	909	Tag./Ilocano
	DZVR	1053	Tag./Iloc./Eng.

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993 (continued)

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
	DWIL-FM	90.7	English
	DWSN	97.9	English
	DWHP	99.5	English
Ilocos Sur			
Vigan	DZVV-AM	603	Tag./Iloc./Eng.
	DWRS	927	Tag./Iloc.
	DZXE	937	Ilocano
	DZNS	963	Tag./Ilocano
	DWIS-FM	98.9	English
La Union			
San Fernando	DZLU-AM	657	Tag./Iloc./Eng.
	DZSO	720	Tag./Iloc./Eng.
	DZNL	783	Tag./Iloc./
	DZYR	1359	Tag./Iloc./Eng.
	DWLU-FM	88.7	Iloc./Eng.
	DWAA	105.5	English
Pangasinan			
Alaminos	DZWM	891	Tag./Pang
Dagupan	DZRD-AM	981	Tag./Pang./Eng.
	DWDW	1017	Tag./Pang.
	DWIN	1080	Tag./Pang.
	DZWN	1125	Tag./Iloc./Eng.
	DWCM	1161	Tag./Pang.
	DZMQ	1224	Tag./Iloc./Eng.
	DWPR	1296	Tag./Iloc./Eng.
	DWKT-FM	90.3	Pang./Eng.
	DWZI	92.1	English
	DWEC	94.3	Tag./Iloc./Eng.
	DWID	99.5	English
	DWHY	100.7	Unknown
	DWON	104.7	English
	DWHT	107.9	Unknown
	DZMQ	-	-
	DWTL	-	-
Rosales	DWMC - AM	1260	Tag./Iloc./Pang./Eng.
Urdaneta	DZAI - FM	92.1	Unknown
II. Cagayan Valley			
Cagayan			
Tuguegarao	DZTG-AM	612	Tag./Iloc./Eng.
	DZCV	684	Tag./Iloc./Eng.

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993 (continued)

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
	DWPE	729	Tag./Iloc./Eng.
	DZYT	765	Tag./Iloc./Eng.
	DWRJ-FM	96.5	English
	DWXY	100.5	English
Isabela			
Cauayan	DZNC-AM	801	Tag./Iloc./Eng.
	DWDY	1107	Tag./Iloc.
	DWND-FM	88.7	English
	DWWWC	95.3	Tag./Iloc./Iloc
Ilagan	DZYI-AM	711	Tag./Iloc./Eng
	DWRS	-	-
	DXRI-FM	98.3	Unknown
Santiago	DWSI-AM	846	Tag./Iloc.
	DZYS	981	Tag./Iloc.
	DWIP-FM	91.9	English
	DWKB	99.3	Unknown
Nueva Vizcaya			
Solano	DWMG-AM	1395	Tag./Iloc./Eng.
	DWDC-FM	101.3	English
III. Central Luzon			
Nueva Ecija			
Cabanatuan	DWNE	900	Tag./Eng.
	DZXO	1188	Tag./Eng.
	DWAY	1322	Tag./Eng.
	DWYC-FM	88.7	Unknown
	DWWG	101.5	English
Cabanatuan(Off-Air)	DWAU-AM	684	Tag./Eng.
Pampanga			
Angeles	DZYA	1476	Tag./Pam.
	DWGV-FM	99.1	English
Tarlac			
Tarlac	DZTC-AM	828	Tag./Pam./Iloc.
	DZXT	936	Tag./Iloc./Eng.
	DWXT-FM	96.1	Tag./Iloc./Eng.
	DZXT	-	Unknown
Zambales			
Iba	DWRF-AM	1458	Tag./Eng.
Olongapo	DWHL-AM	756	Tag./Eng.

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993 (continued)

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
	DZOR	1404	Tag./Eng.
	DWGO	1044	Tag./Eng.
	DWSL	96.7	English
IV. Southern Tagalog			
Batangas			
Batangas	DZBR-AM	531	Tagalog
	DWAM	1080	Tag./Eng.
Laguna			
Los Baños	DZLB-AM	1116	Tag./Eng.
San Pablo	DZSP-AM	864	Tag./Eng.
	DWJY-FM	94.3	English
Mindoro Oriental			
Calapan	DZDM-AM	1440	Tag./Eng.
Mindoro Occidental			
Baco	DZBZ-FM	3.3	Unknown
San Jose	DZVT-AM	1395	Tag./Eng.
	DZYM	1539	Tag./Eng.
Palawan			
Puerto Princesa	DYMR-AM	765	Tagalog
	DYPR-FM	99.9	English
	DYPR	-	English
Quezon			
Infanta	DZJO-AM	720	Tag./Eng.
	DZJO-FM	-	-
Lucena	DWLC	98.3	Tagalog
	DWTI-AM	972	Tag./Eng.
	DZEL	1053	Tag./Eng.
	DZLT	1188	Tag./Eng.
	DWLQ	1296	Tag./Eng.
	DWKL-FM	92.7	English
	DWKI	95.1	English
	DWLM	96.7	English
	DWVM	103.9	Tag./Eng
V. Bicol			
Albay			
Legaspi	DWAS-AM	1125	Tag./Eng.
	DWGV	684	Bicol

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993 (continued)

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
	DZGB	729	Tag./Bic./Eng.
	DWZR	828	Tag./Bic./Eng.
	DZRC	873	Bicol
	DWRL	1080	Tag./Bic./Eng.
	DWGW	-	-
	DWDA-FM	90.7	English
	DWRC	95.5	English
	DWGB	97.1	Bicol
	DWMR	97.9	English
	DWCM	98.3	English
Tabaco	DWBS-AM	1008	Bicol/Tagalog
Camarines Norte			
Daet	DZMD-AM	1161	Tag./Bic./Eng.
	DZVX	1269	Tag./Bic./Eng.
	DWEN-FM	100.5	Tag./Eng.
Camarines Sur			
Naga	DWLV	602	Tag./Bic.
	DWRN	657	Tag./Bic.
	DWNW	756	Tag./Bic.
	DZGE	855	Tag./Bic.
	DZDR	1044	Tag./Bic./Eng.
	DZNG	1044	Unknown
	DXRB	-	-
	DZRB-FM	95.9	English
	DWEB	99.9	English
	DWMY	90.3	Tag./Bic./Eng.
	DWNX	91.1	Tag./Bic./Eng.
	DWYN	99.1	Tag./Bic./Eng.
Iriga	DZAL-AM	954	Tag./Bic./Eng.
	DZKI	1332	Tag./Bic./Eng.
Catanduanes			
Virac	DZVC	621	Tag./Eng.
Masbate			
Masbate	DYME-AM	783	Tag./Eng.
	DYME-FM	95.9	Tag./Eng.
Sorsogon			
Sorsogon	DWFA-AM	801	Tag./Bic./Eng.
	DZMS	1251	Tag./Bic./Eng.
	DZRS	1287	Tag./Bic./Eng.
	DZGN-FM	102.3	English
	DWOL	102.3	Unknown

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993 (continued)

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
VI. Western Visayas			
Aklan			
Kalibo	DYRG-AM	1250	Tag./Ilon./Eng.
	DYKR	1161	Tag./Ilon./Eng.
Antique			
San Jose	DYKA-AM	801	Ilon./Eng.
	DYCX	-	Unknown
Capiz			
Roxas	DYRO-AM	945	Ilonggo
	DYJJ	1286	Ilon./Eng.
	DYOW	-	-
	DYVR-FM	93.9	English
	DYKP	97.3	Unknown
	DYRX	103.7	Unknown
Iloilo			
Iloilo City	DYCI-AM	594	Ilon./Eng.
	DYOK	720	Ilon./Eng.
	DYFM	837	Ilon./Eng.
	DYBQ	981	Ilon./Eng.
	DYRP	1017	Ilon./Eng.
	DYSA	1053	Tag./Ilon.
	DYRI	1107	Tag./Ilon.
	DYXX	1323	Ilon./Eng.
	DYMC-FM	91.1	Unknown
	DYMK	93.5	English
	DYIC	95.1	English
	DYMB	97.5	English
	DYRF	99.5	English
	DYRJ	98.7	English
	DYOZ	100.7	English
	DYNY	107.9	Unknown
Negros Occidental			
Bacolod	DYEZ-AM	684	Ilon./Eng.
	DYHB	747	Ilon./Eng.
	DYRH[1]	1197	Ilon./Eng.
	DYVS	1233	Tag./Ilon.
	DYMB	1269	Ilon./Eng.
	DYRL	1341	Ilon./Eng.
	DYKB	1404	Ilon./Eng.
	DYCP-FM	90.3	Ilon./Eng.

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993 (continued)

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
	DYKS	91.9	Unknown
	DYEC	92.7	Unknown
	DYHT	94.3	Unknown
	DYIF	95.9	English
	DYRK	98.3	Ilon./Eng.
	DYKY	99.0	Unknown
	DYRR	101.5	Unknown
	DYBC	102.3	Ilon./Eng.
	DYMG	103.1	Ilon./Eng.
	DYBE	-	-
	DYKR	-	-
	DYOO	-	-
Binalbagan	DYKW-AM	936	Ilon./Eng.
Cadiz	DYAG-AM	639	Ceb./Ilon./Eng.
San Carlos	DYRS-AM	1431	Ceb./Eng.
VII. Central Visayas			
Bohol			
Tagbilaran	DYXT-AM	1071	Tag./Ceb./Eng.
	DYTR	1116	Tag./Ceb./Eng
	DYRD	1161	Ceb./Eng.
	DYTR-FM	91.9	English
	DYRD	102.7	English
Cebu			
Cebu City	DYRB	540	Cebuano
	DYMR	576	English
	DYHP	612	Cebuano
	DYCB	765	English
	DYLA	909	Cebuano
	DYRC	963	Cebuano
	DYSS	999	Cebuano
	DYMF	1260	Cebuano
	DYRF	1215	Tag./Ceb./Eng.
	DYIP-FM	89.1	Unknown
	DYAC	90.7	Ceb./English
	DYBN	92.3	Unknown
	DYWF	93.1	English
	DYXL	93.9	English
	DYLL	94.7	Unknown
	DYMX	95.5	Unknown
	DYRK	96.3	Unknown
	DYLS	97.1	Unknown
	DYBU	97.9	English
	DYPR	98.7	Unknown

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993 (continued)

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
	DYFX	1305.0	Unknown
	DYFR	98.7	English
	DYRT	99.5	English
	DYIO	101.1	English
	DYNC	101.9	English
	DYNU	107.5	Unknown
	DYBN	-	-
Cebu (Bogo)	DYCM-FM	-	-
Mandaue	DYKC-AM	675	Tag./Eng.
Negros Oriental			
Dumaguete	DYWC-AM	801	Ceb./Eng.
	DYSR	891	Ceb./Eng.
	DYRM	1134	Ceb./Eng.
	DYCM	-	Unknown
	DYGB-FM	91.7	Unknown
	DYSR-FM	95.1	Unknown
	DYEM	96.7	Ceb./Eng.
	DYMY	106.3	Unknown
VIII. Eastern Visayas			
Leyte			
Maasin	DYDM-AM	1548	Unknown
Ormoc	DYRR-AM	1548	Cebuano
Sogod	DVSL-AM	1359	Tag./War./Eng.
Tacloban	DYMN-AM	594	Tag./Ceb./Eng.
	DYBR	711	Tag./War./Eng.
	DYVL	819	Tag./War./Eng.
	DYMY	1413	Unknown
	DYWR	1476	Unknown
	DYTM-FM	91.1	Unknown
	DYKT	93.9	Unknown
	DYTX	95.1	Unknown
	DYDR	100.7	English
	DYXY	-	-
Samar			
Borongan	DYVW	1386	Unknown
	DYES	-	-
Calbayog	DYCC-AM	966	Tag./War./Eng.
	DYHR	1089	Tag./War.
	DYOG	-	Unknown
Catbalogan	DYMS-AM	1044	Tag./War./Eng.

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993 (continued)

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
	DYRV	1188	Tag./War.
Catarman	DYSM-AM	972	Tag./War.
IX. Western Mindanao			
Sulu			
Bongao	DXGD-AM	549	Unknown
Jolo	DXMM-AM	927	Samal
	DXSM	-	-
	DXSM-FM	-	-
Tawi-tawi	DXMI-AM	549	Tausog
	DXRR	-	-
Zamboanga del Norte			
Dipolog	DXDR-AM	981	Chav./Eng.
	DXKD	1053	Chav./Eng.
Zamboanga del Sur			
Basilan	DXRS-AM	-	-
Pagadian	DXPR-AM	603	Ceb./Eng.
	DXKP	1377	Ceb./Eng.
Zamboanga City	DXSC-AM	819	Chav./Eng.
	DXRZ	900	Tag./Ceb.
	DXYZ	963	Tag./Ceb./Chav.
	DXXX	1008	Tag./Ceb.
	DXLL	1044	Tag./Ceb.
	DXRH	1080	Unknown
	DXAS	1116	Tag./Ceb.
	DXMR	1170	Tag./Ceb.
	DXZB	1242	Tag./Ceb.
	DXVP	1467	Unknown
	DXKZ-FM	91.5	Unknown
	DXWR	93.9	Unknown
	DXEL	95.5	Unknown
	DXCM	97.9	Unknown
	DXLA	99.5	Ceb./Eng.
	DXTY	101.1	Ceb./Eng.
X. Northern Mindanao			
Agusan del Norte			
Butuan	DXBC-AM	693	Ceb./Eng.
	DXJM	756	Tag./Ceb./Eng.
	DXRB	873	Tag./Ceb./Eng.

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993 (continued)

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
	DXBN	-	-
	DXGL-FM	88.7	Ceb./Eng.
	DXMB	95.1	Unknown
	DXEY	96.7	Unknown
	DXMK	97.5	Unknown
	DXBB	98.5	Unknown
	DXYZ	110.7	Unknown
Agusan del Sur			
San Fernando	DXDA-AM	-	-
Bukidnon			
Bukidnon	DXMU	1134	Unknown
Malaybaly	DXDB-AM	594	Unknown
	DXMB	648	Ceb./Eng.
	DXMV	1134	Unknown
Musuan	DXMU-AM	1422	Ceb./Eng.
Valencia	DXMV-FM	1134	Ceb./Eng.
	DXCR-AM	1386	Ceb./Eng.
Camiguin			
Camiguin	DXLL	-	-
Misamis Occidental			
Ozamis	DXDD-AM	657	Cebuano
	DXSY	1242	Tag./Ceb./Eng.
	DXOC	1494	Cebuano
	DXLM-FM	97.5	Unknown
	DXDD	100.7	Ceb./Eng.
Misamis Oriental			
Cagayan de Oro	DXOR-AM	729	Ceb./Eng.
	DXCC	828	Ceb./Eng.
	DXIM	936	Ceb./Eng.
	DXCD	1044	Ceb./Eng.
	DXCL	1098	Ceb./Eng.
	DXIF	1188	Unknown
	DXKO	1368	Ceb./Eng.
	DXEQ-FM	90.3	Unknown
	DXWZ	94.3	Unknown
	DXKS	96.9	Unknown
	DXVM	99.1	English
	DXKR	99.9	Unknown
	DXRK	99.9	English
	DXRL	101.5	English

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993 (continued)

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
Gingoog City	DXRG-AM	882	Ceb./Eng.
Surigao del Norte			
Surigao City	DXSN-AM	1017	Cebuano
	DXKS	1080	Tag./Ceb./Eng.
	DXRS	1207	Tag./Ceb./Eng.
	DXSJ	93.3	Unknown
XI. Southern Mindanao			
Davao del Norte			
Tagum	DXDN-AM	936	Tag./Ceb./Eng.
Davao del Sur			
Digos	DXML-AM	1044	Tag./Ceb./Eng.
	DXDS	1161	Tag./Ceb./Eng.
Davao City	DXHM	549	Unknown
	DXDC-AM	621	Tag./Ceb./Eng.
	DXRD	711	Tag./Ceb./Eng.
	DXRA	783	Tag./Ceb./Eng.
	DXUM	819	Tag./Ceb./Eng.
	DXOW	981	Ceb./Eng.
	DXKT	1071	Tag./Ceb./Eng.
	DXFE	1197	Ceb./Eng.
	DXED	1224	Tag./Ceb./Eng.
	DXMF	5765	Tag./Ceb.
	DZRP	-	-
	DXGN-FM	89.9	English
	DXBM	90.7	English
	DXWT	92.3	English
	DXXL	93.9	English
	DXLL	94.7	Unknown
	DYRK	95.5	Unknown
	DXSS	97.9	English
	DXOZ	99.5	Unknown
	DXRR	101.1	-
	DXFM	101.9	English
	DXIP	900.0	-
	DXTM	-	-
	DZPP	-	-
	DXKR	-	-
South Cotabato			
General Santos	DXCP-AM	585	Tag./Ceb./Eng.

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993 (continued)

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
	DXDX-AM	693	Tag./Ceb.
	DXGS	765	Cebuano
	DXRE	837	Tag./Ceb./Eng.
	DXMD	-	-
	DXXB-FM	95.3	English
	DXOO	97.5	English
	DXRT	99.1	Unknown
	DXWk	101.5	Unknown
Marbel	DXKR-AM	639	Tag./Ceb./Eng.
	DXKI	1062	Unknown
Surigao del Sur			
Bislig	DXBL-AM	801	Tag./Ceb./Eng.
	DXHP	999	Tag./Ceb./Eng.
	DXGR-FM	89.3	Unknown
	DXJR	-	-
Tandag	DXKS-AM	-	-
XII. Central Mindanao			
Lanao del Norte			
Iligan	DXIC-AM	711	Cebuano
	DXWG	855	Cebuano
	DXCS-FM	92.7	Unknown
	DXRI	98.3	Cebuano
	DXIX	102.3	Unknown
	DXIL	103.1	Unknown
Lanao del Sur			
Marawi	DXSO-AM	774	Cebuano
	DXRM	1449	Cebuano
Maguindanao			
Cotabato City			
	DXMS-AM	887	Mus./Tag./Eng.
	DXRO	945	Tag./Ceb.
	DXCM	1089	Tag./Ceb.
	DXMY	-	-
	DXMC	-	-
	DXOL-FM	92.7	Tag./Eng.
	DYOK	94.7	English

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Table 20.7 List of Operating Radio Stations in the Philippines: As of August 1993 (concluded)

Region/province	Station	Frequency (KHZ/ MHZ)	Language/ dialect
North Cotabato			
Kidapawan	DXND-AM	747	Cebuano
	DXDM-FM	88.7	Unknown

[1] Off air.

Source: Association of Accredited Advertising Agencies of the Philippines. Media Fact Book1994.

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Table 20.8 Existing Radio Stations in the Philippines by Region and by Type of Service: As of August 1993

Type of service	Philippines	National Capital Region	Region I Ilocos	Region II Cagayan	Region III Central Luzon	Region IV Southern Tagalog	Region V Bicol
Total	85,025	31,811	3,382	1,757	6,365	5,283	1,726
Citizen's band	157	0	0	0	0	0	0
Amateur	22,933	8,868	758	43	2,294	1,910	486
Portable	9,493	3,871	349	38	701	703	154
Land mobile	11,374	7,255	323	684	397	291	125
Land base	3,873	2,021	121	50	356	288	80
Repeater	371	71	23	40	9	58	8
Ship	3,498	2,099	5	0	12	44	78
Coast	741	622	1	0	10	1	6
Aircraft	505	463	0	0	0	2	4
Aeronautical	91	11	4	4	1	1	22
Radio school	128	18	14	3	9	11	15
Government	4,468	957	564	234	112	76	269
AM Broadcast	273	28	35	10	18	18	24
FM Broadcast	169	25	29	6	8	2	19
SW Broadcast	5	2	0	0	3	0	0
Television	68	6	0	0	0	1	8
TV Relay and X Lator	70	0	7	3	10	28	0
Point to point CV	7,502	2,892	368	203	118	960	220
Point to point CP	1,263	210	123	143	28	0	144
Radio Navigation	24	0	0	2	0	0	4
Cellular Base/PRS BASE	7	0	0	0	2	0	0
Cellular Mobile/PRS MOB	5,599	927	143	80	903	216	21
Spl Sta/Prs Porta	12,413	1,465	515	214	1,374	673	39

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Table 20.8 Existing Radio Stations in the Philippines by Region and by Type of Service: As of August 1993 (concluded)

Type of service	Region VI Western Visayas	Region VII Central Visayas	Region VIII Eastern Visayas	Region IX Western Mindanao	Region X Northern Mindanao	Region XI Southern Mindanao	Region XII Central Mindanao
Total	7,124	9,779	1,202	2,127	5,808	6,597	2,064
Citizen's band	5	5	0	7	25	104	11
Amateur	1,735	2,074	459	512	1,511	1,340	943
Portable	180	1,865	13	57	519	986	57
Land mobile	325	566	34	63	421	861	29
Land base	94	468	3	65	122	150	55
Repeater	28	59	4	6	15	46	4
Ship	422	409	12	74	7	316	20
Coast	31	24	0	6	2	36	2
Aircraft	5	14	0	4	4	9	0
Aeronautical	5	6	4	14	6	11	2
Radio school	12	6	3	5	10	13	9
Government	389	738	290	252	139	295	153
AM Broadcast	26	18	17	17	28	26	8
FM Broadcast	22	22	5	7	11	9	4
SW Broadcast	0	0	0	0	0	0	0
Television	6	10	0	18	9	8	2
TV Relay and X Lator	3	7	2	0	10	0	0
Point to point CV	537	761	154	224	379	620	66
Point to point CP	207	177	25	138	0	56	12
Radio Navigation	16	0	0	0	0	1	1
Cellular Base/PRS BASE	2	2	0	0	1	0	0
Cellular Mobile/PRS MOB	952	765	19	91	1,214	205	63
Spl Stn/Prs Porta	2,122	1,783	158	567	1,375	1,505	623

Source: National Telecommunications Commission.

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Table 20.9 Television Stations by Area and Network: 1993

Region/location	Total number of stations	ABS-CBN	PTV4	GMA	RPN	IBC	ABC	SBN
Total	112	-	-	-	-	-	-	-
National Capital Region (NCR)	7	1	1	1	1	1	1	1
Luzon	32	6	2	17	3	2	2	-
Baguio, Benguet	5	1	1	-	1	1	1	-
Mt. Carlos	1	1	-	-	-	-	-	-
Mt. Sto. Tomas	1	-	-	1	-	-	-	-
Pasuquin, Ilocos Norte	1	-	-	1	-	-	-	-
San Nicolas, Ilocos Norte	1	-	-	1	-	-	-	-
Bayombong	2	-	-	-	1	1	-	-
Mt. Amuyao	1	-	-	1	-	-	-	-
Botolan, Zambales	1	1	-	-	-	-	-	-
Iba, Zambales	1	-	-	1	-	-	-	-
Olongapo	2	1	-	1	-	-	-	-
Batangas	1	-	-	1	-	-	-	-
Tagaytay	1	-	-	1	-	-	-	-
Marinduque	1	-	-	1	-	-	-	-
Mindoro	1	-	-	1	-	-	-	-
Palawan	1	-	-	1	-	-	-	-
Naga	4	1	1	1	-	-	1	-
Iriga	2	-	-	1	1	-	-	-
Legaspi	1	-	-	1	-	-	-	-
Malilipot, Albay	1	-	-	1	-	-	-	-
Masbate	2	1	-	1	-	-	-	-
Virac	1	-	-	1	-	-	-	-
Visayas	28	2	3	9	7	6	1	-
Tacloban	2	-	-	-	1	1	-	-
Capookan, leyte	1	-	-	1	-	-	-	-
Isabel, Leyte	1	-	-	1	-	-	-	-
Bagacay	1	-	-	-	1	-	-	-
Cebu	6	1	1	1	1	1	1	-
Bohol	2	-	-	1	-	1	-	-
Barile	1	-	-	1	-	-	-	-
Dumaguete	3	-	1	1	1	-	-	-
Bacolod	5	1	1	1	1	1	-	-
Iloilo	2	-	-	-	1	1	-	-
Antique	2	-	-	1	1	-	-	-
Roxas	2	-	-	1	-	1	-	-

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Table 20.9 Television Stations by Area and Network: 1993 (concluded)

Region/location	Total number of stations	ABS-CBN	PTV4	GMA	RPN	IBC	ABC	SBN
Mindanao	45	5	5	8	12	11	4	-
Cagayan de Oro	4	-	-	1	1	1	1	-
Surigao	2	-	-	-	1	1	-	-
Butuan	3	-	-	1	1	1	-	-
Bukidnon	1	-	-	1	-	-	-	-
Ozamis	4	1	-	1	1	1	-	-
Oroquieta	1	-	-	-	1	-	-	-
Davao	6	1	1	1	1	1	1	-
Bislig	1	-	-	-	-	1	-	
Mati	1	-	-	-	-	1	-	-
General Santos	3	-	-	-	1	1	1	-
Marbel	2	-	-	-	1	1	-	-
Cotabato	2	-	-	1	1	-	-	-
Iligan	2	-	-	1	-	1	-	-
Dipolog	1	-	1	-	-	-	-	-
Pagadian	3	1	1	-	1	-		-
Zamboanga	6	1	1	1	1	1	1	-
Jolo	3	1	1	-	1	-	-	-

Source: Association of Accredited Advertising Agencies of the Philippines. Media Factbook 1993-1994.

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Table 20.10 Statement of Mail Volume Handled: 1990 - 1992
(Thousand)

Particulars	1990	1991	1992
Volume of mail handled	804,048	980,570	1,156,757
Mail posted in the Philippines	637,389	804,855	958,752
Domestic mail	488,071	589,996	775,551
Outgoing foreign mail	149,318	214,859	183,201
Surface mail	2,551	1,946	1,621
Airmail	146,767	212,913	181,580
Received from foreign countries	166,659	175,715	198,005
Surface mail	72,928	72,825	72,961
Airmail	93,731	102,890	125,044

Source: Postal Services Office.

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Table 20.11 Summary of Mails Posted in the Philippines by Region: 1992

Region	All mails	Domestic mails			Outgoing foreign mails		
		Total	Registered/ recorded	Nonrecorded	Total	Registered/ recorded	Nonrecorded
Philippines	958,746,247	775,550,600	51,468,633	724,081,967	183,195,647	1,960,600	181,235,047
National Capital Region (NCR)	831,504,431	677,236,969	23,903,804	653,333,165	154,267,462	1,038,330	153,229,132
Cordillera Administrative Region (CAR)	3,689,788	3,122,481	492,951	2,629,530	567,307	23,972	543,335
I. Ilocos	10,602,969	6,836,425	2,481,949	4,354,476	3,766,544	69,268	3,697,276
II. Cagayan Valley	4,145,371	3,089,387	745,755	2,343,632	1,055,984	42,385	1,013,599
III. Central Luzon	23,160,742	15,904,582	5,478,170	10,426,412	7,256,160	196,423	7,059,737
IV. Southern Tagalog	20,993,626	14,481,029	4,479,680	10,001,349	6,512,597	212,303	6,300,294
V. Bicol	8,277,480	7,100,221	2,429,701	4,670,520	1,177,259	18,552	1,158,707
VI. Western Visayas	10,922,505	9,378,064	2,298,282	7,079,782	1,544,441	75,774	1,468,667
VII. Central Visayas	13,290,803	10,188,195	2,240,968	7,947,227	3,102,608	89,601	3,013,007
VIII. Eastern Visayas	6,186,922	5,336,789	1,390,441	3,946,348	850,133	14,259	835,874
IX. Western Mindanao	5,013,558	4,501,176	1,576,325	2,924,851	512,382	79,320	433,062
X. Northern Mindanao	8,589,911	7,451,550	1,651,701	5,799,849	1,138,361	38,549	1,099,812
XI. Southern Mindanao	9,048,956	7,978,468	1,754,742	6,223,726	1,070,488	41,522	1,028,966
XII. Central Mindanao	3,319,185	2,945,264	544,164	2,401,100	373,921	20,342	353,579

Source: Postal Services Office.

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Table 20.12 Distribution of Post Offices by Region: 1992

Region	Total	Regular post office	Postal station
Total	2,147	2,040	107
National Capital Region (NCR)	92	83	9
Cordillera Administrative Region (CAR)	99	93	6
I. Ilocos	154	143	11
II. Cagayan Valley	126	107	19
III. Central Luzon	160	156	4
IV. Southern Tagalog	266	255	11
V. Bicol	171	161	10
VI. Western Visayas	180	168	12
VII. Central Visayas	170	170	-
VIII. Eastern Visayas	189	180	9
IX. Western Mindanao	145	142	3
X. Northern Mindanao	151	147	4
XI. Southern Mindanao	120	116	4
XII. Central Mindanao	124	119	5

Source: Postal Services Office.

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Table 20.13 Distribution of Postal Personnel by Region: 1992

Region/Office	Total	Regional director and assistant director	Chief Postal Services Officer	Post-master	Letter carrier	Postal teller	Mail sorter	Driver	Utility	Others
Total	18,382	16	120	1,868	8,727	614	2,470	351	1,622	2,594
Central Office	1,684	-	39	-	50	13	412	66	421	683
National Capital Region (NCR)	3,567	2	9	112	1,650	229	738	118	425	284
I. Ilocos	1,017	2	6	140	518	26	109	13	43	160
II. Cagayan Valley	729	1	2	108	341	27	66	10	33	141
III. Central Luzon	1,451	2	7	148	865	34	172	10	85	128
IV. Southern Tagalog	1,679	2	12	261	974	31	164	13	94	128
V. Bicol	1,143	-	6	146	623	33	120	13	62	140
VI. Western Visayas	1,249	1	6	170	700	35	116	17	61	143
VII. Central Visayas	1,183	1	4	158	633	32	108	16	102	129
VIII. Eastern Visayas	1,136	2	7	162	569	34	123	18	73	148
IX. Western Mindanao	925	1	5	107	469	38	89	12	64	140
X. Northern Mindanao	954	1	4	137	481	30	92	19	63	127
XI. Southern Mindanao	951	1	7	111	510	33	88	17	48	136
XII. Central Mindanao	714	-	6	108	344	19	73	9	48	107

Source: Postal Services Office.

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Table 20.14 Newspapers in the Philippines: 1993 - 1994

Publication	Total circulation ('000)	Language
Morning Broadsheets		
Malaya	174	English
Manila Bulletin	240	English
Manila Times	146	English
Philippine Inquirer	228	English
Philippine Times Journal	111	English
Philippine Star	275	English
Manila Standard	180	English
Morning tabloids		
Abante	350	Pilipino
Balita	151	Pilipino
Bongga	111	Pilipino
Peoples Journal	383	Pilipino
Pilipino Star Ngayon	-	Pilipino
Taliba	229	Pilipino
Tempo	-	Pilipino
Afternoon tabloids		
Abante Tonite	250	Pilipino
People's Tonight	164	English/Pilipino
Business newspapers		
Business World	58	English
Business Star	77	English
The Businessman	10	English
Manila Chronicle	80	English
Chinese Newspapers		
Chinese Commercial News	30	Chinese
China Times	73	Chinese
United Daily News	38	Chinese
Universal Daily News	-	Chinese
World News	77	Chinese
Trade Journals		
Buy & Sell	121	English
Jobs & Opportunities	35	English

Source: Accredited Advertising Agencies of the Philippines. *Media Factbook 1993-1994.*

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Table 20.15 Provincial Newspapers by Region: 1993 - 1994

Region	Name/Place of publication	Edition	Circulation (thousands)
I. Ilocos	The Ilocos Times Laoag City	Sunday	5.0
	The Weekly San Fernando, La Union	Friday	4.5
	Baguio Midland Courier Baguio City	Sunday	9.0
	Weekly Vibrations Baguio City	Sunday	8.5
	Baguio Daily Vibration Baguio City	Mon-Sat	8.5
	The Sunday Punch Dagupan City	Sunday	9.3
	The Courier Dagupan City	Sunday	5.0
II. Cagayan Valley	The Valley Times Santiago, Isabela	Saturday	4.5
	Cagayan Star Tuguegarao, Cagayan	Sunday	3.5
III. Central Luzon	Monday Post Cabanatuan City	Monday	3.5
	Olongapo News Olongapo City	Monday	3.0
	Zambales Times Iba, Zambales	Thursday	3.0
	Mabuhay San Fernando, Pampanga	Wednesday	5.0
IV. Southern Tagalog	The Barangay San Pablo City	Sunday	4.0
	Quezon Times Lucena City	Saturday	3.0
	Tambuling Batangas Lipa City	Wednesday	2.5

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Table 20.15 Provincial Newspapers by Region: 1993 - 1994 (continued)

Region	Name/Place of publication	Edition	Circulation (thousands)
V. Bicol	Balalong Naga City	Friday	6.0
	Handiong Naga City	Thursday	4.0
	Mayon Times Legaspi City	Wednesday	5.0
	Bicol Chronicle Legaspi City	Sunday	3.5
	Bicol Courier Naga City	Forthly	5.0
	City Newsweek Naga City	Saturday	3.0
VI. Western Visayas	Western Visayas Journal Bacolod City	Wednesday	6.0
	Visayan Daily Star Bacolod City	Tues. & Sat.	4.5
	Kapawa News Bacolod City	Saturday	50.0
	Capiz Times Roxas City	Monday-	3.0
	News Express Iloilo City	Wednesday	7.0
	Daily Times Iloilo City	Daily	52.5
	Panay News Iloilo City	M-W-F	45.0
	Negros Bulletin Bacolod City	Monday	10.0
	Aklan Reporter Kalibo, Aklan	Wednesday	3.5
	Visayan Tribune Iloilo City	Tuesday	5.0
VII. Central Visayas	The Freeman Cebu City	Daily	12.0

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Table 20.15 Provincial Newspapers by Region: 1993 - 1994 (continued)

Region	Name/Place of publication	Edition	Circulation (thousands)
	Sun Star Daily Cebu City	Daily	17.0
	News Times Cebu City	Daily	7.0
	Negros Chronicle Dumaguete City	Sunday	2.5
	Bohol Chronicle Tagbilaran City	Sunday	2.0
	Sunday Post Tagbilaran City	Sunday	5.0
VIII. Eastern Visayas	The Reporter Tacloban City	Wednesday	5.0
	The Samar Reporter Catbalogan, Samar	Thursday	2.0
IX. Western Mindanao	Zamboanga Times Zamboanga City	Daily	4.0
	Prensa Zamboanga Zamboanga City	Monday	3.3
	Pagadian Times Pagadian City	Tuesday	5.0
	Pagadian Express Pagadian City	Thursday	4.0
X. Northern Mindanao	Peryodiko Mindanao Cagayan de Oro City	Saturday	4.0
	San Pedro Express Cagayan de Oro City	Tuesday	8.0
	Mindanao Post Cagayan de Oro City	Wednesday	6.0
	News Express Cagayan de Oro	Thursday	8.0
	Mindanao Star Cagayan de Oro	Saturday	3.5
	Misamis Weekly Cagayan de Oro	Saturday	2.3

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Table 20.15 Provincial Newspapers by Region: 1993 - 1994 (continued)

Region	Name/Place of publication	Edition	Circulation (thousands)
	Northern Mindanao Chronicle Butuan City	Wednesday	5.0
	The Bukidnon Express Malaybalay, Bukidnon	Monday	5.0
	Central Mindanao Newswatch Malaybalay, Bukidnon	Saturday	4.0
	Gold Star Daily Cagayan de Oro	Daily	3.0
	Mindanao Courier Butuan City	Tuesday	5.0
XI. Southern Mindanao	Mindanao Daily Mirror Davao City	Tuesday	12
	People's Daily Forum Davao City	Tuesday	6.0
	Mindanao Mirror Bulletin Davao City	Monday	3.5
	Mindanao Mail Davao City	Saturday	5.0
	Mindanao Times Davao City	Thursday	5.0
	Davao Star Davao City	Wednesday	2.0
	Lanao Mail Iligan City	Monday	5.0
	Peryodiko Dabaw Davao City	Daily	3.0
	Southern Review General Santos City	Saturday	2.0
	Digos Times Digos, Davao del Sur	Sunday	2.5
	Sarangani Journal General Santos City	Saturday	3.0
	The Daily San Pedro Express Davao City	Daily	12.0

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Table 20.15 Provincial Newspapers by Region: 1993 - 1994 (concluded)

Region	Name/Place of publication	Edition	Circulation (thousands)
XII. Central Mindanao	Lanao Star Iligan City	Monday	5.0
	San Pedro Express Cotabato City	Monday	7.5

Source: Association of Accredited Advertising Agencies of the Philippines. *Media Factbook 1993-1994.*

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Table 20.16 List of Magazines and Circulation by Type: 1993 - 1994

Type/Name of magazines	Edition	Circulation (thousands)
I. Sunday Supplement		
Panorama	Sunday	238.6
Starweek	Sunday	221.4
Sunday Inquirer	Sunday	170.8
Sunday Standard	Sunday	137.8
Sunday Times Life	Sunday	143.5
II. General Interest (English)		
Aglow	Monday	65.2
Metro	Monday	18.0
Miscellaneous	Monday	133.4
Mr. & Ms.	Tuesday	139.0
Parents	Monthly	40.0
Phil Free Pres	Saturday	113.6
WQ	Thursday	123.7
III. Female-oriented		
Chic	Friday	78.0
Clique	Monday	10.0
Look	Bi-Monthly	25.4
Mega	Monthly	10.0
Mod Filipina	Friday	121.61
Woman's Home Companion	Wednesday	137.22
Women's Journal	Saturday	147.4
Woman Today	Wedbesday	145.0
IV. Male-oriented		
Man Magazine	Monthly	28.8
V. Teen-oriented		
Teen	Bi-Monthly	25.0
VI. Specialty		
WT Celebrity Recipe	Monthly	45.2
WT Fashion Catalogue	Monthly	45.2
VII. Sports Magazines		
Sports Flash	Thursday	92.4
Sports Weekly	Friday	180.0
Sports Life Weekly	Tuesday	250.0
VIII. General Interest (Pilipino)		
Liwayway	Wednesday	102.4
Pilipino Reporter	Saturday	97.0
Pilipino Magazine	Tuesday	50.0

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Table 20.16 List of Magazines and Circulation by Type: 1993 - 1994 (concluded)

Type/Name of magazines	Edition	Circulation (thousands)
IX. General Interest (Dialect)		
Bannawag (Ilocano)	Friday	42.9
Bisaya (Cebuano)	Friday	46.4
Yuhum (Ilonggo)	Monday	52.6
Hilagaynon (Waray-waray)	Wednesday	20.0
X. Showbiz Magazines		
Gossip	Monday	187.6
Intrigue	Thursday	80.9
Kislap	Monday	137.2
Movie Flash	Monday	127.4
Moviestar	Wednesdday	120.0
Rumors	Thursday	180.1
Scandals	Tuesday	180.8
Secrets	Monday	171.9
Showbiz	Monday	80.7
Teenstars	Wednesday	172.4
XI Regional Publication		
Lifestyle Asia	Monthly	4.6
Taipan	Monthly	4.6

Source: Association of Accredited Advertising Agencies of the Philippines. *Media Factbook: 1993-1994.*

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Table 20.17 Advertising Expenditures: 1987-1992
(Million pesos)

Media	1987	1988	1989	1990	1991	1992
Total	2,207.2	2,766.0	3,886.0	4,528.1	5,171.6	6,643.3
Print	398.4	476.0	919.0	1,024.3	987.5	1,219.7
Radio	350.1	411.0	613.0	707.5	798.4	1,034.1
Television	1,430.3	1,824.0	2,302.0	2,743.1	3,325.3	4,324.8
Others	28.3	55.0	52.0	53.2	60.4	64.7

Source: Association of Accredited Advertising Agencies of the Philippines. *Media Factbook 1989-1990.*

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Table 20.18 Advertising Expenditure by Type of Media and Product Category: 1990 and 1992 (In thousand pesos)

Product Category	Total	Television	Media[1] Radio	Print
1990				
Total	4,474,880	2,743,102	707,477	1,024,301
Other personal care products	284,122	185,434	60,277	38,411
Medical products and Equipment	268,157	178,576	63,461	26,120
Home care products	114,837	75,710	34,313	4,814
Dairy products	321,975	249,897	51,080	20,998
Corporate and Institutional	215,623	145,384	35,515	34,724
Entertainment, sports, special occasions and events[3]	282,257	244,959	11,178	26,120
Restaurants, fastfoods, bakeshops and theaters	278,679	149,773	25,964	102,942
Food products	231,758	176,656	36,152	18,950
Beer and liquors	310,578	162,392	97,278	50,908
Automative, transport and tourism	304,893	89,974	34,949	179,970
Communications and business machines	201,076	77,630	9,339	114,107
Hair care products	121,651	82,567	29,148	9,936
Fashion and retail establishments	234,984	99,575	18,536	116,873
Appliances, housewares, furniture and fixtures	230,532	161,294	15,565	53,673
Financial institutions and insurance companies	167,231	77,081	21,932	68,218
Beverages	257,887	201,344	43,227	13,316
Government agencies, institutions and public utilities	231,856	176,381	14,503	40,972
Dentifrices, mouthwash and toothbrush	86,587	58,702	23,276	4,609
Cigarettes	151,467	65,012	52,141	34,314
Construction, heavy machineries, and others	76,052	30,448	3,608	41,996
Veterinary products	24,570	16,459	5,448	2,663
Paper, paper products, print and others[2]	35,895	20,573	4,669	10,653
Bookstores, school and office supplies	27,785	17,007	3,608	7,170
Agricultural products and equipment	14,428	274	12,310	1,844

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Table 20.18 Advertising Expenditure by Type of Media and Product Category: 1990 and 1992 (continued)
(In thousand pesos)

Product category	Total	Media[1] Television	Radio	Print
1991				
Total	5,111,172	3,325,329	798,365	987,478
Other personal care products	330,079	241,419	56,764	31,896
Medical products and Equipment	319,012	221,134	73,290	24,588
Home care products	191,859	139,664	41,036	11,159
Dairy products	339,825	267,356	49,658	22,811
Corporate and Institutional	279,283	202,845	34,569	41,869
Entertainment, sports, special occasions and events[3]	339,365	282,320	13,892	43,153
Restaurants, fastfoods, bakeshops and theaters	346,236	222,132	31,775	92,329
Food products	277,737	220,469	40,876	16,392
Beer and liquors	295,841	149,972	95,804	50,065
Automative, transport and tourism	214,199	82,136	26,107	105,956
Communications and business machines	295,114	155,625	14,770	124,719
Hair care products	176,808	132,681	36,326	7,801
Fashion and retail establishments	232,287	121,375	26,186	84,726
Appliances, housewares, furniture and fixtures	246,529	170,257	16,925	59,347
Financial institutions and insurance companies	230,304	94,439	27,144	108,721
Beverages	212,554	167,597	30,737	14,220
Government agencies, institutions and public utilities	257,172	147,312	65,226	44,634
Dentifrices, mouthwash and toothbrush	114,185	90,116	20,119	3,950
Cigarettes	163,379	72,825	60,436	30,118
Construction, heavy machineries, and others	86,584	36,246	3,433	46,905
Veterinary products	32,994	25,605	5,908	1,481
Paper, paper products, print and others[2]	42,190	30,261	3,832	8,097
Bookstores, school and office supplies	69,886	48,550	9,980	11,356
Agricultural products and equipment	17,750	2,993	13,572	1,185

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Table 20.18 Advertising Expenditure by Type of Media and Product Category: 1990 and 1992 (concluded)
(In thousand pesos)

Product category	Total	Media[1] Television	Radio	Print
1992				
Total	6,578,685	4,324,827	1,034,170	1,219,688
Other personal care products	471,282	357,754	78,282	35,246
Medical products and Equipment	456,867	294,210	127,254	35,403
Home care products	453,151	337,378	101,694	14,079
Dairy products	439,335	355,492	55,984	27,859
Corporate and Institutional	409,166	307,932	36,379	64,855
Entertainment, sports, special occasions and events[3]	389,135	329,868	16,501	42,766
Restaurants, fastfoods, bakeshops and theaters	382,240	242,618	38,116	101,506
Food products	364,450	287,461	44,040	32,949
Beer and liquors	358,362	217,166	101,930	39,266
Automative, transport and tourism	334,574	121,684	27,688	185,202
Communications and business machines	310,423	166,325	32,011	112,087
Hair care products	278,553	203,093	65,015	10,445
Fashion and retail establishments	274,765	133,861	33,806	107,098
Appliances, housewares, furniture and fixtures	258,002	165,666	25,341	66,995
Financial institutions and insurance companies	256,775	107,931	21,632	127,212
Beverages	255,554	185,944	43,110	26,500
Government agencies, institutions and public utilities	250,467	136,763	55,785	57,919
Dentifrices, mouthwash and toothbrush	189,449	154,288	27,067	8,094
Cigarettes	187,870	82,303	62,769	42,798
Construction, heavy machineries, and others	111,954	49,251	5,808	56,895
Veterinary products	54,287	43,895	8,321	2,071
Paper, paper products, print, and others[2]	41,013	25,443	6,600	8,970
Bookstores, school and office supplies	30,395	16,339	4,139	9,917
Agricultural products and equipment	20,616	2,162	14,898	3,556

[1] Breakdown by type of media and by product category is based on PMS proportions.
[2] Spending on print includes regional magazines where only local advertisements originating from the Philippines are measured except for advertisements on airlines, beer, liquor and wine, and cigarettes.'
[3] Movie trailers are only monitored on television, not radio and prints.

Source: Adboard Data Center.

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Chapter 21
Public Finance

This chapter presents in brief the quantitative details of the government budget program: the revenue and borrowing program, and the expenditure program.

It identifies the cash budget components that are annually appropriated as well as the major projects of the national government. Debt service and outstanding debt of local government finance and highlights of the Philippine tax system and taxation are likewise presented.

21.1 The Government Budget

The national budget program for 1994 is the government's concrete manifestation of the country's decisive thrust to economic transformation envisioned under Philippines 2000. It was formulated in the context of the twin objectives of human development and global competitiveness enshrined in the Medium Term Development Plan. It supports the basic policies and strategies enunciated towards achieving these goals.

The proposed budget program of the national government for 1994 amounts to P362,038 million, 6.68 percent or P22,679 million higher than the updated 1993 budget of P339,359 million. It represents 21.13 percent of GNP, slightly lower than 1993's 22.47 percent. The productive portion of the budget, i.e., excluding debt services and net lending, amounts to P243,026 million. This amount is 6.59 percent higher than the 1993 level of P228,000 million. Of the total budget, P119,012 million or 32.87 percent was scheduled for payment of debt services and net lending. A larger proportion of disbursements will be financed by revenues, i.e., 88.16 percent in 1994 compared to 77.26 percent in 1993. Refer to Tables 21.1 and 21.2.

21.1.1 Revenue Program

In 1994 revenues are expected to reach P319.2 billion or 18.6 percent of GNP. Taxes will account for P278.8 billion of the total; the balance represents nontax revenues - P40.3 billion.

The revenue program estimates will be generated mainly from existing measures and as new sources from legislative and executive measure introduced in 1993 and 1994.

Revenues from existing tax and nontax sources are expected to increase by 21.73 percent over the 1993 level. Tax revenues were projected to grow by 25.17 percent from P222.76 million in 1993. Taxes on international trade and trans-

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actions is the major component as it accounted for 35.93 percent of the total projected tax collection. Taxes on property and domestic goods and services represent roughly 34.48 percent of aggregate tax revenues with increased yields of P460 million and P95,678 million, respectively. Collection of taxes on income and profit is expected to grow by 16.26 percent from P70,963 million in 1993 to P82,500 million during the year.

From nontax sources, projected revenues registered an increase of 2.28 percent to reach a total of P40,338 million. This will come primarily from fees and service income of various government agencies, accounting for P13,981 million or 27.22 percent of total nontax revenues. Collectively, other taxes of this category are expected to generate a total of P26,358 million (Table 21.3).

21.1.2 Expenditure Program

The P362,038 million budget for 1994 expenditure program is P22,679 million or 6.68 percent higher than the 1993 total expenditure of P339,359 million. Framework of the government expenditure program is patterned from the budget requirements of different sectors of the economy. It is designed to initiate various institutional and structural reforms to strengthen and improve the delivery of basic public services.

Social Services. This sector is allocated the biggest share of the national budget with P94.2 billion or a 19.72 percent increase over the 1993 budget allocation. Of this amount, P46.4 billion will go to education, culture and manpower development activities. Other activities that will get funding support under this sector are health services (P13.1 billion), social security and welfare (P7.7 billion), housing and community amenities (P1.7 billion) and other social services (P25.3 billion).

Economic Services. This sector is allocated P74.5 billion, slightly lower than the 1993 level of P74.6 billion. A significant portion of the amount will cover expenditures for utilities and infrastructure - P31.0 billion. Other economic services subsectors are alloted as follows: agriculture, agrarian reform and natural resources - P18.7 billion, industry, trade, labor and tourism - P3.5 billion and other economic services - P21.4 billion.

General Public Administration. This sector is allocated P41.2 billion or an increase of 2.34 percent over 1993. This amount will be used to cover expenditure for general administration, public order and safety and other general public services.

Defense. This sector is allocated P33.1 billion representing 9.15 percent of total expenditure. This amount is for domestic security and other defense services.

Debt Burden. Debt burden in 1994 is P117.8 billion. The amount allocated for debt services constitutes 32.54 percent of total expenditures (Table 21.4).

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21.2 Local Government Finance

The national assistance to local government units (LGUs) in 1991 amounted to P16.6 billion constituting 6.5 percent of the total budget and will consist of various forms of support. The largest portion of this assistance was the P10 billion internal revenue allotment given to LGUs as block grants, the utilization of which was basically left to the local government.

Meanwhile, LGUs were expected to generate a total of P19,774 million resources to augment projected expenditures of P16,197 million. It is 11.99 percent more than the previous year's level of P17,656 million. LGUs financial resources were composed of the P17,064 million total receipts and the P2,710 million cash balance at the beginning of the year.

Of the total receipts, tax revenues continued to contribute the biggest share amounting to P12,614 million, equivalent to 73.92 percent. More than half of this revenue or 55.97 percent comes primarily from internal revenue allotment which consistently topped the contributors from 1984 up to the present. Real property tax with 20.85 percent share or an estimated collection of P2,630 million came second, followed by local taxes and revenue stabilization fund with their respective totals of P1,437 million and P1,400 million.

On the other hand, nontax revenue constituted 22.51 percent of the total financial resources with operating and resources miscellaneous revenue as the major component aggregating P2,402 million.

Attributed to the continued economic and social development in the LGUs, total expenditures exhibited a positive trend with annual average increase of 12.70 percent from P6,370 million in 1983 to P16,197 million level of estimated spending during the year. The biggest increase of 27.49 percent was recorded in 1989 where budgetary requirements of the LGUs increased further to augment programs and projects development particularly the upgrading of salary of government workers which commenced on July 1989. From then on, level of expenditures of the general government sector has constituted the major part of the LGUs estimated disbursement.

With total resources worth P19,774 million and expected expenditure of P16,197 million in 1991, LGUs had a cash balance of P3,577 million at the end of the year. See Table 21.5.

21.3 Status of Public Debt

Public debt is defined as the obligations incurred by the government and all its branches, agencies, and instrumentalities including those of government monetary institutions. It consists of all claims against the government which may be payable in goods and services, but usually in cash, to foreign government or individuals or to persons, natural or juridical. Obligations may be purely financial, i.e., loans or advances extended to the Philippine Government, its branches, agencies and instrumentalities; services rendered or goods delivered to the government for which certificates, notes or other evidences of indebtedness

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have been issued to the creditor; and for external debt such as claims of foreign entities, securities held in trust, nonbonded debts and obligations of the Philippine government to the IMF.

The Philippines is one of the highly indebted countries among the developing countries. In this regard, the government continued to restructure the existing debt, pursue debt reduction program and find other creative approaches to the solution of the debt problem. In effect, the budget for debt service payment remarkably increased since restructuring was implemented.

However, with the rising financial requirement for economic development, outstanding public internal debt in 1993 increased to P554,419.9 million or 6.37 percent more than the P521,219.7 million registered in 1992. Of the total internal debt, the national government accounted for 88.75 percent or a total of P492,057 million outstanding obligation. This amount is 10.43 percent higher than the 1992 level of P445,568 million. Monetary institutions acquired a total of P55,269 million outstanding debt followed by government corporations with P7,094 million internal debt (Table 21.6).

On the other hand, outstanding public external debt for the year 1993 stood at US$33,348 million, registering an increase of 7.80 percent from 1992 figure of $30,934 million.

The major source of the country's external financing was banking institution with a total of $5,728 million worth of credit extended to the Philippine government in the form of project or program loans designed to improve the efficiency of specific sectors of the economy. Likewise, outstanding public external debt to bilateral sources stood at $13,426 million wherein $7,731 million came from Japan and $3,911 million, from export credit agencies. Moreover, the country's outstanding obligations from International Bank for Reconstruction and Development (IBRD) and Asian Development Bank (ADB) constituted a sizeable portion of 11.22 percent and 6.61 percent of the total external debt, respectively. See Table 21.7.

21.4 Sources of Revenue

The Bureau of Internal Revenue (BIR) has the power and duty to comprehend the assessment and collection of all national internal revenue taxes, fees, charges and the enforcement of all forfeitures, penalties, and fines connected therewith. The Bureau of Customs (BOC) and the Land Transportation Office (LTO) are constituted agents of the BIR. The BOC is empowered to collect advance sales or compensating tax on imported articles, while the LTO collects private motor vehicle tax.

In 1992, revenue collections exhibited a remarkable increase indicating relative success of measures taken to maximize the yield of the revenue system. From a total of P116,255.78 million collected in 1991, it went up to P133,904.12 million, registering an increase of P17,648.34 million or 15.18 percent. Of the total, more than half or 52.37 percent came from taxes on net income and profit

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of which corporate income tax with relatively low increase constituted the major part amounting to P30,645.38 million or 43.70 percent of net income and profit taxes. This was followed by individual tax collection of P22,850.14 million.

Likewise, taxes on domestic goods and services increased by 11.44 percent. This was effected by the increased collection on taxes on value added and selective excise on goods with increases of 19.98 percent and 8.73 percent, respectively. The other composition of BIR receipts were travel tax, documentary stamp tax and other miscellaneous taxes which together accounted for 6.06 percent of the total. See Table 21.8.

Although the 80s exhibited a fluctuating trend in the BOC's total income, the first three years of the 90s showed an increasing trend. From a total income of P44,620 million in 1990, it went up to P65,701 million in 1991, then to P74,377 million in 1992 or a 47.25 percent and 13.20 percent increases, respectively. Receipts from export duties dropped considerably, declining by 91.32 percent in 1991 and 51.26 percent in 1992. On the other hand, custom receipts from import duties registered an increase of 12.19 percent from P64,004 million in 1991 to P71,804 million in 1992. However with the abolition of the five percent import levy in the second quarter of 1992, receipts from import duties minimally increased by 3.35 percent. See Table 21.9.

21.5 Tax System and Taxation

Tax administration is a system involving assessment, collection and enforcement of taxes. It fixes and determines the tax liability of a taxpayer.

A *tax* is a force burden, charge, exaction, imposition or contribution assessed in accordance with some reasonable rule of apportionment by authority of a sovereign state upon the persons or property within its jurisdiction, to provide public revenue for the support of the government, the administration of the law, or the payment of public expenses.

Tax imposed by the national government is called a national tax and tax laid directly upon persons and properties is called excise tax which is neither called a poll tax nor a property tax. On the other hand, tax demanded from person upon whom the law intends to impose it and cannot be shifted by the taxpayer to some other person is called direct tax. Likewise, tax levied for the general purposes of the government is popularly known as general tax.

Taxation is the exercise of the sovereign power to raise a revenue for the expenses of the government. It is a medium by which a desirable income distribution pattern is attained, economic growth is promoted and longer run institutional changes effected to conform to development of social and political goals.

21.5.1 Philippine Tax Laws

The first income tax law in the Philippines was the United States Revenue Act of 1913. A section therefrom provided that the administration and enfor-

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cement of the law will be under the internal revenue officers of the Philippine Government. This law was amended by the Act of the United States Congress in 1916, and by the United States War Revenue Act of 1917. The latter Act authorized the Philippine Legislature to amend, modify or repeal the Federal Income Tax Law then enforced in the Philippines. On March 9, 1919, the Philippine Legislature enacted Act No. 2833 which was the first income tax law passed by the Philippine Legislative body.

On June 15, 1939, Commonwealth Act No. 466, otherwise known as the National Internal Revenue Code (NIRC) was approved, with Title II thereof as the Income Tax Law. The NIRC took effect on July 1, 1939 but the provisions on income tax were made to apply to income earned from January 1, 1939.

The income tax law of 1939 was amended by numerous laws and by several Presidential Decree but has been consolidated into a single Tax Code known as the National Internal Revenue Code of 1977 by Presidential Decree No. 1158 on June 3, 1977. In October 1985, Presidential Decree No. 1994, after amending certain provisions embodied in the NIRC of 1977 created the new National Internal Revenue Code of 1986. From then on, the NIRC of 1986 has had several amendments effected to help the government step up the process of increasing the efficiency of the revenue system.

21.5.2 Income Tax

Taxability of income is based upon the citizenship or nationality, residence and the source of income of the taxpayer. Income taxpayers are classified as individuals, estates and trusts, and corporations.

Individual Income Tax. Every individual, whether a citizen of the Philippines or an alien residing in the Philippines with a taxable compensation income of over P2,500 during each taxable year from all sources must file an income tax return. Every nonresident citizen deriving income from all sources outside the Philippines with an adjusted gross income of not less than $6,000 during each taxable year is likewise required to file an income tax return.

For nonresident citizens deriving income from sources within the Philippines, taxes shall be computed in the same manner as the income tax payable by resident citizen and resident aliens. The return must be filed, and the tax due, if any, must be paid on or before April 15, following the year in which the return is being filed.

An individual whose income is derived solely from compensation is taxed according to the rates on taxable compensation income (Table 21.10). Taxable compensation income is gross compensation income less the personal and additional exemptions allowed. The term "gross compensation income" includes the following items: salaries, wages, honoraria, bonuses; allowances (such as transportation, entertainment, and the like); fringe benefits; fees; pensions and other income similar in nature. It means all remuneration for services performed by an employee for his employer whether paid in cash or in kind. On

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the other hand, an individual who receives income from the practice of his profession, trade or business is taxed in accordance with the schedule on taxable net income. The modified gross income tax scheme seeks to disallow the availment of deductions by fixed income earner who will be entitled only to personal and additional exemptions and in case of business or professional income, to limit the maximum amount of entertainment, travel, and promotional expenses they may be allowed as deductions.

The exemptions granted under the income tax laws applicable for income earned for the taxable year are as follows: a) single, widow/widower or married individual legally separated with no qualified dependent, P9,000; b) head of the family, P12,000; and c) married, P18,000.

The head of the family means an unmarried or legally separated man or woman with one or both parents, or with one or more brothers, sisters, or with one or more legitimates, recognized natural or legally adopted children living with and dependent upon her/him for their chief support, where such brothers, sisters or children are not more than 21 years of age, unmarried and not gainfully employed or where such brothers, sisters or children regardless of age are incapable of self-support because of mental or physical defect.

For each of the qualified dependents, not exceeding four, an additional exemption of P5,000 is granted. The husband shall be the proper claimant of the exemption in respect to any dependent children, unless he explicitly waives this right in favor of his wife in the withholding exemption certificate. If the gross compensation income including that of the spouse does not exceed P20,000 for the taxable year, a special additional exemption of P4,000 is granted.

A nonresident alien is entitled to personal exemption in an amount equal to the exemptions allowed by the income tax laws of the country of which he is a subject or citizen, to citizens of the Philippines not residing in such country, but not to exceed the amount fixed for citizens or residents of the Philippines under the Tax Code and provided further that he files a true and accurate return of his income from all sources in the Philippines.

21.5.3 Transfer Tax

Estate Tax is imposed on the transfer of the decedent's estate to his lawful heirs and beneficiaries based on the fair market value of the net estate at the time of the decedent's death. The *net estate* is arrived at by deducting from the total fair market value of the decedent's gross estate the total amount of allowable deductions.

Estate tax return shall be filed by the executor or administrator of the estate or in default thereof, by any person in actual or constructive possession of the decedent's property at the time of his death. The return shall be filed within nine months after decedent's death. If judicial proceeding has been instituted within such period, the return must be filed within 21 months after the decedent's death.

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Donor's Tax is imposed on the transfer of property as a gift. The tax payable by the donor is based upon the fair market value of the total net gifts made by such donor during the calendar year.

The return shall be filed, within thirty days after the date the gift was made, with the Commissioner, Regional Director, Revenue District Officer, or Collection Agent of the city or municipality in which the donor was domiciled at the time of the transfer.

21.5.4 Excise Taxes

Excise taxes apply to goods manufactured or produced in the Philippines for domestic sale or consumption and to things imported, but not to domestic products actually exported without returning to the Philippines. Excise taxes on imported products shall be imposed in addition to customs duties.

An excise tax imposed and based on weight or volume capacity and other physical unit of measure is called *specific tax* and an excise tax imposed and based on selling price or other specified value of the article is called an *ad valorem tax*. Specific tax is not a tax on property but it applies to both local and imported articles.

Excise taxes on domestic products shall be paid by the manufacturer or producer before removal from the place of production. However, excise taxes on locally manufactured petroleum shall be paid within 15 days from the date of removal thereof from the place of production.

Excise taxes on imported articles shall be paid by the owner or importer to the customs officer before the release of such articles from the customhouse. Imported articles shall be subject to the same rates and basis of excise taxes applicable to locally manufactured articles. Articles subject to specific taxes are:

Alcohol Products. On distilled spirit, a tax of P3.20 per proof liter is imposed if produced from sap of *nipa*, coconut, cassava, camote or *buri* palm or from the juice, syrup or sugar of the cane, provided such materials are produced commercially in the country where they are processed into distilled spirit; P1.00 per proof liter if produced in a pot still by a distiller producing 100 liters a day containing not more than 50 percent of alcohol by volume; P25 per proof liter if produced from raw materials other than those enumerated above.

An ad valorem tax equivalent to 37 percent of the brewer's wholesale price shall be collected on fermented liquor such as beer, lager beer, ale, porter and the like except *tuba*, *basi* and other similar domestic fermented liquor. On wines, a tax of P16 shall be collected on sparkling wines regardless of proof.

A tax of one peso is collected on still wines containing 14 percent of alcohol and four pesos if more than 14 percent of alcohol per liter of volume capacity.

Tobacco products. A tax of P0.75 shall be collected on each kilogram of the following products of tobacco: tobacco twisted by hand to be consumed in any manner other than the ordinary mode of drying and curing, tobacco prepared with or without the use of any machine or instruments or without being pressed

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or sweetened, and on fine-cut shorts and refuse, scraps, clippings, cuttings, stems and sweepings of tobacco; P0.60 on each kilogram of tobacco specially prepared for chewing so as to be unsuitable for use in any other manner.

Cigars and Cigarettes. An ad valorem tax of five percent of the manufacturer's or importer's wholesale price is imposed on cigars.

On cigarettes packed in thirties, an ad valorem tax of 15 percent of the manufacturer's registered wholesale price is collected.

On cigarettes packed in twenties, a tax equivalent to 55 percent of the manufacturer's registered wholesale price is collected on locally manufactured cigarettes bearing a foreign brand and 40 percent on other locally manufactured cigarettes. When the existing registered wholesale price, including tax of cigarettes packed in twenties does not exceed P3.60 per pack, the rate for the cigarettes packed in thirties shall apply.

On imported cigarettes, regardless of the contents per pack, a tax equivalent to 65 percent of the importer's wholesale price is collected.

Tobacco Inspection Fees. There shall be collected a fee of 50 centavos for each thousand of cigars or fraction thereof: 10 centavos for each thousand cigarettes or fraction thereof: two centavos for each kilogram of leaf tobacco or fraction thereof; and three centavos for each kilogram or fraction scrap and other manufactured tobacco.

The inspection fee on cigars, cigarettes or other tobacco products shall be paid by the manufacturer, producer or owner within 10 days after the end of each month while the inspection fee on leaf tobacco, scrap and other manufactured product of tobacco shall be paid immediately before removal from the establishment of the wholesaler, manufacturer, or redrying plant. In case of imported leaf tobacco and products thereof, the inspection fee shall be paid by the importer before removal from the custom's custody.

Petroleum Products. Specific tax on Manufactured Oil and other fuels. There shall be collected on refined and manufactured mineral oils and motor fuels, the following excise taxes: P4.50 per liter of volume capacity of lubricating oils; P0.05 per liter of volume capacity for processed gas; P3.50 per kilogram of greases, waxes, and petroleum; and P0.05 per liter of volume capacity in denatured alcohol to be used for motive power.

Ad Valorem Tax on Manufactured Oil and other fuels. There shall be collected on refined and manufactured mineral oils and motor fuels based on the company take or netback on the product as approved by the Energy Regulation Board the following excise taxes: 48 percent on naphtha, gasoline and other similar products of distillation; and aviation turbo jet fuel; 24 percent on fuel oil such as diesel oil, kerosene, liquefied petroleum gas (LPG), and the like.

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Miscellaneous Products

Fireworks. A tax of P30 per kilogram of fireworks which include firecrackers, sparklers, rockets and the like shall be collected.

Cinematographic films. A tax of 70 centavos per linear meter shall be collected on cinematographic films including television films or tapes in reels, regardless of width. Educational films are not subject to tax.

Saccharine. A tax of P60 per kilogram of saccharine and all its derivatives and other sweetening agents shall be collected.

Automobiles. There shall be levied, assessed and collected an ad valorem tax on automobiles based on the manufacturer's or importer's selling price in accordance with the following schedule:

Engine displacement (in cc)

Gasoline	Diesel	Tax Rate
up to P1,600	up to P1,800	15%
P1,601 - P2,000	P1,801- P2,300	35%
P2,001 - P2,700	P2,301- P3,000	50%
P2,701 or over	P3,001 or over	100%

Nonessential goods such as jewelry, whether real or imitation, precious and not precious, perfumes and toilet waters, yachts or vessels intended for pleasure or sports are subject to a tax equivalent to 20% based on wholesale price or the value of importation used by the Bureau of Customs in determining tariff and customs duties.

Mineral Products. There shall be collected on mineral, mineral products and quarry resources the following excise taxes: P10 per metric ton of coal and coke; three percent tax based on actual market value of the annual gross output thereof at the time of removal in the case of locally extracted or produced nonmetallic minerals and quarry resources; five percent in the case of metallic minerals (the same condition as nonmetallic); and 22 percent in the case of indigenous petroleum based on its fair international market value in the first taxable sale.

21.5.5 Privilege Tax on Business

A privilege tax is paid before any specific business can be lawfully pursued. A tax on business is payable for every separate or distinct environment or place

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where business subject to the tax is conducted. The tax on business is paid by a person, firm or company conducting the business.

A privilege tax on business is payable on or before January 31. Any person starting a business shall pay the tax before engaging therein. Unless otherwise provided, every person engaging in business on which the percentage tax is imposed shall pay the tax before engaging therein.

21.5.6 Percentage Tax Payment

Percentage tax is imposed on every person subject to percentage taxes and are required to prepare a quarterly declaration of the amount of his gross sales, receipts and earnings and pay the tax due thereon within 20 days after the close of each taxable quarter. For failure to file and pay the tax on the specific date, a 25 percent increase in the amount of the tax shall be collected.

For imported articles, percentage tax shall be paid prior to the release of such articles from the Bureau of Customs custody.

The tax is based on the home consumption value (excluding internal revenue excise tax) plus 10 percent of such consumption value including postage, commission, customs duty and all similar charges except freight and insurance, plus 25 percent of the total value of such articles.

21.5.7 Other Percentage Taxes

Percentage taxes of varying rates are imposed on the following:

Miller's Tax. Three percent tax is imposed on gross value of milled, manufactured or processed products by proprietors or operators of rope factories, sugar central and mills, coconut oil mills, cassava mill and dessicated coconut factories. Such tax is based on the actual selling price or market value of these products at the time they leave the factory or mill warehouse.

Contractor's Tax. A four percent tax is imposed on the gross receipt of a contractor and includes all amount received by him undiminished by any amount paid by him to the subcontractor arrangement which portion shall not be included on the taxable gross receipt of the latter.

Hotel Operators's Tax. A twelve percent tax is imposed on the receipt of proprietors or operators of hotels, motels, resthouses, pension houses, lodging houses and resorts. Taxable gross receipts are derived from room occupancy.

Caterer's Tax. A caterer's tax of four percent is imposed on gross receipts of operators of restaurants, refreshment parlors and other eating places, including clubs and caterers; eight percent on gross receipt of operators of bars and cafes and other eating places and on sales of wines and liquors; and four percent on gross receipt from sales of food and refreshments. A 25 percent tax is imposed on gross receipts of the establishment, if maintained within the premises of or compound of race track and 12 percent in case of night and day clubs.

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Common Carrier's Tax. Three percent tax is imposed on quarterly gross receipt of common carriers and keepers of garages, transportation contractors, except owner of bancas and animal- drawn two-wheeled vehicles.

Broker's Tax. A seven percent tax is imposed on gross compensation received by stock, real estate, commercial, customs and immigration brokers.

Tax on Cinematographic Film Owners and Lessors. A three percent tax is imposed on gross receipts of cinematographic film owners, lessors or distributors.

Tax on Dealers in Securities. A six percent tax is imposed on gross income of dealers in securities and five percent of their gross income in the case of lending investors.

Overseas Communication Tax. A tax of 10 percent is imposed on every overseas dispatch, message or conversation transmitted from the Philippines by telephone, telegraph, telewriter exchange, wireless and other communication equipment services on the amount paid for such services. The tax is payable within 20 days after the end of each quarter. However, this tax does not apply to amounts paid for messages transmitted by the government of the Philippines or any of its political subdivisions; by any embassy and consular offices of a foreign government; by a public international organization based in the country; and amounts paid for message by any newspaper, press association, radio or television, etc., in which messages deal exclusively with the collection of news items.

21.5.8 Documentary Stamp Tax

All documents, instruments and papers, acceptances, assignments, sales and transfers of the obligation, right or property incident thereto are subject to documentary stamp tax. Documentary stamps are affixed only on original documents or on documents in place of the original. The amount of tax usually varies directly with the amount involved in the documents.

21.5.9 Mining Tax

An annual occupation fee of P10 per hectare, or fraction thereof is paid in advance by any locator, holder or occupant of mining claim until the lease covering such claim is granted. For the privilege of exploring, developing, exploiting and disposing of the minerals from the lands covered by lease, the following are collected: P5 per hectare or fraction thereof on coal-bearing public lands, payable in advance on the date of the approval of the lease and on the same date annually for 10 years; thereafter P10 annually during the life of the lease; P50 per hectare or fraction thereof on public lands bearing quarry resources for each and every year during the life of the lease; P10 per hectare or fraction thereof for each and every year during the life of the lease; P10 per

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hectare or fraction for each and every year during the life of the lease on all other mineral land containing metallic and nonmetallic minerals under existing mining laws and decrees.

21.5.10 Miscellaneous Taxes

Finance Companies. A tax of five percent is imposed on gross receipts derived by all finance companies doing business in the Philippines from interest, discounts and all other items treated as gross income under the NIRC. Provided that income from lending activities and income from financial leasing shall be taxed on the basis of the remaining maturities of the instruments from which such receipts are derived in accordance with the following schedule: five percent on short-term maturity; three percent on medium-term maturity; and one percent on long term maturity. The tax is payable within 20 days after the end of each calendar quarter.

Banks. A tax with the following schedule: on interests, commissions and discounts from lending activities as well as income from financial leasing on the basis of remaining maturities of instruments from which such receipts are derived; five percent for short-term maturity not in excess of two years; three percent for medium term maturity; one percent for long-term maturity; and a tax of five percent is imposed on royalties, rentals of property, real or personal, profits from exchange and all other items.

Interest from Philippine currency bank deposits and yield or any other monetary benefit from deposit substitutes and from trust fund received by citizens of the Philippines or by resident alien individuals and by domestic resident foreign corporations shall be subject to a 15 percent final tax.

Tax of one percent is imposed on gross value of every sale or purchase of foreign exchange by all banks, nonbank financial intermediaries and all authorized foreign exchange dealers. Bank and nonbank financial intermediaries should make a true and complete return of the value of foreign exchange sold or purchased during the week payable on the first banking day of the succeeding week.

Insurance Premiums. A tax of five percent is imposed on total premiums collected from every person, company or corporation doing business of any sort in the Philippines whether such premiums are paid in money, notes, credits or any substitutes for money.

Franchises. A tax of five percent is imposed on the gross receipts of the business covered by the franchise, or such taxes, charges and percentages as specified in the special charters of grantees except in the case of electric utilities, city gas and water supply, the rate of which is two percent, and on telephone and/or telegraph system, and radio broadcasting starting with a rate of three percent tax. The period of payment is specified in the charter or, in the absence thereof, within 20 days after the end of quarter.

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Amusement Tax. A tax of 18 percent is collected on gross receipts of operators or proprietors of cockpits, cabarets and night or day clubs; 15 percent on gross receipts of boxing, professional basketball games and bowling alleys; and 30 percent on gross receipts of operator in the case of race tracks. Amusement taxes are payable within 20 days after the end of each quarter.

Tax on Winnings. Every person who wins in horse races shall pay a tax equivalent to 10 percent of his winnings or individual dividends after deducting the cost of the ticket. The same tax shall be collected from owners of winning race horses.

Charges on Forest Products. The following charges are collected on each cubic meter of timber cut in any forest land: P30 on timber in the third and fourth groups, not including firewood; P2 per cubic meter on branches and other recoverable wood wastes of timber, regardless of group classification, when used as fuel or raw materials for the manufacture of finish wood products. A forest charge of P2 is imposed on each cubic meter of firewood cut in forest land, except mangrove species.

There shall be collected a charge of 10 percent on the actual market value of gums, resins and other forest products removed from any public forest.

21.5.11 Taxes Imposed Under Special Laws

Taxes imposed and collected by the government under special laws are the following:

Residence Tax. Every inhabitant of the Philippines, 18 years of age and over who has been regularly employed on a wage and salary basis for at least thirty consecutive working days during any calendar year at the rate of not less than P1.00 a day; or who is engaged in business or occupation; or who owns a real property with an aggregate assessed value of P1,000 or more; or who is required by law to file an income tax return shall pay an annual residence tax of P1.00 and an annual additional tax which in no case shall exceed P3,000 in accordance with the following schedule:

a. P2.00 for every P5,000 worth of real property in the Philippines owned by such person during the preceding year, based on the valuation used for the payment of real property tax under existing laws, found in the assessment rolls of the municipality or city where the property is situated.

b. P2.00 for every P5,000 worth of gross receipts or earnings, in excess of P10,000, derived by such person from his business in the Philippines during the preceding year.

c. P1.00 for every P1,000 worth of salaries or gross receipts or earnings derived by such person from the exercise of any profession in the Philippines or from the pursuit of any occupation therein during the preceding year.

Every corporation no matter how it was created or organized, whether domestic or foreign resident, engaged in or doing business in the Philippines

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shall pay an annual residence tax of P50 and an annual additional tax which, in no case, shall exceed P6,000 in accordance with the following schedules:

a. P2.00 for every P5,000 worth of real property in the Philippines owned by it during the preceding year, based on the valuation used for the payment of real property under existing laws, found in the assessment rolls of the city or municipality where the real property is situated.

b. P2.00 for every gross receipts or earnings derived by it from its business in the Philippines during the preceding year. For purposes of additional tax, dividends received by a corporation from another corporation shall not be considered as part of the gross receipts or earnings of the said coporation.

Presidential Decree No. 1118, issued on April 15, 1977, consolidated the two residence taxes (Residence Tax A and B) into one residence certificate. Furthermore, the said decree amended the deadline for the payment of the tax from March 31 to the last day of February.

Narcotics Tax. On or before January 20 of each year, every person who deals in any manner with opium, marijuana, coca leaves, or any synthetic drugs which hereafter may be declared habit-forming by the President of the Philippines should register with the Bureau of Internal Revenue, his name and place of business and pay the taxes required.

The annual fixed taxes on business in narcotics drugs are as follows: P72 on importers, manufacturers, producers or compounders: P36 on wholesale dealers; P12 on retail dealers; and P6 on physicians, dentists, veterinary surgeons and others lawfully entitled to obtain and use the drugs in the laboratory.

Motor Vehicles Fees. All motor vehicles and trailers of any type used or operated on or upon any highway of the Philippines must be registered with the Land Transportation Office for the current year, the dates of which shall be based on a registration scheme prepared by the Office. Registration of such vehicles shall be distributed equitably over different months in the calendar year and shall not be changed more often than once every three years, and only upon due notice given to the public at least 90 calendar days before its effectivity.

Immigration Tax. Every alien over 16 years of age admitted to the Philippines for stay exceeding sixty days shall pay a tax of P25. The tax shall be paid to the Immigration officer or to his duly authorized representative at the time of entry.

Travel Tax. The tax shall be collected from a) citizens of the Philippines; b) permanent, resident aliens: c) nonimmigrant aliens who have stayed in the Philippines for more than one year; and d) Filipino citizens who are permanent residents of a foreign country who have stayed in the Philippines for more than one year.

Persons travelling on nonrevenue tickets are also subject to the tax based on the classification of their nonrevenue tickets. The tax rates imposed by P.D. No. 1867 are as follows; P2,700 for first class passage; P1,620 for economy class

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passage; P1,080 reduced rate on first class passage; P810 reduced rate on economy class passage; and P300 for contract workers.

Exception to certain class of persons travelling abroad could be availed of by securing a Travel Tax Exemption Certificates from the Philippine Tourism Authority.

21.5.12 Value Added Tax (VAT)

Any person who, in the course of trade or business, sells, barters or exchanges goods, renders services, or engages in similar transactions and any person who imports goods shall be subject to VAT.

Sale of Goods. A VAT equivalent to 10 percent of the gross selling price or gross value in money of the goods sold, bartered or exchanged is collected from the seller or transfer.

Sale on Services. There shall be collected a VAT equivalent to 20 percent of gross receipts derived by any person engaged in the sale of services.

Importation of Goods. There shall be collected on every importation of goods a VAT equivalent to 10 percent based on the total value used by the Bureau of Customs in determining tariff and customs duties, plus customs duties, excise taxes, if any, and other charges, such as tax to be paid by the importer prior to the release of such goods from customs custody.

Sources:

21.1-21.2 Department of Budget and Management.
21.3 Central Bank of the Philippines.
21.4-21.5 Bureau of Internal Revenue and Bureau of Customs.

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Table 21.1 Summary of Government Income and Expenditures: 1964-1994
(Million pesos)

Year	Income	Percent increase/ (decrease)	Expenditures[1]	Percent increase/ (decrease)
1964-1965	1,969	-	2,066	-
1965-1966	1,854	(5.84)	2,202	6.58
1965-1967	2,419	30.47	2,516	14.26
1967-1968	2,653	9.67	2,913	15.78
1968-1969	2,947	11.08	3,600	23.58
1969-1970	3,154	7.02	4,037	12.14
1970-1971	4,315	36.81	4,391	8.77
1971-1972	5,100	18.19	5,562	26.67
1972-1972	7,157	40.33	7,909	42.20
1972-1974	11,088	54.93	12,892	63.00
1974-1975	15,085	36.05	16,684	29.41
CY				
1976[a]	18,300	-	21,300	-
1977	22,138	20.97	22,597	6.09
1978	30,391	37.28	27,106	19.95
1979	29,470	(3.03)	32,884	21.32
1980	34,731	17.85	37,404	13.75
1981	35,933	3.46	48,154	28.74
1982	38,205	6.32	48,924	1.60
1983	45,632	19.44	53,418	9.19
1984	56,861	24.61	59,024	10.49
1985	68,961	21.28	74,958	27.00
1966	79,245	14.91	114,505	52.76
1967	103,214	30.25	155,500	35.80
1968	112,861	9.35	168,409	8.30
1989	142,136	25.94	173,341	2.93
1990	177,216	24.68	211,756	22.16
1991	206,381	16.46	254,384	20.13
1992	253,138	22.66	286,603	12.67
1992	262,202	3.58	339,359	18.41
1994[b]	319,169	21.73	362,038	6.68

[1] Total expenditure from 1979 to 1986 excludes lending account.
[a] Data not comparable with previous year.
[b] Data are subject to revisions.

Source: Department of Budget and Management, Budget Planning Bureau.

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Table 21.2 Fiscal Program of the National Government: 1985-1994
(In billion pesos)

Particulars	1985	1986	1987	1988	1989	1990	1991	1992	1993	[a]1994
Revenues	69.0	79.2	103.2	112.9	142.1	177.2	206.4	223.3	213.7	259.5
Current operating expenditures	55.3	66.9	95.5	113.6	127.5	151.2	162.8	214.9	230.1	284.1
Current surplus	13.7	12.3	7.7	(0.7)	14.6	26.0	43.6	8.4	(16.4)	(24.6)
Current outlays and net lending	24.8	43.6	24.4	22.5	29.2	32.2	48.1	54.2	57.6	60.7
Deficit	11.1	31.3	16.7	23.2	14.6	6.2	4.5	45.8	74.0	85.3
Financing account										
Net domestic financing	11.4	27.7	9.9	19.0	3.1	(5.3)	(27.9)	27.9	49.1	72.7
Net foreign financing	(0.3)	3.6	6.8	4.2	11.4	11.5	32.4	14.4	18.0	7.3

[a] Data are subject to revisions.

Source: Department of Budget and Management, Development Budget Coordination Committee.

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Table 21.3 National Government Revenues by Source: 1986-1994
(Thousand pesos)

Particulars	1986	1987	1988	1989	1990	1991	1992	1993	[a]1994
Total revenues	79,245,269	103,214,000	112,861,000	142,135,675	177,215,837	206,381,000	253,138,976	262,202,505	319,169,334
Tax revenues	65,491,000	85,923,000	90,351,920	121,352,000	155,453,000	184,482,000	208,652,420	222,765,000	278,831,000
Taxes on net income and profits	19,148,000	21,799,000	27,408,730	36,482,000	45,374,000	54,751,000	69,917,590	79,963,000	82,500,000
Taxes on property	205,000	240,000	383,270	659,000	534,000	648,000	326,100	368,000	460,000
Taxes on domestic goods and services	28,292,000	37,614,000	36,978,550	45,299,000	60,311,000	76,750,000	64,861,000	73,137,000	95,678,000
Taxes on international trade and transactions	17,846,000	26,270,000	25,581,370	38,912,000	49,234,000	52,333,000	73,547,730	78,297,000	100,193,000
Nontax revenues	13,754,269	17,291,000	22,509,080	20,783,675	21,762,837	21,899,000	44,486,556	39,437,505	40,338,334
Operating and service income	11,472,694	12,197,508	10,323,937	14,414,634	11,546,260	12,369,061	14,362,886	13,335,856	13,980,574
Income from public enterprise/investments	218,640	41,893	1,786,984	1,584,545	3,389,368	2,389,071	7,492,469	4,563,757	5,139,765
Miscellaneous income	574,693	794,757	653,762	2,799,083	2,773,356	2,884,090	5,021,622	6,087,060	6,293,201
Capital revenue	517,603	1,259,326	6,015,713	532,581	2,357,313	2,331,488	12,404,393	10,590,291	10,033,386
Grants and aid	694,944	1,937,181	1,604,449	1,357,000	1,683,000	1,911,000	5,000,060	4,217,221	4,008,980
Extraordinary income	275,695	1,060,335	2,124,235	95,832	13,540	14,290	205,126	643,320	882,420

[a] Data are subject to revisions.

Source: Department of Budget and Management, Budget Planning Bureau.

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Table 21.4 National Government Expenditures by Sector: 1981-1994
(Million pesos)

Particulars	1981	1982	1983	1984	1985	1986	[a]1987
Total expenditures	48,154	48,924	53,418	59,024	74,958	114,505	155.5
Economic services	18,773	16,981	15,700	13,748	18,585	28,114	25.0
Agriculture, agrarian reform and natural resources	3,241	3,889	3,534	3,395	4,045	4,927	7.5
Industry, trade, labor and tourism	2,759	2,275	1,905	1,370	1,585	739	1.2
Utilities and infrastructure	12,773	10,817	10,261	8,983	12,955	10,955	12.3
Other economic services	-	-	-	-	-	11,492	4.0
Social services	10,736	11,160	12,037	12,916	15,398	21,023	27.5
Education	5,806	6,413	6,263	7,830	10,268	14,838	17.0
Housing and community amenities	1,289	1,373	1,871	1,394	746	1,550	2.4
Health	1,734	2,136	2,485	2,308	2,802	3,570	4.1
Social security and welfare	1,577	906	1,012	1,023	1,180	834	1.0
Other social services	330	332	406	361	402	231	5.0
Defense	5,447	5,951	6,526	6,341	8,143	7,611	12.6
General public administration	9,301	9,940	10,707	11,022	14,081	14,631	12.6
Net lending	-	-	-	-	-	15,066	7.6
Debt service fund	3,897	4,892	8,448	14,997	18,751	28,061	77.8
Revenue control account	-	-	-	-	-	-	-

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Table 21.4 National Government Expenditures by Sector: 1981-1994 (concluded)
(Million pesos)

Particulars	1988	1989	1990	1991	1992	1993	[b]1994
Total expenditures	168,409	173,341	211,756	254,384	286,603	339,359	362,038
Economic services	26,092	39,523	49,747	64,343	55,943	74,605	74,508
Agriculture, agrarian reform and natural resources	8,429	12,964	16,812	21,496	14,486	15,478	18,661
Industry, trade, labor and tourism	1,147	1,147	1,431	2,183	1,629	2,066	3,516
Utilities and infrastructure	14,569	19,896	23,089	26,762	31,657	38,630	30,957
Other economic services	1,948	5,190	8,415	13,902	8,171	18,430	21,373
Social services	31,069	38,512	56,144	62,509	58,862	78,655	94,165
Education	22,022	27,378	35,564	39,417	37,696	43,310	46,392
Housing and community amenities	595	624	687	1,598	311	820	1,673
Health	5,564	6,488	8,623	10,158	9,908	7,994	13,050
Social security and welfare	1,147	1,667	6,088	6,031	3,406	5,321	7,728
Other social services	1,733	2,354	5,181	5,305	7,541	21,210	25,322
Defense	18,298	19,766	23,321	26,010	26,727	28,932	33,117
General public administration	15,731	17,453	22,144	25,982	33,650	40,293	41,236
Net lending	4,907	1,589	(471)	777	2,199	2,169	1,200
Debt service fund	71,321	56,498	60,871	74,763	109,222	109,190	117,812
Revenue control account	-	-	-	-	-	-	5,516

[a] In billion.
[b] Data are subject to revisions.
Source: Department of Budget and Management, Budget Planning Bureau.

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Table 21.5 Consolidated Statement of Receipts and Expenditures of Local Government Units: 1983-1991
(In thousand pesos)

Particulars	1983	1984	1985	1986	1987	1988	1989	1990	1991
Beginning cash balance	1,603,342	2,223,419	1,912,978	906,276	940,325	1,432,728	2,431,572	1,955,804	2,709,807
Receipts									
Tax Revenue									
Internal revenue allotment	1,250,662	1,447,952	1,730,871	2,194,265	2,340,085	3,162,663	3,866,548	5,647,583	7,059,358
Specific tax allotment	1,264,751	1,372,622	1,656,837	1,187,259	54,312	48,583	81,092	78,323	86,817
Real property tax	1,068,758	1,163,532	1,187,993	1,534,153	1,581,080	1,735,056	1,943,437	2,397,944	2,630,392
Local taxes	1,105,590	934,021	1,370,220	1,291,219	1,657,711	1,944,721	1,684,949	1,321,351	1,436,519
Revenue stabilization fund	-	-	-	-	-	1,133,913	1,132,279	1,106,167	1,400,442
Total tax allotment	4,689,761	4,918,127	5,945,921	6,206,896	6,767,101	8,023,302	8,682,193	10,854,137	12,613,528
Nontax revenue									
Capital revenue	134,823	129,802	112,122	87,121	205,197	153,344	273,979	107,134	40,341
Operating and miscellaneous revenue	1,110,760	1,014,677	1,027,936	1,379,035	1,727,568	1,501,652	1,804,120	2,439,726	2,402,055
Grants	231,964	247,551	339,290	330,178	775,166	576,415	642,510	662,587	407,804
Extra ordinary income	701,826	1,175,194	903,381	847,452	352,662	401,200	397,760	1,469,731	1,407,557
Borrowings	21,312	31,407	133,727	17,635	105,242	38,821	26,825	36,935	17,655
Inter-fund transfer	99,391	62,383	22,936	35,724	75,854	160,675	262,775	36,935	174,907
Total nontax revenue	2,300,076	2,661,014	2,539,392	2,697,145	3,241,689	2,832,107	3,407,969	4,846,454	4,450,319
Total receipts	6,989,837	7,579,141	8,485,313	8,904,041	10,008,790	10,855,409	12,090,162	15,700,591	17,063,847
Total financial resources	8,593,179	9,802,560	10,398,291	9,810,317	10,949,115	12,288,137	14,521,734	17,656,395	19,773,654

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Table 21.5 Consolidated Statement of Receipts and Expenditures of Local Government Units: 1983-1991 (concluded)
(In thousand pesos)

Particulars	1983	1984	1985	1986	1987	1988	1989	1990	1991
Expenditure									
General government	1,707,708	1,870,671	2,080,722	2,349,400	2,668,056	3,636,814	4,946,540	6,408,659	7,427,821
Public welfare	1,357,017	1,564,440	1,729,600	1,964,775	2,266,619	1,570,472	1,890,476	2,073,398	2,235,435
Economic development	1,379,719	1,538,690	1,725,002	1,654,834	1,677,079	1,482,342	1,821,086	2,439,865	2,622,934
Operation of economic enterprises	279,779	334,930	616,650	582,859	558,845	459,225	645,925	773,296	729,302
Inter-government aids	589,773	677,245	730,706	722,891	658,635	1,216,404	1,164,336	725,025	685,033
Loans and advances	213,586	229,934	254,246	260,591	307,218	181,410	249,946	252,664	266,372
Transfers	135,176	127,942	171,619	170,135	152,490	187,410	320,023	210,271	250,001
Capital outlays	707,002	1,545,730	1,271,604	1,164,507	1,086,948	1,122,771	1,527,598	2,063,410	1,979,722
Total expenditures	6,369,760	7,889,582	8,580,149	8,869,992	9,375,890	9,856,565	12,565,930	14,946,588	16,196,620
Ending cash balance/ (surplus/deficit)	2,223,419	1,912,978	1,818,142	940,325	1,573,225	2,431,572	1,955,804	2,709,807	3,577,034

Source: Department of Budget and Management.

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Table 21.6 Internal Outstanding Debt Classified by Level of Government: 1970-1993
(Million pesos)

Year	Total[1]	National government	Local government	Government corporation	Monetary institutions
1970	7,191.0	4,019.5	107.2	2,145.7	918.6
1971	7,701.9	4,286.7	103.8	2,171.9	1,139.5
1972	9,701.4	5,607.8	106.3	2,265.3	1,722.0
1973	12,533.4	7,294.2	96.3	2,004.7	3,138.2
1974	16,629.5	9,877.0	107.6	1,032.5	5,612.4
1975	20,838.5	11,415.5	127.6	1,402.8	7,892.6
1976	23,394.4	13,175.5	166.1	1,977.4	8,075.4
1977	27,364.7	15,262.2	219.9	2,572.8	9,309.8
1978	32,470.2	17,838.8	280.0	3,331.1	11,020.3
1979	36,826.6	19,086.6	289.4	3,919.8	13,530.8
1980	41,181.6	21,875.5	335.9	4,978.5	13,991.7
1981	49,364.6	28,657.0	361.7	6,656.4	13,689.5
1982	57,563.4	35,343.6	431.9	9,855.5	11,932.4
1983	61,114.4	41,841.3	380.5	12,157.1	6,735.5
1984	84,146.2	57,735.1	174.0	13,206.0	13,031.1
1985	116,286.5	75,972.2	182.4	14,003.8	26,128.1
1986	144,351.6	108,085.2	161.3	12,411.1	23,694.0
1987	161,100.3	150,751.2	116.0	9,313.3	919.8
1988	207,178.9	195,015.3	116.0	8,081.9	3,965.7
1989	237,249.6	225,211.8	116.0	5,879.0	6,042.8
1990	253,808.7	243,289.7	-	6,490.7	4,028.3
1991	340,800.0	286,590.3	-	6,701.0	47,509.5
1992	521,219.7	445,568.0	-	6,988.9	68,662.8
1993[p]	554,419.9	492,056.9	-	7,094.4	55,268.6

[1] Revised to exclude dollar treasury bills.

Source: Central Bank of the Philippines, Department of Economic Research.

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Table 21.7 Outstanding Public External Debt Classified by Institutional Source: 1984-1993
(Million US dollars)

Institution and country	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993[p]
Total	25,418	26,252	28,256	28,649	27,915	27,616	28,549	29,956	30,934	33,348
I. Banks[1]	14,721	14,474	15,356	14,624	13,915	12,222	10,982	10,451	9,083	5,728
II. Financial institutions	1,089	795	828	390	396	544	509	556	324	322
III. Supplier credit[2]	3,103	3,264	3,085	2,355	2,111	2,198	2,312	2,802	2,963	3,178
IV. Multilateral	4,090	4,486	4,688	5,033	5,069	5,584	6,005	6,499	7,168	7,702
a. International Bank for Reconstruction and Development	2,215	2,256	2,297	2,454	2,526	2,781	3,067	3,130	3,473	3,742
b. Asian Development Bank	799	885	943	1,097	1,228	1,381	1,686	1,889	2,113	2,203
c. International Development Association	52	63	64	98	103	103	101	135	167	168
d. International Finance Corporation	41	40	39	33	29	47	143	168	219	234
e. International Fund for Agriculture Development	10	10	9	9	12	11	11	12	13	13
f. International Monetary Fund	973	1,232	1,336	1,342	1,171	1,261	997	1,165	1,183	1,342
V. Bilateral	2,276	2,860	3,925	5,203	6,509	6,712	8,547	9,572	11,328	13,426
a. Australia	65	-	1	1	1	1	1	-	-	-
b. Belgium	21	21	27	37	34	36	41	40	37	36
c. Canada	3	5	3	3	3	3	3	3	3	3
d. Denmark	16	18	21	45	31	39	43	57	99	94
e. France	10	21	12	15	14	15	19	118	157	149
f. Italy	-	1	26	26	54	54	54	-	32	33
g. Japan	914	1,273	1,769	2,487	3,049	3,107	3,560	4,378	6,176	7,731
h. Kuwait	6	6	6	5	4	5	4	4	3	3

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Table 21.7 Outstanding Public External Debt Classified by Institutional Source: 1984-1993 (concluded)
(Million US dollars)

Institution and country	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993[P]
i. OPEC Special Fund	24	23	2	21	22	19	18	16	17	16
j. Romania	9	8	7	6	3	2	10	2	2	3
k. Spain	17	16	5	5	5	5	9	21	25	25
l. United Kingdom	22	48	32	37	106	100	115	116	147	142
m. United States	454	561	574	579	669	661	712	733	702	701
n. Switzerland	-	2	8	10	17	17	20	18	35	34
o. Germany	59	71	79	100	98	122	171	326	431	434
p. Export Credit Agencies	656	786	1,332	1,828	2,398	2,474	3,689	3,659	3,351	3,911
q. Norway	-	-	-	-	-	2	3	3	2	2
r. Brunei	-	-	-	-	-	50	75	75	100	100
s. Finland	-	-	-	-	-	-	-	-	6	6
t. Netherlands	-				-	-	-	3	3	3
VI. Others	139	373	374	844	585	356	194	76	68	2,992

[1] Includes overseas branches of Philippine institutions.
[2] Starting 1987 supplier credit includes D/A and O/A credits of $314 million.

Source: Central Bank of the Philippines.

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Table 21.8 Receipts of the Bureau of Internal Revenue: 1985-1992
(Million pesos)

Source of income	1985	1986	1987	1988	1989	1990	1991	1992
Total tax collection	41,658.24	46,985.92	58,583.46	63,390.68	82,188.93	104,038.97	116,255.78	133,904.12
I. Taxes on net income and profit	17,654.78	18,351.62	21,484.13	27,650.74	37,464.34	49,438.80	60,617.08	70,122.82
A. Company, corporate enterprise	8,489.48	8,713.67	12,371.83	13,094.32	15,175.37	18,499.43	24,081.30	30,645.38
1. Corporate	4,864.54	4,825.68	7,517.75	9,431.08	11,020.08	11,781.49	16,715.69	19,101.85
2. Withholding at source	3,624.94	3,888.00	4,854.08	3,663.24	4,155.29	6,717.94	7,365.61	11,543.53
B. Individual	5,595.45	6,006.32	7,311.33	8,017.21	10,960.85	15,567.96	20,762.61	22,850.14
1. Individual	591.82	813.29	640.45	1,156.52	1,516.08	1,807.09	2,544.72	2,566.31
2. Withholding on wages	3,217.78	3,283.78	4,040.90	5,330.33	7,765.26	11,319.82	15,759.38	16,448.58
3. Capital gains	115.01	215.29	438.47	711.36	936.10	962.90	1,064.81	1,715.84
4. Withholding source	1,670.85	1,694.00	2,191.50	819.01	743.40	1,478.14	1,393.71	2,119.41
C. Others	3,569.85	3,631.62	1,800.96	6,539.21	10,180.14	14,391.65	15,773.18	16,627.30
1. Bank deposits	3,569.85	3,631.62	1,800.96	2,119.81	4,536.84	6,004.43	8,395.07	8,351.83
2. Treasury bills	-	-	-	4,419.40	5,643.30	8,387.22	7,378.11	8,275.47
D. Incremental collections	-	-	-	-	1,147.98	979.77	-	-
II. Taxes on property (Transfer tax)	64.67	82.33	62.39	65.82	121.98	194.74	164.70	248.42
III. Taxes on domestic goods and services	20,886.97	25,680.36	34,779.48	31,471.26	40,475.73	49,140.48	49,732.49	55,423.88
A. VAT (10%)	-	-	-	5,928.72	10,134.49	13,079.15	15,095.74	18,112.85
B. Sales	2,995.60	3,711.93	5,931.22	1,218.04	-	-	-	-
C. Selective excise on goods	13,447.53	16,518.64	22,984.10	20,154.00	24,852.67	28,874.65	25,411.37	27,629.25
1. Alcoholic products	2,778.49	2,637.39	3,710.95	3,420.16	4,276.80	4,889.04	7,751.71	8,210.32
2. Tobacco products	3,023.32	5,120.53	6,871.88	5,918.28	6,306.98	6,787.82	7,999.07	8,791.64
3. Fuels and oils	7,390.07	8,512.92	11,908.88	9,734.78	9,664.23	13,503.00	7,168.62	8,034.31

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Table 21.8 Receipts of the Bureau of Internal Revenue: 1985-1992 (concluded)
(Million pesos)

Source of income	1985	1986	1987	1988	1989	1990	1991	1992
4. Miscellaneous	76.19	109.28	145.25	507.96	1,424.11	1,728.32	1,613.04	2,004.61
5. Mining	171.94	128.25	337.84	563.00	711.41	400.14	869.23	573.06
6. Tobacco inspection fee	7.52	10.27	9.30	9.82	9.52	9.31	9.71	15.31
7. Adjustment measures	-	-	-	-	2,459.61	1,557.02	-	-
D. Selective tax on services	3,646.25	4,655.04	4,833.93	3,517.13	4,596.01	6,206.73	7,940.44	8,275.86
1. Other percentage	2,422.32	2,983.53	3,580.56	2,144.88	2,413.58	2,897.48	3,507.74	3,716.98
2. Overseas community tax	86.18	101.76	-	-	-	-	-	-
3. Banks/financial institution	745.84	1,197.93	843.97	927.29	1,666.39	2,617.09	3,696.00	3,737.18
4. Insurance premiums	281.67	256.71	314.39	352.53	443.83	532.37	634.41	643.64
5. Amusements	110.24	115.13	95.01	92.44	72.21	159.79	102.28	178.06
E. Taxes on use of goods or property	712.09	714.12	932.12	653.37	892.56	979.96	1,284.94	1,405.92
F. Others (forest cargo)	85.50	80.63	98.10	-	-	-	-	-
IV. Others	3,051.82	2,871.61	2,257.46	4,202.86	4,126.89	5,264.95	5,741.51	8,109.01
A. Travel tax	329.06	314.66	256.49	567.44	536.98	568.40	573.79	696.74
B. Documentary tax	1,175.52	1,450.78	1,472.02	2,530.24	3,075.38	3,544.45	4,683.48	6,419.23
C. Miscellaneous	102.10	1,079.66	528.95	1,105.18	514.53	1,152.09	231.13	522.51
D. Forex	1,445.14	26.51	-	-	-	-	-	-
E. Fines and penalties	-	-	-	-	-	-	253.11	470.53

Note: Figures were revised.

Source: Bureau of Internal Revenue.

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Table 21.9 Receipts of the Bureau of Customs: 1981-1992
(Thousand pesos)

Type of income	1981	1982	1983	1984	1985	1986
Total income[1]	11,414,199	12,461,727	16,223,376	19,067,698	17,792,480	17,733,556
Customs receipt	7,811,956	8,871,308	12,472,233	15,937,389	14,699,259	13,782,043
Import duties	7,501,264	8,550,978	12,087,804	14,198,734	13,496,772	13,012,798
Export duties	254,193	224,159	253,851	1,518,687	1,005,440	590,987
Customs documentary stamps	8,180	9,155	11,634	19,367	19,438	24,282
Other income	48,319	87,015	118,944	200,601	177,610	153,976
Internal revenue receipts	3,602,243	3,590,420	3,751,144	3,130,310	3,093,221	3,951,513
Specific tax on imports (Excise tax)	43,644	89,262	41,435	57,531	103,007	176,852
Advance sales tax	2,963,098	2,677,593	3,301,185	2,669,759	2,609,590	3,238,408
Compensating tax	594,805	820,979	398,668	401,688	379,263	534,762
Other taxes	696	2,587	9,855	1,332	1,362	1,491

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Table 21.9 Receipts of the Bureau of Customs: 1981-1992 (concluded)
(Thousand pesos)

Type of income	1987	1988	1989	1990	1991	1992
Total income[1]	26,211,473	25,360,190	38,887,777	44,619,631	65,701,345	74,376,970
Customs receipt	24,603,722	23,705,803	36,653,124	42,808,043	64,004,403	71,803,853
Import duties	24,384,282	9,191,497	13,694,956	18,937,320	28,847,287	29,812,393
Export duties	22,235	3,636	1,085	2,292	199	97
Customs documentary stamps	30,644	30,613	34,863	32,914	31,944	39,369
Other income	166,561	14,480,037	22,922,219	23,835,517	35,121,973	41,951,994
Internal revenue receipts	1,607,751	1,654,387	2,234,654	1,811,588	1,696,942	2,573,117
Specific tax on import (Excise tax)	114,323	9,780	100,528	181,908	133,059	111,618
Advance sales tax	1,091,228	848,285	729,991	308,259	202,371	486,903
Compensating tax	400,299	210,890	2,343,942	172,852	173,407	191,076
Other taxes	190	585,431	1,169,193	1,148,569	1,188,105	1,783,520

[1] Details may not add up to totals due to rounding.

Source: Bureau of Customs.

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Table 21.10 Rates of Tax on Citizens and Residents (Revised September 1992)

Income subject to tax	Tax due
A. On taxable compensation income	
Not over P2,500	Exempted
Over P 2,500 but not over P 5,000	1% excesss over P2,500
Over P 5,000 but not over P 10,000	P 25 plus 3% of excess over P 5,000
Over P 10,000 but not over P 20,000	P 175 plus 7% of excess over P 10,000
Over P 20,000 but not over P 40,000	P 875 plus 11% of excess over P 20,000
Over P 40,000 but not over P 60,000	P 3,075 plus 15% of excess over P 40,000
Over P 60,000 but not over P 100,000	P 6,075 plus 19% of excess over P 60,000
Over P 100,000 but not over P 250,000	P 13,675 plus 24% of excess over P 100,000
Over P 250,000 but not over P 500,000	P 49,675 plus 29% of excess over P 250,000
Over P 500,000	P122,175 plus 35% of excess over P 500,000
B. On taxable income	
Not over P10,000	3%
Over P 10,000 but not over P 30,000	P 300 plus 9% of excess over P 10,000
Over P 30,000 but not over P 120,000	P 2,100 plus 15% of excess over P 30,000
Over P 120,000 but not over P 350,000	P 15,600 plus 20% of excess over P 120,000
Over P 350,000	P 61,600 plus 30% of excess over P 350,000
C. On taxable income without the Philippines of nonresident citizens:	
Not over US $6,000	1%
Over US $6,000 but not over US $20,000	US $ 60 plus 2% of excess over US $ 6,000
Over US $20,000	US $340 plus 3% of excess over US $20,000

Source: Bureau of Internal Revenue.

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Chapter 22
Banking, Other Commercial Finance and Insurance

In developing countries, the banking system plays an important role in the development process. It acts as a custodian of the public's liquid assets and supports the government's priority programs. Banking serves two functions - the provision of money and intermediation between lenders and borrowers. On the other hand, other commercial finance institutions provide short and long-term financing for the expansion and modernization of productive ventures, facilitate placement of funds or evidence of indebtedness and provide capital financing for industrial purposes.

22.1 The Philippine Financial System

The vital element in the attainment of sustained economic growth and stability is a strong and progressive financial system. It stimulates the effective transformation of savings into investments and serves as financial intermediary between savers and spenders. It likewise facilitates the chanelling of loanable funds from surplus spending units to deficit spending units for production and economic growth.

The Philippine financial system has grown in size from 5,421 in 1981 to 8,916 in 1992 or an average annual increase of 4.69 percent, thus reflecting improved efficiency in the utilization of capital investments as well as branching out of financial institutions. From 1981 to 1988, banking institutions consistently outnumbered nonbank financial and nonbank thrift institutions but in 1989 to 1992, nonbank institutions exceeded banking institutions. Nonbank financial intermediaries comprised 50.56 percent while banking institutions and nonbank thrift institutions constituted 48.18 percent and 1.26 percent, respectively, of the total number of Philippine financial institutions at yearend 1992. See Table 22.1.

The eighties exhibited favorable growth in resources of the financial system as it registered an annual average increase of 12.76 percent. In 1983, growth rate of financial resources stood at 30.28 percent. From 1984 to 1985, the rate of increase slowed down until it reached a negative growth of 3.05 percent in 1986. From then on, total resources of the financial system increased gradually until it reached a level of P1,453.22 billion in 1992. The decrease in resources in 1986 was largely due to change in administration which resulted in mild economic instability, and of some changes or revisions made in the coverage of the deposit money banks. However, aggregate resources of the financial system in 1992 increased by 14.63 percent, exceeding the previous year's total by P185.52

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billion. Likewise, the total resources of thrift banks, specialized government banks, rural banks and nonbanks posted an annual growth rates of 16.43 percent, 8.67 percent, 8.02 percent and 2.24 percent, respectively. Please refer to Table 22.2.

22.2 The Philippine Banking Institutions

The history of the Philippine banking system covers a period of nearly five centuries. The history and evolution of the system can be generally divided into epochal periods: Spanish Period (1594-1900), American Period (1900-1941), Japanese Period (1942- 1945), Post-War Period (1945-1948), and the Central Bank Era (1949 to present).

To make the monetary and banking system responsive to the rehabilitation and development of the Philippine economy, the Central Bank was established in 1949. During the period, there were only 11 head offices and 75 branches of commercial banks in operation. In the 50s, seven commercial banks were organized and 44 branches were established, making a total of 137 commercial banking offices operating at the end of 1959. Rapid expansion took place in the 60s with 24 commercial banks and 483 branches added to the system. The same is true with savings, development and rural banks and also with savings and loan associations.

Under the General Banking Act (R.A. 337 as amended by P.D. 71), banking institutions are classified into three general categories: *commercial banks*, *thrift banks* (composed of savings and mortgage banks, private development banks and stock savings and loan associations), and regional unit banks composed of rural banks. *Specialized government banks*, such as the Development Bank of the Philippines and the Land Bank of the Philippines are not covered by this classification but are subject to the supervision of the Central Bank of the Philippines, which is the nucleus of the country's banking system.

At the early 70s, nonbank financial institutions, such as investment houses and finance companies started operations. It was also during this period that Euro-currency banking started in the Philippines when the Central Bank launched a program to establish Foreign Currency Deposit Units (FCDUs) of local commercial banks and to accept foreign currency holdings of residents abroad. The FCDUs became the forerunner of the Offshore Banking Units (OBUs) which commenced operations in mid-1977.

As the eighties ushered in a new era, financial reforms were adopted such as the introduction of expanded commercial banking, reduction in differentiation among categories of banks and nonbank financial intermediaries authorized to perform quasibanking, elimination of all functional distinctions among thrift banks, and increase in the powers and functions of nonbank financial intermediaries authorized to perform quasibanking functions.

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22.2.1 Central Bank of the Philippines (CBP)

The Central Bank of the Philippines under its original charter is called upon to maintain monetary stability, ensure the preservation of the international value and convertibility of the peso into other freely convertible currencies, and promote an increasing level of production, employment and real income.

Presidential Decree No. 72 upon recommendation of the Joint IMF- CBP Banking Survey Commission amended the charter redirecting the CBP's primary objectives towards the maintenance of internal and external stability of the peso and to foster monetary, credit and exchange conditions conducive to a balanced and sustainable growth of the economy.

Besides credit control and monopoly of currency issue and custody and management of foreign exchange reserves, the CBP regulates and supervises the banking system and exercises regulatory power over the operations of nonbank financial institutions. It performs clearing functions and has custody of commercial banks' reserves and simplifies banking classification. It also has the power to take preventive action against insufficiently-funded financial institutions and may impose a legal structure for banks, minimum paid-up capital requirements, and guidelines for management qualifications of personnel of the applicant institution. It provides monetary and credit regulations to control the solvency and liquidity of banks, restrict the types of business that they may engage in and limit the exposure that banks may take according to perceived risks relative to such exposures. Likewise, the CBP has the authority to revoke licences and take necessary steps to straighten out the banks' affairs which may include any combination of actions such as rehabilitation, merger or closure. To the government, it acts as a fiscal agent and financial adviser. In addition, the CBP has also been authorized to collect through the banking system national revenue taxes, customs duties and other levies including stabilization tax.

The Central Bank strategy in pursuing its objectives took the forms of exchange and trade controls in the 1950s; monetary and credit regulation in a free economy with an adjusted but fixed exchange rate in the 1960s; and monetary and credit management, external debt management and regulation of certain exchange transaction under a "floating currency" in the 1970s.

In 1972, the CBP initiated measures to encourage economies of scale in banking and to improve its supervision over the financial sector. It organized foreign savings through the introduction of a foreign currency system for domestic banks in 1972 and the offshore banking system for foreign banks in 1976. In 1980, a new set of multi-purpose institutions called *unibanks* (wherein the resources of commercial banks are coupled with those of investment house/merchant) were developed with greater capacity to generate long-term investment capital. When the foreign exchange and financial crisis erupted in 1983, the Central Bank closed down several institutions, and bailed out others. In effect, the CBP reformed the banking sector, expanded the capital base of banks and exercised closer control over all aspects of the financial system. It

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raised the reserve requirements from 18 percent in 1982 to 24 percent in 1984 and introduced Central Bank bills which yielded high interest.

Money Supply. The tern *money supply* refers to the total currency in circulation (currencry issue of the Central Bank less cash held in vaults of the National Treasury and of the deposit money banks) and peso deposits subject to check of the monetary system, including certified checks outstanding but excluding deposits and other cash items of the national government and interbank balances.

The 70s brought a rapid expansion in money supply as a result of the public clamor for cash balances to hedge uncertainties brought about by the oil crisis. It grew at an annual average of 17.86 percent from P5.18 billion in 1971 to P22.54 billion in 1980. At the start of the 80s, money supply stood at P23.52 billion but slid slightly by 0.12 percent in 1982. The biggest increase of 38.28 percent was registered in 1983 as it grew by P8.99 billion to come up with a total of P32.49 billion money supply for the year. From P33.63 billion in 1984 money supply increased further to P1,179.82 billion in 1992. Generally, the 80s recorded an annual average increase of 15.55 percent, less than 2.31 percent from the annual average increase registered in the past decade. By composition, currency in circulation contributed 64.21 percent to total money supply in 1992 whereas demand deposits constituted 35.79 percent. As of August 1993, money supply amounted to P860.70 billion with 61.37 percent and 38.63 percent currency in circulation and demand deposits, respectively. See Tables 22.3 and 22.3a for details.

International Reserves. *International reserves* consist of the Central Bank's holdings of gold, Special Drawing Rights (SDR), foreign investments and foreign exchange denominated in currencies eligible to form part of reserves. Aside from the U.S. dollar, the following currencies have been included in the country's international reserves - Pound sterling (United Kingdom), Canadian dollar, Swiss franc, Deutsche mark (West Germany), French franc, Dutch guilder (Netherlands), Japanese yen, Austrian schilling, Hongkong dollar, Singapore dollar, Belgian franc, Australian dollar, Bahrain dinar, Brunei dollar, Indonesian rupiah, Italian lira, Kuwaiti dinar, Saudi riyal, Thai baht and Malaysian dollar. The Philippine gold holdings was valued at $35 per fine troy ounce prior to April 1972 and $38 per fine troy ounce up to January 1973. From 1973 to March 1978, gold holdings was valued at $42 per fine troy ounce. Thereafter, gold acquired by the CBP has been valued at acquisition cost based on prevailing market rates. *Special Drawing Rights* (SDR) is a reserve asset deliberately created by the decision of the IMF to supplement existing international reserve assets while foreign investments consist of interest earning deposits with foreign correspondent banks and foreign securities with maturities not exceeding five years which are government-guaranteed and supranational issues. Foreign assets which consist of nonearning demand deposits and foreign currencies on hand comprise the foreign exchange.

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International reserves of the CBP exhibited an erratic trend from 1971 to 1993. From 1971 to 1980, international reserves cumulated to $15,452.21 million, while it registered a total international reserves of $17,891.06 million from 1981 to 1990. During the 80s, the biggest amount of CBP international reserves was attained in 1980 when it generated a total of $3,155.37 million which was attributed to the continued recovery in the level of foreign exchange and investments since the crisis period (1970s). The outbreak of global recession which started in 1982 resulted in an abrupt decrease in international reserves of nearly 50 percent in 1983 but recovered gradually until it reached the second highest reserves of $2,458.98 million in 1986. Since then, CBP's international reserves exhibited a fluctuating movement until it finally registered a total of $1,993.11 million in 1990. From 1991 to 1993, CBP's international reserves showed an increasing and stable trend as it registered total reserves of $4,470.33 million to $5,081.47 million. The two major compositions of international reserves were gold and foreign investments with their respective values of $1,224.79 million and $4,489.12 million. Foreign exchange and SDRs together accounted for $67.56 million or 1.16 percent of the total international reserves during the year. See Table 22.5.

22.2.2 Financial Banking Institutions

The banking sector has grown in size, complexity and sophistication since 1949, the CBP era. Banks are categorized into universal/commercial banks, thrift banks, rural banks and specialized government banks. In 1992, a total of 4,296 banking institutions were recorded with 920 head offices and 3,047 branches nationwide. Of the total banking institutions, commercial banks continued to dominate numbering 2,254 units followed by the rural banks with 1,140 institutions. Thrift banks and specialized government banks constituted the remaining 718 and 184 banking units, respectively.

Total resource base of the banking system grew by a little less than two times from P469.27 billion in 1983 to P1,397.89 billion in 1992 with an annual average increase of 13.24 percent. Within these years, the highest increase was attained in 1983 with 31.56 percent increment over the 1982 resource level of P356.71 billion. In 1986, total resources of the system declined by 4.44 percent from P646.75 billion in 1985 and rose by 6.07 percent in 1987. Thereafter, level of resources of the banking system increased to P1,397.89 billion in 1992 which was P177.63 billion or 14.56 percent more than the previous year's level. Except Central Bank, commercial banks constituted 49.44 percent of the system's aggregate resources posting an increase of 15.35 percent over the 1991 level. Thrift banks followed with P60.23 billion or 4.31 percent of the total. The remaining 4.34 percent was accounted for by specialized government banks (P41.98 billion) and rural banks (P18.64 billion). See Table 22.2 for details.

The system by which banking institutions mobilize domestic resources include savings deposits, time deposits, demand deposits, negotiable order for withdrawal account (NOW account) and money market instruments. These are

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also the sources of funds for the bank's lending operations and therefore, an increase in deposit liabilities is a healthy indicator of the state of the system. At yearend 1992, total deposit liabilities of the banking system stood at P509.66 billion composed of P279.23 billion savings deposits, P111.84 billion other deposits, P77.02 billion time deposits and P41.57 billion demand deposits. Increases in nominal wages and deposit interest rates expanded the total deposit liabilities of the banking system by P83.77 billion or 19.67 percent over the 1991 level of P425.89 billion. See Table 22.4.

On the other hand, loans outstanding of the banking system amounted to P318.18 billion as of yearend 1992, an increase of P123.12 billion or 63.12 percent from the 1991 level. Being the largest banking network with P256.32 billion loans outstanding, commercial banks constituted 80.56 percent of the total loans outstanding of the system. Thrift banks acquired a total loans outstanding of P25.44 billion, or 8.00 percent. Rural banks and specialized government banks had total loans outstanding of P12.67 billion and P23.75 billion, respectively. See Tables 22.6.

Commercial Banks. Commercial banks are the largest and predominant group of institutions in the Philippine banking system, numbering 2,254 units and consisting of 32 head offices with branches and extension offices throughout the country. They represent 52.47 percent of the 4,296 banking institutions and 25.28 percent of all financial institutions (banks and nonbanks) which numbered 8,916 as of 1992.

The major function of a commercial bank is its depository and safekeeping function. A deposit is a contract between the saver and the bank, giving rise to a creditor-debtor-relationship. Deposits are likewise the lifeblood of commercial banks. Deposits may be in peso or currency, private or government and demand or savings and time deposits. These deposits are protected by statutory requirements and by setting up legal reserves. Legal reserves are looked upon as a safety fund in meeting the normal demands of depositors and also as a tool of monetary policy to regulate money supply. The Central Bank of the Philippines sets the rate of the legal reserve requirements.

For additional protection of depositors, R.A. 3591 established the Philippine Deposit Insurance Corporation (PDIC) which insures the deposit liabilities of banking institutions engaged in the business of accepting deposits. Originally set at P10,000, the present maximum coverage is P100,000 per depositor.

Apart from the CBP, commercial banks are the only institutions which can create money by means of issuing new demand deposit in the process of granting loans. This is called the *demand deposit function*. This ability to create money is tied-up with the fractional reserve system that the CBP requires against demand deposits.

In its function as a lending institution, a commercial bank's lending policies serve as the performance guidelines of bank personnel. The bank must have its policies with regard to the rates it will charge on loans. In granting the loan,

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proper evaluation should be made and should conform to the widely accepted 4 Cs of credit, namely: credit character, capacity to pay the loan, sufficient capital, and the climate or conditions surrounding the loan.

Another aspect of commercial banking is the provision of trust services. Trust servicing is actually a nonbanking service. *Trust business* is defined as an arrangement whereby a person called the *trustee* holds and manages property for the benefit of another person/s called the *beneficiary*. It includes the business of settling estates, administering guardianship, and performing agencies. Other services that commercial banks may offer are its facilities for providing foreign financial services. These include correspondent banking relationships, financing of foreign trade, provision of facilities for letters of credit, buying and selling of travellers checks, foreign drafts, international credit card servicing and facilities for foreign currency deposits.

The minimum capital requirements for putting up a commercial bank is P100 million. Commercial banks with foreign currency deposit units had to come up with P150 million capitalization whereas the expanded commercial banks or universal banks' minimum capital requirement is P500 million.

Under the financial reforms of 1980, *Batas Pambansa Blg. 61* revised commercial banking system. Under the law, the powers necessary to carry on the business of commercial banking are accepting of drafts and issuing letters of credit; discounting and negotiating promissory notes, drafts, bills of exchange and other evidences of indebtedness; receiving deposits, buying and selling foreign exchange and gold or silver bullions; lending money against personal property, mortgages or improved real estate and the insured improvements thereon; investing in equity of allied undertaking whether financial or nonfinancial; acquiring readily marketable bonds and other debt securities; receiving in custody funds, documents, valuable objects and renting safety deposit boxes for safeguarding such effects; and acting as financial agent for the buy and sell by order of/for the account of customers, shares, evidences of indebtedness and all types of securities.

Expanded commercial banking (universal banking) is a combination of commercial banking with the powers of an investment house. Benefits derived from universal banking are numerous such as those arising from economies of scale in operations, flexibility in arranging financial packages, stronger competitive capacity and ability to service broader market. Likewise, expanded commercial banking were given the expanded authority to invest in the equity not only of allied undertakings, but of nonallied enterprises and to own up to 100 percent of the equity of a financial intermediary other than a commercial bank.

At yearend 1992, commercial banks yielded a total amount of P691.10 billion resources or 49.44 percent of the banking system's total resources. Excluding the CBP, commercial banks comprised the bulk or 47.56 percent of the aggregate resources of the Philippine financial system. Its resources increased by 15.35 percent over the 1991 level of P599.12 billion, largely on account of the rise in their lending activities. During the 80s, commercial banks

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assets suffered a decline in 1986 mainly due to some revisions and changes made in the coverage of deposit money banks. See Table 22.2.

Being the largest group, commercial banks contributed the biggest share in total deposit liabilities of the banking system amounting to P424.97 billion or 83.38 percent of the P509.66 billion deposits of the system in 1992. Savings deposits and other deposits registered the highest increase of 18.93 percent and 34.64 percent in 1992 over the P192.15 billion savings deposits and P80.97 billion other deposits registered in 1991. Time deposits decreased by 5.88 percent. Growth in deposit liabilities reflects improvement in national income and the public preference for deposits and confidence in the banking system. See Table 22.4.

On the other hand, loans outstanding of commercial banks was P256.32 billion or a tremendous increase of 77.63 percent over the 1991 level of P144.31 billion. Growth in commercial banks' loans outstanding may be attributed to reduced lending rates. See Table 22.6 for details.

Thrift Banks. *Thrift banks* mobilize small savings and provide loans at generally longer and easier terms to lower income groups. Loans are usually for basic social and economic needs and for small producers such as farmers, cottage industry entrepreneurs and consumers to finance their production and consumption requirements.

The thrift banking system is composed of Savings and Mortgage Banks (SMBs), Stock Savings and Loan Associations (SSLAs) and private development banks.

Savings and mortgage banks are organized for the purpose of accumulating the savings of depositors and investing them to marketable bonds and securities, commercial papers and accounts receivable, drafts of exchange, acceptances or notes arising from loans, whether secured or unsecured, mortgages on real estate, financing for housing loans and other investments and loans authorized by the Monetary Board of the CBP for national economic development purposes. *Stock Savings and Loan Associations* are involved in similar activities but limit such services to their members and stockholders.

Private development banks cater to the capital needs and demand for investment credit or medium to long-term loans for the promotion and growth of industry and agriculture at reasonable costs. These banks are also authorized to generate deposit from the public and other government institutions as the source of funds for the loans and financing services they provide.

The capitalization of thrift banks may be in the form of common stock or a combination of common stock and preferred stock. For existing thrift banks with head offices located within Metro Manila, capitalization shall be P20 million and for those operating outside Metro Manila, P10 million. Thrift banks that may engage in special activities such as acceptance of demand deposits shall have a minimum capitalization of P50 million. For thrift banks established after September 13, 1990 the minimum paid in capital requirement would be

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P100 million for those with head offices within Metro Manila and P20 million for those with head offices outside Metro Manila.

Aggregate resources of the 718 thrift banks operating in the country in 1992 amounted to P60.23 billion, up by 26.87 percent from the 1991 level. See Table 22.2.

Deposit liabilities of thrift banks likewise registered an increase of 19.44 percent from P33.94 billion in 1991 to P40.54 billion during the year. Savings and mortgage banks accounted for the largest share of deposits at P28.56 billion or 70.46 percent while the combined share of SSLAs and private development banks comprised the remaining 29.54 percent or P11.97 billion. See Table 22.4.

Rural Banks. A rural bank is a unit-type community oriented bank organized as a stock corporation with five to fifteen incorporators, majority of them must be residents of the place where the rural banks will operate and must own the majority or controlling voting shares of the rural bank.

Rural banks provide savings facilities in rural areas and extend loans to farmers and small businessmen. Because of their credit and savings function in the rural economy, rural banks receive considerable assistance from the government.

In addition, upon approval of the Monetary board, a rural bank may open current or checking accounts or NOW accounts; may act as official depository of municipal, city and provincial funds in the locality where it is located; may rediscount papers with the PNB and DBP; and may invest in allied undertakings.

Acting as a depository or agent, it offers trusteeship services such as receiving in custody funds, documents and other valuable, acting as trustee over estates and properties of farmers and merchants; and as financial agent for the account of its clients and buy or sell for their account, shares, securities, and other types of indebtedness, as well as make collections and payments for the account of their customers which is not incompatible with the banking business.

The *agricultural loans* include farm expenses in connection with the preparation, cultivation, transportation, storage or marketing of products and other farm-related activities necessary to increase and maintain productivity. *Commercial loans* are granted for the conduct, development or improvement of commercial operations as well as the purchase of commodities for resale while *industrial loans* are granted for the purchase of raw materials for the manufacture and processing of goods, and for payment of labor and cost of marketing finished goods. Other types of loans include *term loans and loans to cooperatives*.

A special feature of the rural bank's lending operations is the program on supervised credit and special financing programs. Supervised credit refers to timely credit combined with farm and management guidance under a trained technician. *Special financing programs*, on the other hand, refer to special programs of the government for agricultural production that have been established and placed under the administration of the CBP in which the rural banks

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are allowed to participate. Funds in this program are channelled through rural banks in the form of special time deposits to provide them with funds for initial loan releases to finance specific projects under the program and to enable the rural banks to generate more funds through rediscounting with the CBP.

Launched early in 1987, the rehabilitation program for the rural bank was implemented to help distressed rural banks regain a solvent position through fresh capital infusion, conversion of supervised rediscount fund arrears into equity of the Land Bank and payment plan not exceeding 10 years.

The CBP's continued supervision over the rural banks boosted local banking units' investments particularly in the form of deposits and loans extended to various economic sectors of different localities. Rural banks numbering 1,140 in 1992 registered a total of P18.64 billion resources, an increase of 16.98 percent or P2.71 billion more than the previous year's level. However, level of deposits decreased by P1.64 billion which is 19.36 percent lower than the total deposits registered in 1991. Of the P6.82 billion total deposits, less than two thirds was in the form of savings deposits aggregating P4.20 billion. More than one third (37.05%) was accounted for by time deposits and the remaining 1.35 percent were in the forms of demand deposits and other deposits. On the other hand, total loans outstanding of rural banking units increased by 17.94 percent from P10.74 billion in 1991 to P12.67 billion in 1992. Much of this amount was channelled to agricultural sector to enhance production of agricultural products which are among the country's top foreign exchange earners. See Tables 22.2, 22.4 and 22.6.

Specialized Banks. In response to specific needs, government-owned specialized banks were created. Among these are the Development Bank of the Philippines, the Land Bank of the Philippines and the defunct Philippine Amanah Bank.

For nine years, specialized government banks managed to maintain favorable growth in terms of assets and liabilities. The 184 specialized government banks operating in the country grew in consolidated assets by 47.00 percent or P13.42 billion within one year reaching a level of P41.98 billion in yearend 1992.

Increased deposits and improvement in capital accounts helped provide funds to finance operations during the year. Gross deposit inflow aggregated P37.33 billion, an 87.45 percent increase over the 1991 deposit level of P19.91 billion. On the other hand, loans outstanding of this sector increased by P8.38 billion or 54.55 percent from P15.37 billion to P23.75 billion in yearend 1992. See Tables 22.2, 22.4 and 22.6 for details.

22.2.3 Offshore Banking System

Offshore Banking Units (OBUs) were established in the country through Presidential Decree No. 1034 on September 30, 1976. OBUs operations involve

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the receipt of funds mostly from external sources and the transfer of these funds from within or outside the country.

Activities open to the OBUs consist of the following: acceptance of time and call deposits or issuance of negotiable certificates of deposits in any foreign currency; acceptance of demand deposits in any amount; extension of foreign currency loans and advances or participation in syndicated loans. They likewise could invest in, underwrite or otherwise deal in debt instruments, regardless of maturity; discount bills, acceptance of negotiable certificates of time deposits; and engage in spots or forward foreign exchange trading among others.

On the other hand, for the depositor whether resident or nonresident of the Philippines, OBUs have the following attractions: acceptance of time, demand and call deposits or issuance of negotiable certificate of time deposits; absence of restrictions on the withdrawability of deposits subject only to the contract terms with the bank; discounting and borrowing facilities; and transferability of deposits to any bank abroad.

For a period of ten years, gross resources of the Offshore Banking Units had a declining trend except for 1982, 1985 and 1992 where it registered an increase of 7.80 percent, 0.90 percent and 4.76 percent, respectively. From US $4.63 billion in 1981, it plunged to a level of US $2.05 billion in 1992 reflecting an annual average decrease of 6.83 percent. During the year, OBUs resources increased by US $0.09 billion largely on account of the US $0.05 billion increment in deposits and borrowings. Placements with banks and nonbanks dropped by US $0.19 billion and US $0.07 billion, respectively. Interbank deposits/borrowings, on the other hand, recorded an increase of US$0.05 billion.

Gross earnings of OBUs in 1992 amounted to US $0.15 billion, slightly exceeding its expenses for the year. It resulted in a net earnings after tax of US $0.03 billion, a decrease of 18.92 percent from US $0.04 billion in 1991 due to the drop in onshore and offshore earnings totalling US $0.05 billion and US $0.10 billion, respectively. Table 22.7 presents the details on offshore banking system.

Foreign Currency Deposit System, which expanded with the enactment of Presidential Decree No. 1035 in 1976, was established for the primary purpose of attracting foreign currency deposits. While the OBUs are principal suppliers of long-term funds, the FCDUs are considered as retail bankers of such funds.

The first three years of the 80s exhibited favorable growth in FCDUs resources with a cumulative total of US $18.90 billion. A declining trend started in 1984 with US $6.45 billion resources down to US $2.75 billion in 1987, or an average decrease of 19.19 percent during that four-year period. The biggest decrease of 42.08 percent in gross resources was attained in 1987 although the earnings during that year increased by 10.56 percent due to lower interest payment on deposits and on interbank borrowings. Thereafter, FCDUs resources increased due to regained confidence on the system's operation. Finally, gross resources of FCDUs stood at US $5.78 billion and their net earnings after

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tax amounted to US $0.07 billion with their respective increases of 28.05 percent and 1.54 percent over the 1991 level. Placements and lendings likewise increased by US $0.65 billion or 19.15 percent to settle at US $4.05 billion in 1992 with lendings to nonbanks posting an increment of US $0.96 billion which substantially offset the US $0.31 billion drop in lendings to bank sector. See Table 22.8 for details.

22.3 Nonbank Financial Institutions (NBFIs)

NBFIs are group of institutions with varying characteristics. These are nonmonetary financial institutions, classified into government and private, with or without quasibanking functions. They are primarily engaged in long-term financing for the expansion and modernization of productive ventures and in facilitating short-term placements in other financial institutions. The three major classification of NBFIs are private nonbank financial intermediaries, nonbank thrift institutions and government nonbank financial institutions. Investment houses, financing companies, securities dealers/brokers, investment companies, venture capital corporations, pawnshops, fund managers and lending investors comprise the *private nonbank financial intermediaries* while *private nonbank thrift institutions* are composed of mutual building and loan associations and the nonstock savings and loan associations. On the other hand, the *government nonbank financial institutions* consist of the Government Service Insurance System (GSIS), the Social Security System (SSS), National Home Mortgage Finance Corporation (NHMFC), Philippine Veterans Investment Development Corporation and the National Development Corporation (NDC).

From 1981 to 1990, the number of NBFIs was generally on the uptrend registering an annual average increase of 9.16 percent. At the start of the 80s, NBFIs consisted of 1,769 branches and head offices nationwide and it grew to 4,620 institutions in 1992. The biggest increase was attained in 1987 at 18.40 percent, attributed mainly to the huge increase in the number of private NBFIs registered during the year. Moreover, its number declined by 0.65 percent, from 2,164 in 1984 to 2,150 in 1985 brought about by the 35.23 percent reduction in the number of financing companies. Of the total number in 1992, private nonbank financial institutions comprised the majority at 94.74 percent. See Table 22.1.

From 1983 to 1990, the NBFIs resources exhibited a positive growth with annual average increase of 11.26 percent. From P92,033.4 million resources recorded in 1983, it grew to P191,840.2 million in 1990. The biggest increase was attained in 1983 amounting to P17,878.8 million or 24.11 percent over the previous year's level of P74,154.6 million. In 1984, the rate of increase suddenly dipped to 3.74 percent due to adverse developments caused by global recession that started in 1982. Since then, investments and production started to slow down that caused NBFIs resources to increase sluggishly. Progress was achieved in 1989 and 1990 when total assets registered a double-digit growth rates of 21.27

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percent and 20.68 percent, respectively. In 1992, NBFIs registered a total of P55,332.0 million resources. See Table 22.2 for details.

22.3.1 Government Nonbank Financial Institutions

Total resources of the five government NBFIs grew at an average annual rate of 11.53 percent from P49.66 billion at yearend 1983 to P105.36 billion at yearend 1990. A substantial increase of 55.08 percent was recorded in 1983 due to the initial inclusion of the National Development Corporation in government NBFIs. Loans outstanding of the institutions amounted to P25.69 billion in 1989, slightly lower by 8.11 percent over the 1988 figure of P27.95 billion. See Table 22.2 and 22.6.

Government Service Insurance System (GSIS). The GSIS provides insurance and social security benefits to its members and extends financial support to a wider range of economic development projects. It has the primary objective of promoting the welfare and security of government employees and their dependents through social security and insurance program benefits. The GSIS has 27 branch offices located all over the country and covers a total of 1.6 million members.

Starting in 1991, the GSIS in its effort to enable member-offices to transact General Insurance business at any branch office, provided decentralized social security services to 13 branches - six in Luzon, three in Visayas and four in Mindanao. This innovation will be of advantage to some 738,046 members representing 46.00 percent of the total membership.

Total assets of the GSIS in 1993 amounted to P55.77 billion, an increase of 9.79 percent or P4.97 billion over the 1992 level of P50.79 billion. From 1971 to 1980 its average annual growth rate was 14.19 percent, relatively higher by 0.14 compared to the 80s which had an average annual increase of 14.33 percent. The highest increase was recorded in 1976 with 43.24 percent increment followed by 1990 and 1992 with 24.98 percent and 17.56 percent, respectively. Moreover, increased yields on different types of insurance funds contributed much to the GSIS reserves which registered a total of P48.48 billion. Investments, on the other hand, reached P21.77 billion, an increase of 29.07 percent over the P16.87 billion in 1992. The system's major investments were placed in low-risk and high yielding short-term treasury bills and other government securities.

Social Security System. The Social Security System was created on September 1, 1957 by virtue of R.A. No. 1972. Intensified coverage campaign project of the SSS marks the rapid growth in the system's employee coverage now aggregating 13.3 million employees, 408,926 employers and 512,755 self-employed persons. The SSS had a total work force of 3,245 employees or a ratio of one SSS employee to 4,099 member employees, to 126 employers, and one to 158 self-employed members at the end of 1992.

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Starting January 1, 1992, the SSS included self-employed farmers and fishermen earning at least P1,500 a month among its covered members, providing them the same social security benefits and privileges enjoyed by other self-employed members.

Consolidated assets of social security, employees' compensation and medicare programs of the SSS in 1992 totalled P88.96 billion, an increase of P12.53 billion or 16.40 percent over the 1991 assets of P76.42 billion. Substantial increase in assets was due to relatively high yields in investments particularly in private securities as well as improved collection efficiency of the system. Investments likewise posted an increase of 16.77 percent or a total of P12.39 billion from P73.86 billion in 1991 to P86.24 billion during the year. On the other hand, total reserves of the System in 1992 amounted to P88.21 billion, an increase of 16.88 percent from 1991. See Table 22.9.

22.3.2 Private Nonbank Financial Institution

In 1972, the CBP was given regulatory authority to institute and implement reforms on nonbank financial institutions under P.D. No. 72. The private NBFIs were given the function of providing long and short term financing and mobilizing funds for the account of others.

The following gives the brief description of the duties and functions of different private NBFIs.

Investment houses are enterprises engaged in guaranteed underwriting of securities of any kind issued by another corporation, person or enterprise, including securities of government and its instrumentalities.

Financing companies are corporations or partnerships primarily organized for the purpose of extending credit facilities to consumers and agricultural enterprises either by discounting or factoring commercial papers or account receivables or other evidences of indebtedness or by leasing motor vehicles, heavy equipment, industrial machinery and equipment, appliances, etc.

Securities dealers are institutions organized either as partnerships or corporations that buy and sell securities of another for the purpose of reselling or offering them for sale to the public for their own accounts. They do not earn commission but they derive income from trading - the difference in buying and selling price of securities.

Securities brokers are institutions engaged in the business of effecting transactions in the sale of securities for the account of others. They earn commission out of this intermediary transaction.

Investment companies are entities primarily engaged in investing, reinvesting or trading in securities.

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Venture capital corporations are entities organized jointly by private banks and government agencies to develop, promote and assist small and medium-scale enterprises through debt or equity financing.

Pawnshops are business establishments engaged in lending money on personal property delivered as security or pledge. Fund managers are institutional and personal administrators of funds created or constituted for the benefit of others. On the other hand, lending investors are persons who practice lending money for themselves or others, usually utilizing their own capital for the purpose of extending all types of loan, generally short-term and without collateral.

Private insurance companies are insurance carriers of all kinds such as life, fire, marine, accident, health, title, financial obligations, casualty, fidelity and surety; insurance agents and brokers organizations servicing insurance carriers; consultants for policy holders; adjusting agencies; independently organized pension (superannuation) funds.

Nonstock Savings and Loan Associations (NSSLAs) are corporations organized primarily for mutual self-help and common interest of its members who must belong to a well-defined group and shall not transact business with the general public. It is a business of accumulating funds of their members through earnings or capital contribution and relending these accumulated funds to their members or investing them in either government securities or other productive enterprises.

Mutual Building and Loan Associations (MBLAs) are corporations whose capital stock is required or is permitted to be paid in by the stockholders in regular, equal periodic payments to repay said stockholders their accumulated savings and profits upon surrender of their shares, to encourage industry, frugality and home building among the stockholders on the security of unincumbered real estate pledge of shares of the capital stock owned by such stockholders as collateral security.

From 1981 to 1990, private nonbank financial institutions have grown substantially in number due to the huge increase in the units of pawnshops. From 1,763 institutions in 1981, the number of private nonbank financial institutions increased to 4,616 units in 1992. More than one half or 58.34 percent are composed of pawnshops having a total of 2,693 units nationwide. Resources of the private NBFI's was generally on the uptrend. It grew at an annual average rate of 11.64 percent from P42.38 billion in 1983 to P86.48 billion in 1990. Private insurance companies which ranked fourth in number, accounted for the biggest resources, sharing P36.21 billion or 41.87 percent of total private NBFIs' resources in 1990. See Tables 22.1 and 22.2.

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22.4 Insurance

The insurance industry forms an integral part in the development process and expansion of financial establishments and other basic industries. Preliminary figures showed that private insurance companies generated a total income of P13.57 billion from insurance premium in 1992 which was 14.71 percent higher than in 1991. Said premiums generated during the year was equivalent to 0.99 percent of GNP and increased the per capita expenditure on private insurance to P211 from P185 in 1991.

As of December 31, 1992, a total of 127 private insurance companies were issued certificates of authority by the Insurance Commission, 23 of which were direct writing life insurance companies, 98 nonlife insurance companies, four professional reinsurers and two direct writing life insurance companies. The five government-owned insurance corporations namely Government Service Insurance System (GSIS), Social Security System (SSS), Philippine Crop Insurance Corporation (PCIC), Philippine Deposit Insurance Corporation (PDIC) and Home Insurance and Guaranty Corporation (HIGC) also form part of the insurance industry although not under the supervision and control of the Insurance Commission.

Total assets of the insurance industry increased by 14.94 percent from P179,635.80 million in 1991 to P206,468.70 million in 1992. Government insurers contributed P150,090.50 million or 72.69 percent of the total assets.

The insurance industry's contribution to nation building could also be gleaned from the amount of investments it placed in government securities. Private insurers investments in government securities in 1992 amounted to P12,957.30 million or 36.09 percent of the total investments, the highest value of investments recorded since 1988. Government insurers' on the other hand, invested a total of P106,748.70 million, a 12.91 percent increase from the 1991 figure of P94,543.10 million of the total investments. Among the government insurance corporations, Social Security System (SSS) posted the highest value of investments at cost accounting for a total of P86,241.50 million or 66.54 percent of the total investment. See Tables 22.9, 22.12 and 22.13.

22.4.1 Life Insurance

The oldest and most widely used form of life insurance protection is the ordinary insurance issued to individual policy holders. *Ordinary insurance policies* have bigger face value compared to industrial insurance. *Group insurance* on the other hand, is life insurance issued to a group of persons under a single contract called the *master policy*.

For the past two decades, life insurance industry was generally on the uptrend. From P1,364.60 million in 1971 to P25,531.90 million in 1990, total resources of life insurers grew at an annual average rate of increase of 16.74 percent. The highest rate of increase was recorded in 1978 at 25.51 percent followed by that in 1989 and 1991 at 24.54 percent and 22.84 percent, respectively. Life insurance assets constitute 64.31 percent of the private insurance

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company's total resources. On the other hand, value of investments of life insurers in 1992 stood at P27,587.30 million or 20.64 percent more than the 1991 figure of P22,867.0 million. See Table 22.12.

Private life insurance also enjoyed a favorable growth in 1992 as it generated a total premium income of P7,473.20 million or an increase of 17.68 percent from the 1991 figure of P6,350.20 million. See Table 22.11.

Despite the decrease in the number of policies written by the private insurance companies in 1992, the value of insurance coverage increased by 28.73 percent from P261,882.00 the previous year to P337,113.50 million this year.

Guaranteed by the legal policy reserves, benefit payment reached P2,898.20 million, higher by 15.54 percent from P2,508.40 million claims paid in 1991. The percentage of claims incurred to premium income reached 38.78 percent, lower by 0.72 percentage point from 39.50 percent recorded in 1991. See Table 22.14.

Of the payments made in 1992 for benefits due to policy holders, the major bulk went to death benefits which amounted to P749.50 million or a share of 25.86 percent. Dividend and surrender benefit payments were next at P655.20 million and P530.70 million, respectively. The remaining 33. 22 percent, on the other hand, were used to pay for the maturity (P464.70 million), annuity (P20.70 million) and other benefit payments (P477.40 million). See Table 22.15.

22.4.2 Nonlife Insurance

Risks incurred by nonlife insurance companies doing business in the Philippines are classified into fire, marine, casualty, surety and recently, professional reinsurers.

Under the Insurance Code, *fire insurance* includes fire, earthquake or shock, typhoon or flood or tidal wave and other allied risks. *Casualty insurance* includes loss of liability arising from accident or mishap, excluding certain types of loss which by law or customs are considered as falling exclusively within the scope of other types of insurance such as fire or marine. It includes but is not limited to public liability insurance, motor vehicle insurance, health and accident insurance, burglary, larceny and theft insurance and other substantially similar kinds of insurance as written by nonlife insurance companies.

The contract of *suretyship*, which is another major line of insurance coverage by nonlife insurance companies, guarantees the performance of an obligation or undertaking in favor of a third party and also includes official recognizances, stipulations, bonds of undertakings issued by any nonlife insurance company doing business in the Philippines under the provisions of Act No. 536 as amended by Act No. 2206.

The operations of *professional reinsurers* are limited to reinsurance transactions and therefore they do not issue direct policies or deal with the insuring public. This type of insurance has been defined as an insurance of an insurance whereby an original insurer distributes its risks by giving off the whole or some portion thereof to another insurer with the object of reducing the amount of its possible loss.

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The private nonlife insurance industry in the Philippines represented by its 98 direct-writing companies and four professional reinsurers, posted a total asset of P20.12 billion and an investment worth P8.31 billion at the end of 1992, wherein P7.90 billion or 95.02 percent of the total was accounted by the nonlife insurers and the remaining 4.98 percent was accounted by the professional reinsurers.

The private nonlife insurance company chalked up its net risks written of the amount of insurance coverage by 53.52 percent from P2,044.78 billion in 1991 to P3,145.94 billion in 1992. Relatively, premiums earned increased by P594.30 million from P5,484.40 million in 1991 to P6,078.70 million during the year. Premiums earned from casualty insurance and fire and allied risk insurance continued to dominate, accounting for P3,708.20 million or 61.00 precent and P1,186.10 million or 19.51 percent, respectively.

Other lines of insurance coverage were marine, aviation or transit and suretyships with a combined total of P1,184.40 million premiums earned in 1992.

Total losses incurred reached P3,024.10 million, a 12.42 percent increase from the 1991 figure of P2,690.10 million. The overall rate of loss over premiums earned for the year was 49.75 percent, higher by 0.70 percentage point from 49.05 percent recorded in 1991. See Table 22.16.

22.4.3 Crop Insurance

The crop insurance program which was in effect since 1981 is an improvement over the old agriculture guarantee system in the sense that while the agricultural guarantee scheme protected the liquidity/financial stability of lending institutions (banks), crop insurance was designed to benefit directly small farmers by way of providing them protection against losses due to natural calamities. Insurance coverage is limited to production inputs invested by the farmer in his farmlot during the crop season (from transplanting or direct seeding to the stage when the crop is ready for harvest) and only the supervised farmers (those under the supervision of duly accredited production technicians) and borrowing farmers are eligible for coverage. As only inputs are insured, insurance ceases when the crop is harvested.

In 1988, the Philippine Crop Insurance Corporation (PCIC) joined the Pool of Livestock Insurers (PLI) and marked the inclusion of livestock among its major programs. For a period of more than five years, a total of 119,350 farmers raising carabaos, cattle, swine and poultry were covered with P1,162.19 million worth of policies issued.

In 1993, the PCIC underwrote for the PLI a total of P432.10 million worth of policies, 0.89 percent lower than the 1992 coverage benefitting 38,308 livestock and poultry raisers.

During its first decade of operation, PCIC experienced favorable growth in crop insurance business. Number of farmers insured reached a cumulative sum of 2,590,468 cultivating a total area of 4,391,763 hectares of farmlands from 1981 to 1993 . These farmers were covered by P17,480.66 million worth of

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insurance policies. Of the total, rice crop insurance accounted for 87.83 percent and 83.55 percent in terms of the number of farmers and amount of coverage, respectively. The highest during its 12 years of operations was in 1991 insuring 301,954 rice farmers. Rice farmers covered in 1993 reached 177,512 cultivating a total area of 288,057 hectares which was 21.00 percent and 18.91 percent lower than the previous year. The decrease in the number of farmers and area covered resulted to the corresponding decrease of 15.05 percent of the insurance coverage from P2,216.87 million in 1992 to P1,883.26 million in 1993.

Corn crop insurance started its operation in 1982 initally covering 9,610 farmers. Realizing the importance of crop protection, the number of farmers insured abruptly increased by 321.42 percent from 1982 to 1983. Corn crop insurers, however, experienced a decline in 1987 by 38.51 percent due to the slow pace of economic recovery resulting from both domestic and international disturbances. But due to the improved service standard of the insurers, it regained the farmers' confidence thus, increasing the number of insured farmers by 153.03 percent in 1988. However, from 1991 to 1993, a continous decline in the number of farmers, area covered and amount of insurance were observed which is largely due to the dry spell that hit the corn producing areas. In 1993, cumulative total of insured farmers reached 314,424. Total area covered was 587,960 hectares with insurance coverage of P2,743.53 million. See Table 22.17.

In September 1991, under a memorandum of agreement between the National Tobacco Administration (NTA) and PCIC, the corporation expanded its existing crop insurance program to tobacco crops. As of 1993, the program accumulated a total of P7,010 thousands sum insured providing protection agains natural risks to 822 farmers cultivating 633 hectares of tobacco farmlands.

Another type of crops that was included in the existing crop insurance program of the PCIC starting 1992 was banana. As of the year end, there were 1,255 hectares covered with the 125,531 thousands insured of banana farmlands.

Like other insurance firms, the PCIC invests in risk. It covers all losses to palay, corn, tobacco and banana crops caused by natural calamities such as typhoons, floods, droughts and plant diseases of all types. From 1981 to 1990, combined losses of the rice and corn crops amounted to P1,447.48 million. The highest claim payment was recorded in 1988 at P203.80 million which was 14.08 percent of the total claims paid from 1981 to 1993.

In 1993, claims for rice crop losses reached P124.39 million primarily caused by typhoons which accounted for 53.21 percent of the total claims paid by the PCIC. On the other hand, claims paid to corn farmers was P28.07 million, a decrease of 4.85 percent from P29.50 million benefit payments in 1992. Droughts accounted for 48.28 percent of the total corn crop losses followed by typhoons and floods with 40.15 percent share. Table 22.18.

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22.4.4 Philippine Deposit Insurance Corporation (PDIC)

The Philippine Deposit Insurance Corporation promotes economic development by preserving public confidence in the banking system. It is the sole insurer of deposits, the primary agency of receivership and liquidation and an institution entrusted to strengthen the Philippine banking system.

The year 1992 witnessed a turning point in the PDIC's history - the passage of Republic Act 7400 which amends the Corporate Charter, RA 3591 which considers the strongest affirmation of the endeavors at strengthening this institution. This milestone has amplified the PDIC's powers and responsibilities essential to its role in enhancing depositor confidence, infusing strength in the failures on the payments system and the economy.

Conscientious claims collections, effective investment policies and the amendment to PDIC Charter reinforced the PDIC's financial strength. Resources in 1992 stood at P9,357.00 million or a 17.32 percent higher than the 1991 figure of P7,975.40 million. Investments, on the other hand, decreased by 9.55 percent from P3,611.60 million in 1991 to P3,266.70 million in 1992. Reserves for insurance losses, however, were remarkably increased by 43.42 percent form P1,412.10 million in 1991 to P2,0125.20 million in 1992 to cover insurance payoff operations.

On its over two decades of operations, the PDIC now covers a total of 902 banking institutions, 13.01 percent lower than the 1991 figure of 930. Unlike in the previous years where the number of member banks fell because of closures, this year it fell because of mergers among thrift and rural banks, some of which were initiated through PDIC's efforts.

On June 31, 1992, there were P17.70 million accounts, 95.95 percent of which were fully recovered. Risk exposure likewise grew from P108.71 billion to P174.88 billion in the same period.

Sources:

22.1 - 22.3	Central Bank of the Philippines.
22.3.1	Government Service Insurance System Social Security System.
22.4 - 22.4.2	Insurance Commission.
22.4.3	Philippine Crop Insurance Corporation.
22.4.4	Philippine Deposit Insurance Corporation.

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Table 22.1 Number of Philippine Financial Institutions: 1981-1992

Institution	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990[r]	1991	1992
Total	5,421	5,569	5,810	5,993	5,780	6,109	6,506	6,916	7,267	7,479	7,982	8,916
Banking institutions	3,652	3,749	3,861	3,829	3,630	3,615	3,553	3,562	3,588	3,638	3,791	4,296
Commercial banks	1,732	1,842	1,905	1,922	1,752	1,765	1,733	1,746	1,765	1,813	1,923	2,254
Thrift banks	637	676	708	650	661	665	658	664	675	653	663	718
Private development banks	182	203	218	209	215	213	205	205	277	211	202	218
Savings and mortgage banks	187	193	209	211	226	231	243	250	206	270	285	316
Stock savings and loans associations (SSLAs)	268	280	281	230	220	221	210	209	192	172	176	184
Rural banks	1,167	1,112	1,151	1,157	1,117	1,085	1,058	1,048	1,043	1,045	1,063	1,140
Specialized government banks	116	119	97	100	100	100	104	104	105	127	142	184
Nonbank financial institutions	1,769	1,820	1,949	2,164	2,150	2,494	2,953	3,354	3,679	3,841	4,191	4,620
Investment houses	48	52	51	49	47	40	44	31	32	32	33	29
Financing companies	559	537	532	545	353	334	285	237	226	186	191	197
Securities dealers/brokers	142	123	124	127	125	124	129	132	88	116	123	126
Investment companies	63	66	65	68	80	82	81	75	60	63	64	64
Fund managers	9	10	12	12	12	11	10	12	13	13	13	[a]9
Lending investors	78	96	124	152	200	300	484	697	811	882	1,093	1,249
Pawnshops	634	693	797	970	1,097	1,367	1,681	1,953	2,221	2,324	2,423	2,693
Private insurance companies	136	136	136	131	127	127	130	129	128	130	127	127
Government nonbank financial intermediaries	6	5	6	6	5	5	5	3	3	3	4	4
Venture capital corporations	8	15	15	17	17	17	17	13	11	10	10	10
Money brokers	5	6	6	5	5	5	5	5	-	-	-	-
Mutual building and loan associations (MBLAs)	7	7	7	7	7	7	7	7	7	6	6	6
Nonstock savings and loan associations (NSSLAs)	74	74	74	75	75	75	75	60	79	76	104	106

[a] As of June 30, 1992.
Source: Central Bank of the Philippines.

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Table 22.2 Resources of Financial System: 1982-1992
(Million pesos)

Institution	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Total	561,305.9	693,264.2	754,010.5	731,022.8	776,850.2	873,094.3	1,023,867.9	1,246,428.6	1,267,707.0	1,453,225.0
Banking institutions	469,272.5	597,783.4	646,751.2	617,977.0	655,489.8	742,004.7	864,900.1	1,054,588.4	1,220,259.0	1,397,893.0
Central Bank of the Philippines	130,371.7	206,026.5	251,611.9	313,892.0	325,185.1	349,932.7	385,889.7	444,893.2	529,161.1	585,934.0
Commercial banks[1]	247,928.2	289,150.9	296,563.9	264,635.1	287,465.1	342,322.3	420,410.0	539,708.0	599,122.0	691,099.0
Thrift banks	16,149.0	14,967.8	15,081.3	17,652.3	19,557.4	24,932.7	32,390.0	37,621.3	47,479.2	60,234.8
Savings banks	7,399.4	7,613.8	6,847.2	8,124.4	10,534.1	14,165.4	19,689.4	21,913.8	n.a.	n.a.
Private development banks	4,613.2	4,525.3	5,084.2	5,624.5	5,474.5	6,698.6	84,397.8	11,251.3	n.a.	n.a.
Stock savings and loan associations (SSLAs)	4,136.4	2,828.7	3,149.9	3,903.4	3,548.8	4,068.7	4,302.8	4,456.2	n.a.	n.a.
Rural banks	9,499.7	9,023.3	8,821.7	9,350.5	9,960.8	11,018.2	12,521.8	13,862.1	15,936.0	18,641.3
Specialized government banks[1]	65,323.9	78,614.9	74,672.4	12,497.1	13,321.4	13,798.8	13,688.6	18,503.8	28,560.8	41,983.9
Nonbank financial institutions	92,033.4	95,480.8	107,259.3	112,998.3	121,360.4	131,089.7	158,967.8	191,840.2	47,448.0	55,332.0
Investment houses	7,210.4	7,506.0	6,600.3	7,518.6	8,986.1	8,456.0	8,242.2	9,428.1	11,716.0	9,968.0
Financing companies	11,810.8	9,587.9	6,163.9	5,627.5	7,022.7	7,364.0	10,102.4	11,259.7	14,490.0	20,417.0
Investment companies	6,159.9	2,603.1	11,855.2	10,154.1	4,732.4	5,615.0	9,797.5	10,957.2	12,713.0	13,541.0
Securities dealers/brokers	683.0	548.3	463.2	945.6	2,072.2	1,706.0	2,725.0	2,437.3	2,924.0	4,397.0
Pawnshops	438.1	623.4	808.2	1,010.8	1,318.2	1,666.0	2,170.4	2,663.6	3,451.0	4,373.0
Fund managers	1,529.6	943.3	1,649.1	1,288.4	1,618.5	1,777.0	2,589.8	7,346.3	n.a.	n.a.

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Table 22.2 Resources of Financial System: 1982-1992
(Million pesos)

Institution	1983	1984	1985	1986[r]	1987	1988	1989	1990	1991	1992
Lending investors	49.2	67.8	92.5	237.4	3,879.8	636.0	1,015.0	1,303.1	2,034.0	2,511.0
Private insurance companies	13,715.7	14,139.2	18,064.5	20,284.4	22,725.3	25,372.7	29,674.1	36,205.9	n.a.	n.a.
Government nonbank financial intermediaries	49,658.3	58,650.8	60,567.1	64,602.5	67,031.9	75,756.0	88,603.5	105,363.3	n.a.	n.a.
Venture capital corporations	111.2	115.2	125.0	126.3	128.6	100.0	90.1	101.7	101.0	105.0
Mutual building and loan associations	18.9	17.1	16.0	15.6	14.0	13.8	15.9	18.5	19.0	20.0
Nonstock savings and loan associations	648.3	678.7	854.3	1,187.1	1,830.7	2,627.2	3,941.9	4,755.5	n.a.	n.a.

[1] Data were revised due to the change in the coverage of deposit money banks.

Note: Data are based on after transfer of nonperforming assets of one commercial bank and one specialized government bank to the national government.

Source: Central Bank of the Philippines, Department of Economic Research.

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Resources of the Financial System: 1990-1992

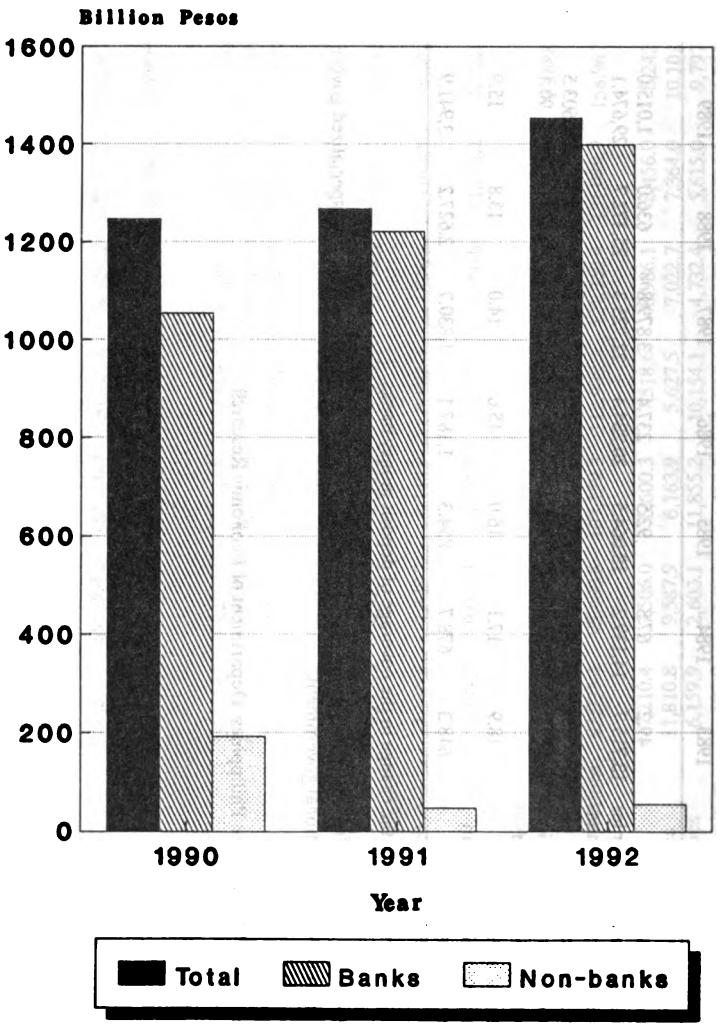

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Table 22.3 Money Supply and Its Origin: 1971-1993
(Million pesos)

Year	Money supply	Net foreign assets	Net domestic credits	Nonmoney supply deposit	Net other accounts
1971	5,179.1	(480.1)	14,574.8	6,320.8	2,594.8
1972	6,469.5	(778.3)	16,289.4	6,446.2	2,595.4
1973	7,267.2	3,093.1	18,342.2	12,726.6	1,441.5
1974	9,007.8	3,877.4	26,500.6	17,015.6	4,354.6
1975	10,314.8	(186.3)	35,258.1	20,430.9	4,326.1
1976	12,074.9	(1,440.6)	43,677.7	25,834.6	4,327.6
1977	14,938.5	(84.8)	51,464.3	31,215.1	5,225.9
1978	16,945.5	(596.0)	63,075.1	37,728.9	7,804.7
1979	18,843.6	(5,068.4)	79,475.0	41,659.9	13,903.1
1980	22,537.5	(7,115.9)	95,128.3	48,392.1	17,082.8
1981	23,524.3	(11,044.6)	115,766.6	61,691.7	19,506.0
1982	23,495.4	(41,601.2)	141,741.8	74,516.9	2,128.3
1983	32,489.3	(74,494.4)	166,619.6	83,371.2	(23,735.3)
1984	33,633.4	(100,084.2)	154,077.8	90,079.7	(69,789.5)
1985	35,826.6	(121,664.0)	156,745.0	99,474.0	(100,219.0)
1986	42,657.2	(112,514.3)	124,728.0	101,463.5	(131,907.0)
1987	52,090.3	(108,213.1)	108,380.4	110,346.5	(162,269.5)
1988	59,548.4	(94,713.0)	121,941.7	138,283.3	(170,603.0)
1989	78,530.0	(114,525.0)	203,818.0	179,441.0	(168,678.0)
1990	89,012.0	(158,493.0)	268,435.0	222,858.0	(201,928.0)
1991 [a]	82,154.0	(151,907.0)	263,525	224,220.0	(194,756)
1992	1,179,815.0	(735,822)	3,045,521.0	3,056,760.0	(1,926,876.0)
1993 [b]	860,699.0	(108,485.0)	2,114,377.0	2,191,834.0	(1,046,641.0)

[a] As of March.
[b] As of August.

Source: Central Bank of the Philippines.

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Table 22.3a Money Supply and Its Composition: 1971-1993
(Million pesos)

Year	Money supply	Curency in circulation Currency issue		Inactive cash	Peso deposit subject to check					
		Notes	Coins		City, provincial and municipal government	Semi-government entities	Private business and individuals	U.S. government entities	Cashiers' and managers' checks	Checks and other cash items
1971	5,179.1	2,730.3	285.1	365.4	182.1	195.5	2,193.7	11.5	334.6	388.3
1972	6,469.5	3,475.5	333.4	374.3	243.2	201.4	2,651.1	14.0	252.3	327.1
1973	7,267.2	3,538.7	453.4	539.7	299.3	282.7	3,767.8	12.4	337.9	885.3
1974	9,007.8	4,489.0	486.5	664.4	465.1	338.1	4,679.8	15.0	411.0	1,212.3
1975	10,314.8	5,115.8	528.8	895.8	432.5	658.6	5,010.3	18.8	483.2	1,037.4
1976	12,074.9	5,997.2	543.3	888.7	529.4	426.2	6,138.9	15.6	469.0	1,156.0
1977	14,938.5	7,131.4	635.1	1,038.9	645.8	484.2	7,400.5	14.5	645.4	979.5
1978	16,945.5	8,531.3	703.0	1,099.3	646.9	496.9	7,783.7	36.0	905.8	1,058.8
1979	18,843.6	9,949.4	625.9	1,393.6	812.1	665.3	8,770.9	10.2	1,119.1	1,715.7
1980	22,537.5	11,598.6	685.0	2,109.0	868.2	609.2	10,475.6	7.8	1,418.0	1,015.9
1981	23,524.3	13,000.3	779.0	2,153.5	855.2	629.3	9,699.5	31.1	1,483.1	799.7
1982	23,495.4	14,098.7	860.9	2,279.4	842.3	761.9	8,332.6	28.7	1,425.7	576.0
1983	32,489.3	21,643.4	990.9	3,027.0	1,046.4	743.9	9,932.8	31.4	1,732.2	604.7
1984	33,633.4	24,343.8	1,332.7	3,878.6	761.0	776.0	9,031.0	72.5	2,059.9	864.9
1985	35,826.6	26,478.7	1,537.7	3,950.3	823.3	512.4	8,732.5	81.9	2,368.5	758.1
1986	42,657.2	32,978.4	1,629.0	5,296.4	832.7	864.9	12,093.6	87.1	1,779.6	866.3
1987	52,090.3	40,012.9	1,785.8	6,347.0	1,112.8	1,398.9	13,862.4	72.9	2,459.4	528.6
1988	59,718.0	44,506.0	2,046.0	5,914.0	1,509.0	1,263.0	13,909.0	73.0	2,606.0	280.0
1989	78,530.0	57,707.0	2,320.0	7,204.0	1,290.0	1,852.0	18,526.0	99.0	4,309.0	399.0
1990	89,012.0	68,200.0	2,572.0	8,851.0	1,699.0	2,314.0	19,937.0	37.0	4,825.0	1,721.0
1991 [a]	82,154.0	61,654.0	2,647.0	7,306.0	1,972.0	2,209.0	17,721.0	29.0	3,545.0	317.0
1992	1,179,815.0	831,366.0	36,550.0	110,311.0	31,092.0	47,439.0	283,154.0	461.0	66,661.0	10,297.0
1993	[b]860,699.0	[c]437,397.0	[c]19,525.0	[b]80,018.0	[b]28,772.0	[b]47,129.0	[b]207,561.0	[b]26.0	[b]54,658.0	[b]5,667.0

[a] As of March. [b] As of August. [c] As of June. Source: Central Bank of the Philippines.

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Table 22.4 Level of Deposits of the Banking System: 1991 and 1992
(Million pesos)

Institution	1992 Total	1992 Demand	1992 Savings	1992 Time	1992 Other	1991 Total	1991 Demand	1991 Savings	1991 Time	1991 Other
Total	509,657.0	41,571.0	279,226.0	77,022.0	111,838.0	425,885.0	39,315.0	229,521.0	74,160.0	82,889.0
Commercial banks	424,973.0	32,695.0	228,516.0	54,742.0	109,020.0	363,577.0	32,296.0	192,150.0	58,160.0	80,971.0
Thrift banks	40,537.0	1,235.0	26,667.0	10,837.0	1,798.0	33,939.0	998.0	22,532.0	9,165.0	1,244.0
Savings and mortgage banks	28,564.0	1,030.0	19,520.0	6,610.0	1,404.0	23,790.0	824	16,342.0	5,667.0	957.0
Private development banks	7,613.0	185.0	4,971.0	2,087.0	370.0	6,396.0	170.0	4,258.0	1,699.0	269.0
Stock savings and loans associations (SSLAs)	4,360.0	20.0	2,176.0	2,140.0	24.0	3,753.0	4.0	1,932.0	1,799.0	18.0
Specialized government banks	37,329.0	7,553.0	19,843.0	8,917.0	1,016.0	19,914.0	5,981.0	9,443.0	3,835.0	655.0
Rural banks	6,818.0	88.0	4,200.0	2,526.0	4.0	8,455.0	40.0	5,396.0	3,000.0	19.0

Note: Deposits refer to gross deposits of banks.

Source: Central Bank of the Philippines.

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Table 22.5 International Reserves of the Central Bank: 1971-1993 (Million US dollars)

Year	Total	Gold	SDRs	Foreign investments	Foreign exchange
1971	375.46	67.14	-	244.97	63.35
1972	548.76	70.76	21.92	367.75	88.33
1973	1,037.05	44.58	28.78	866.86	96.83
1974	1,502.51	44.58	33.32	1,310.00	114.61
1975	1,360.65	44.58	27.56	1,188.10	100.41
1976	1,641.68	44.58	15.67	1,453.29	128.14
1977	1,525.09	44.58	24.35	1,325.96	130.21
1978	1,882.72	118.50	17.83	1,536.92	209.47
1979	2,422.92	165.73	40.86	1,861.82	354.51
1980	3,155.37	294.03	15.78	2,042.51	803.05
1981	2,573.96	508.49	1.94	1,752.45	311.08
1982	1,711.38	823.44	2.75	780.73	104.46
1983	864.70	117.48	0.93	746.29	-
1984	886.06	287.74	22.14	484.90	91.28
1985	1,061.14	501.03	37.99	365.57	156.55
1986	2,458.98	798.67	5.69	1,602.84	51.78
1987	1,958.68	1,045.65	0.19	835.37	77.47
1988	2,058.88	1,107.62	0.14	806.61	144.51
1989	2,324.17	954.04	0.93	1,135.75	233.45
1990	1,993.11	1,124.34	1.11	445.00	422.66
1991	4,470.33	1,280.00	4.39	2,944.22	241.72
1992	5,218.14	934.58	0.53	4,240.19	42.84
1993	5,801.47	1,244.79	10.13	4,489.12	57.43

Note: Data revaluated; SGV adjustments reflected.

Source: Central Bank of the Philippines.

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Table 22.6 Loans Outstanding of the Financial System by Institution: 1970-1992 (Million Pesos)

Year	Total	Commercial banks[1, 2]	Thrift banks	Rural banks	Specialized government banks[2]	Private nonbank financial institutions[3]	Government nonbank financial institutions[4]
1970	12,037.3	8,433.8	480.6	534.8	-	227.8	2,360.3
1971	14,539.7	10,078.4	753.7	646.2	-	300.0	2,761.4
1972	20,958.3	12,427.3	789.4	782.7	3,399.9	404.5	3,154.5
1973	27,767.8	17,798.4	774.6	1,070.4	3,899.1	633.8	3,591.5
1974	33,581.1	21,303.9	1,119.0	1,718.6	4,314.9	813.7	4,311.0
1975	48,838.5	33,300.6	1,424.0	2,347.8	5,593.2	908.4	5,264.5
1976	59,333.9	38,631.8	2,036.7	2,590.3	8,060.2	1,167.5	6,847.4
1977	75,515.9	[a]44,596.5	2,858.3	2,821.0	10,053.4	7,927.4	7,259.3
1978	93,563.8	54,077.9	2,886.3	3,422.8	11,098.0	13,655.5	8,423.3
1979	117,617.2	68,264.2	4,770.0	4,172.1	13,502.4	18,395.5	8,513.0
1980	137,181.2	77,198.1	6,871.1	4,690.7	16,690.7	21,740.4	9,990.2
1981	158,060.9	86,505.2	5,923.2	5,488.1	27,672.1	19,651.7	12,820.6
1982	178,742.2	98,239.6	7,339.4	6,669.0	31,653.9	20,625.3	14,215.0
1983	208,303.8	115,389.7	10,534.3	7,648.0	36,511.6	21,139.4	17,080.8
1984	216,633.0	120,355.4	8,628.6	7,022.5	39,234.5	20,750.0	20,642.0
1985	183,348.9	91,827.2	6,105.2	6,636.3	28,623.0	23,540.5	26,616.7
1986	161,853.0	88,325.7	7,872.0	6,790.5	6,689.9	23,255.3	28,919.6
1987	175,086.0	101,112.0	9,804.6	7,227.0	5,592.7	25,063.0	26,286.7
1988	204,575.1	126,614.6	13,240.2	7,970.2	6,219.5	22,576.9	27,953.7
1989	249,652.8	165,857.6	16,464.2	8,859.0	7,730.5	25,056.1	25,685.4
1990	238,475.2	199,644.9	20,175.7	9,735.7	8,918.9	n.a.	n.a.
1991	195,062.5	144,306.2	24,646.8	10,744.0	15,365.4	n.a.	n.a.
1992	318,184.0	256,324.5	25,440.6	12,671.1	23,747.8	n.a.	n.a.

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Table 22.6 Loans Outstanding of the Financial System by Institution: 1970-1992 (concluded)
(Million Pesos)

a Revised as of September 1977. Figures include past due items, items in litigations, domestic and foreign bills clean. After transfer of selected assets and liabilites to the national government of one commercial bank and one specialized government bank.

[1] Loans outstanding of commercial banks classified by Debt Instrument.
[2] Data were revised due to the change in the coverage of deposit money banks.
[3] Starting 1977, revised to consist of all private nonbanks.
[4] Starting 1977, revised to consist of GSIS and SSS.

Source: Central Bank of the Philippines.

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Table 22.7 Offshore Banking System (Selected Accounts): 1981-1992
(Million U.S. dollars)

Particulars	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gross resources	4,627	4,988	4,407	4,209	4,247	3,900	3,367	2,991	2,749	2,377	1,954	2,047
Deposits/borrowings	4,479	4,858	4,283	4,081	4,172	3,837	3,282	2,886	2,637	2,305	1,908	1,955
Banks	4,332	4,793	4,244	4,069	4,149	3,829	3,271	2,861	2,594	2,200	1,826	1,888
Nonbanks	147	65	39	12	23	8	11	25	43	105	82	67
Placements/lendings	4,479	4,829	4,212	4,009	5,166	3,824	3,291	2,891	2,634	2,249	1,892	1,767
Banks	2,781	3,069	2,317	2,204	2,627	2,691	2,163	1,728	1,552	1,338	1,120	928
Nonbanks	1,698	1,760	1,895	1,805	2,539	1,133	1,128	1,163	1,082	911	772	839
Earnings and expenses												
Earnings[1]	643	730	506	547	470	365	345	418	330	307	212	149
Onshore	201	234	172	209	174	110	109	136	126	108	80	49
Offshore	442	496	334	338	296	255	236	282	204	199	132	100
Expenses[2]	617	701	478	516	450	352	305	375	269	257	174	119
Net earnings after tax	23	25	26	29	17	11	38	39	59	48	37	30

[1] Mostly discount and interest on loans and advances.
[2] Mostly on: interest paid on deposits.....296
interest paid on interbank borrowings.....145
other borrowings..... 39

Source: Central Bank of the Philippines.

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Table 22.8 Foreign Currency Deposit System (Selected Accounts): 1981-1992
(Million U.S. dollars)

Particulars	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gross resources	5,195	6,760	6,942	6,454	6,056	4,755	2,754	3,336	3,655	4,252	4,514	5,780
Deposits/borrowings	4,124	5,537	5,555	5,081	4,433	3,558	1,560	1,854	2,049	2,555	3,727	4,685
Banks	3,085	4,526	4,621	4,085	3,482	2,706	558	462	n.a	n.a.	n.a.	n.a.
Nonbanks	1,039	1,011	934	996	951	852	1,002	1,392	n.a.	n.a.	n.a.	n.a.
Placements/lendings	4,874	6,208	6,401	5,870	5,300	4,504	2,495	2,997	3,307	3,495	3,395	4,045
Banks	2,214	3,402	3,613	3,778	3,423	3,528	1,635	2,099	2,378	2,609	2,654	2,348
Nonbanks	2,660	2,806	2,788	2,092	1,877	976	860	898	929	886	741	1,697
Earnings and expenses												
Earnings[1]	848	824	741	650	533	445	492	327	462	498	381	444
Onshore	577	556	528	470	325	240	243	161	227	216	123	164
Offshore	271	268	213	180	208	205	249	166	235	282	258	280
Expenses[2]	720	686	592	572	483	428	285	197	316	234	316	213
Net earnings after tax	123	134	143	69	44	12	206	128	145	262	65	66

[1] Mostly discount and interest on deposits and loans and advances.
[2] Mostly on: interest paid on deposits 337
interbank borrowings 208

Source: Central Bank of the Philippines.

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Table 22.9 Assets, Investments and Reserves of Government-Owned Insurance Corporations: 1971-1993
(Million pesos)

Year	Government Service Insurance System			Security Security System			Philippine Crop Insurance Corporation			Philippine Deposit Insurance Corporation		
	Assets	Invest-ments	Reserves	Assets	Invest-ments	Reserves	Assets	Invest-ments	Reserves	Assets	Invest-ments	Reserves
1971	2,904.9	2,012.7	2,769.3	1,330.6	1,265.8	1,315.9	-	-	-	-	-	-
1972	3,390.8	2,355.3	3,073.3	1,572.3	1,519.2	1,548.8	-	-	-	-	-	-
1973	3,615.0	2,570.1	3,343.4	1,949.2	1,890.4	1,925.0	-	-	-	-	-	-
1974	4,008.2	2,821.5	3,658.3	2,388.9	2,348.8	2,350.7	-	-	-	-	-	-
1975	4,425.6	2,937.2	4,036.1	2,997.0	2,915.5	2,904.9	-	-	-	-	-	-
1976	6,339.4	3,851.6	5,152.2	3,696.1	3,597.0	3,596.2	-	-	-	-	-	-
1977	6,751.0	4,324.8	5,699.6	4,539.7	4,348.1	4,448.4	-	-	-	-	-	-
1978	7,169.4	4,868.4	6,393.5	5,512.4	5,276.7	5,409.2	-	-	-	-	-	-
1979	8,137.0	5,564.5	7,246.6	7,499.3	7,328.5	7,375.6	-	-	-	-	-	-
1980	9,245.5	6,443.2	8,210.7	9,260.2	9,085.1	9,148.7	-	-	-	-	-	-
1981	10,943.8	7,859.2	9,808.3	11,362.1	11,086.2	11,221.1	[a]372.4	[a]297.9	[a]3.4	-	-	-
1982	13,312.2	9,323.9	11,533.4	13,645.9	13,308.3	13,515.3	415.6	320.6	7.3	-	-	-
1983	14,609.9	9,903.4	12,959.7	16,227.1	15,880.1	16,082.9	428.4	345.0	9.1	-	-	-
1984	15,641.7	10,899.3	13,916.2	20,115.8	19,296.6	19,760.8	420.2	345.3	7.6	-	-	-
1985	16,752.9	11,857.7	15,225.3	26,301.5	24,963.3	25,508.1	509.0	414.4	12.1	3,819.7	181.7	-
1986	19,326.0	12,746.6	18,113.9	31,187.7	30,172.2	30,640.7	452.4	321.7	11.0	3,841.4	279.3	580.3
1987	22,536.0	14,797.8	18,931.9	37,211.3	35,774.2	36,684.1	522.3	380.2	12.9	4,456.0	507.0	557.3
1988	24,513.0	17,263.0	21,537.3	43,529.6	42,618.1	43,230.0	450.2	268.7	16.5	5,718.5	1,000.4	500.4
1989	28,859.7	19,881.2	24,481.2	51,940.8	50,682.2	51,431.8	423.2	176.6	21.7	6,626.6	2,050.4	575.7
1990	36,068.0	23,635.9	29,403.6	62,566.9	61,030.7	62,075.5	465.8	163.6	28.5	7,741.0	3,221.3	813.4
1991	43,207.4	16,881.3	37,470.4	76,424.1	73,855.5	75,470.3	648.0	194.7	49.3	7,975.4	3,611.6	1,412.1
1992	50,794.2	16,867.1	43,841.6	88,958.4	86,241.5	88,207.8	980.9	373.4	31.3	9,357.0	3,266.7	2,025.2
1993	[b]55,767.8	[b]21,770.6	[b]48,479.2	n.a.	n.a.	n.a.	1,180.6	425.7	35.5	7,686.8	4,707.0	2,066.4

[a] For eight-month period ended December 31,1981.

[b] As of September 30,1993.

Sources: Government Service Insurance System; Social Security System; Philippine Crop Insurance Company and Philippine Deposit Insurance Corporation.

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Table 22.10 Value of Investments at Cost of Government Insurance Corporations: 1987 - 1992
(Million pesos)

Particulars	1987	1988	1989	1990	1991	1992
Total	54,349.0	64,573.4	76,385.1	92,322.7	116,190.3	130,178.2
GSIS	17,648.0	20,229.7	24,760.8	26,871.0	37,538.6	38,954.0
SSS	35,774.0	42,618.1	50,682.3	61,030.7	73,855.6	86,241.5
PCIC	366.0	268.7	173.4	158.5	156.8	373.4
PDIC	561.0	317.7	95.7	3,223.2	3,647.6	3,626.4
HIGC	-	1,139.2	672.9	1,039.3	991.7	982.9

Source: Insurance Commission.

Table 22.11 Insurance Policies in Force: 1977-1992

Year	Number of policies	Sum assured (Million pesos)	Annual premium (Million pesos)
1977	4,971,330	189,355.2	2,053.2
1978	5,145,241	221,587.8	2,518.0
1979	5,362,653	270,755.4	2,945.0
1980	5,242,942	372,613.4	3,289.1
1981	5,363,641	402,340.4	3,615.8
1982	5,109,359	372,907.4	4,006.5
1983	5,461,758	388,498.6	4,104.3
1984	4,857,251	522,621.7	4,706.3
1985	4,707,693	598,200.5	5,190.3
1986	4,780,584	677,796.6	5,620.9
1987	5,340,277	1,014,506.6	6,327.0
1988	5,614,114	1,104,665.8	7,466.4
1989	5,731,603	1,417,071.2	8,815.5
1990	[a]3,066,659	[r]231,727.0	[r]5,353.2
1991	[a]2,885,311	261,882.0	6,350.2
1992	[a]2,798,702	337,113.5	7,473.2

[a] For private life insurance only.

Source: Insurance Commission.

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Table 22.12 Summary of Admitted Assets by Type of Insurance Companies: 1971-1992
(Million pesos)

Year	Total	Life companies	Nonlife companies	Professional reinsurers	Increase (Decrease) Amount	Percent
1971	2,178.0	1,364.6	752.6	60.8	309.1	16.54
1972	2,557.3	1,582.3	884.3	90.7	379.3	17.42
1973	3,066.3	1,767.1	1,193.7	105.5	509.0	19.90
1974	3,468.0	1,903.7	1,429.3	135.0	401.7	13.10
1975	4,224.5	2,260.6	1,785.9	178.0	756.5	21.81
1976	5,230.1	2,701.6	2,305.2	223.3	1,005.6	23.80
1977	6,167.5	3,026.9	2,873.2	267.4	937.4	17.92
1978	7,803.1	3,799.0	3,636.8	367.3	1,635.6	26.52
1979	8,955.1	4,414.8	4,102.0	438.3	1,152.0	14.76
1980	9,997.4	5,107.7	4,382.2	507.5	1,042.3	11.64
1981	11,333.6	5,950.7	4,870.5	512.4	1,366.2	13.37
1982	13,715.7	6,843.9	5,965.7	906.1	2,382.1	21.02
1983	15,286.6	8,003.6	6,535.4	747.6	1,570.9	11.45
1984	18,064.5	9,238.2	7,894.6	931.7	2,777.9	18.17
1985	20,284.5	10,499.5	8,815.5	969.5	2,220.0	12.29
1986	22,725.3	12,670.4	9,256.1	798.8	2,440.9	12.03
1987	25,372.0	14,378.2	10,082.2	911.6	2,647.4	11.65
1988	29,674.1	17,131.3	11,532.3	1,010.5	4,301.4	16.95
1989	36,205.9	21,335.7	13,825.8	1,044.4	6,531.8	22.01
1990	45,151.1	25,531.9	18,318.1	1,301.1	8,945.2	24.71
1991	51,380.9	31,364.4	18,404.5	1,342.0	6,229.8	13.80
1992	56,378.2	36,257.6	18,811.0	1,309.6	4,997.3	9.73

Source: Insurance Commission.

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Table 22.13 Summary of Investments at Cost of Private Insurance Companies: 1991 and 1992
(Million pesos)

Type of investment	Total 1992	Total 1991	Life 1992	Life 1991	Nonlife 1992	Nonlife 1991	Professional reinsurers 1992	Professional reinsurers 1991
Total	35,902.3	30,366.0	27,587.3	22,867.0	7,900.8	7,197.9	413.9	301.1
Bonds	3,946.8	3,689.1	3,269.8	3,229.9	625.2	428.1	51.8	31.1
Stocks	9,303.4	6,270.7	7,416.3	4,139.6	1,808.4	2,071.5	78.7	59.6
Real estate owned	2,633.7	2,384.0	1,991.6	1,829.1	640.0	552.9	2.1	2.0
Purchase money mortgages	19.8	53.1	2.0	47.7	17.8	5.4	-	-
Mortgage loans on real estate	2,673.9	3,057.9	2,526.8	2,971.6	142.1	86.3	5.0	-
Collateral loans	367.3	303.9	363.9	300.2	2.7	3.1	0.7	0.6
Guaranteed loans	2,920.9	2,492.2	2,904.2	2,458.8	16.7	33.4	-	-
Policy loans	2,656.1	2,526.9	2,656.1	2,526.9	-	-	-	-
Other loans	122.6	97.7	93.5	69.9	27.2	24.7	1.9	3.1
Short-term investments	9,397.9	7,483.6	5,215.7	3,936.0	3,919.2	3,371.2	262.7	176.4
Other investments	376.5	550.2	279.7	516.3	94.2	32.1	2.6	1.8
Fixed deposits	1,483.4	1,456.7	867.7	841.0	607.3	589.2	8.4	26.5

Source: Insurance Commission.

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Table 22.14 Summary of Premium Income and Claims Incurred by Private Life Insurance Companies: 1968-1992
(Million pesos)

Year	Premium income	Claims incurred	Ratio claims/ premium (Percent)
1968	205.28	39.52	19.25
1969	240.56	77.77	32.33
1970	273.85	80.26	29.31
1971	313.81	96.47	30.74
1972	364.64	105.39	28.90
1973	436.17	126.41	28.98
1974	496.31	130.60	26.31
1975	609.23	170.99	28.07
1976	670.60	205.60	30.66
1977	795.30	213.04	26.79
1978	1,093.04	282.34	25.83
1979	1,315.81	331.58	25.20
1980	1,489.86	392.73	26.36
1981	1,710.74	536.78	31.38
1982	1,995.45	856.00	42.90
1983	1,951.90	750.30	38.44
1984	2,190.20	946.50	43.22
1985	2,430.90	1,176.00	48.38
1986	2,756.40	1,366.30	49.57
1987	3,308.50	1,513.60	45.75
1988	4,015.00	1,698.70	42.31
1989	4,678.10	1,904.50	40.71
1990	5,353.20	2,194.80	41.00
1991	6,350.20	2,508.40	39.50
1992	7,473.20	2,898.20	38.78

Source: Insurance Commission.

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Table 22.15 Annual Benefit Payments of Private Life Insurance Companies: 1980-1992
(Million pesos)

Year	Total	Death	Maturity	Surrender	Dividend	Annuity	Others
1980	445.1	160.3	45.8	135.5	52.3	1.7	49.5
1981	536.8	200.9	51.2	176.0	52.3	1.3	55.1
1982	856.0	207.1	61.4	455.0	62.0	1.9	68.6
1983	750.3	244.9	87.4	246.4	85.4	0.3	85.9
1984	946.5	250.2	137.6	323.8	119.9	0.4	114.6
1985	1,176.0	304.4	155.2	419.1	134.8	0.3	162.2
1986	1,366.3	361.6	185.6	372.6	160.2	2.5	123.8
1987	1,513.6	379.9	219.3	407.0	220.5	0.6	286.4
1988	1,698.7	484.6	249.3	425.4	243.9	2.8	292.7
1989	1,904.5	541.9	282.3	426.3	349.7	0.2	304.1
1990	2,194.8	669.6	319.5	452.6	425.8	0.2	327.1
1991	2,508.4	725.2	368.4	513.7	481.4	28.8	390.9
1992	2,898.2	749.5	464.7	530.7	655.2	20.7	477.4

Source: Insurance Commission.

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Table 22.16 Summary of Losses Incurred, Premiums Earned and Loss Ratios for Each Major Line of Nonlife Insurance Coverage: 1990-1992
(Million Pesos)

Line of insurance	Losses incurred			Premiums earned			Ratio losses/premiums (percent)[1]		
	1990	1991	1992	1990	1991	1992	1990	1991	1992
Total	2,610.7	2,690.1	3,024.1	4,778.3	5,484.4	6,078.7	54.64	49.05	49.75
Fire and allied risks	993.0	682.8	636.4	1,319.8	1,304.8	1,186.1	75.24	52.33	53.65
Fire	689.3	621.2	636.1	1,194.3	1,163.7	1,071.1	57.72	53.38	59.38
Earthquake/fire/shock	198.8	46.1	(9.4)	88.3	92.7	73.3	225.03	49.75	(12.81)
Typhoon/flood/tidal wave	104.9	15.5	9.7	37.1	48.4	41.7	282.69	32.06	23.33
Marine	187.9	263.6	165.6	570.7	621.1	614.5	32.92	42.45	26.95
Ocean marine	114.4	188.5	98.1	437.6	468.8	461.8	26.14	40.21	21.24
Inland marine	13.1	19.7	13.3	61.6	67.4	61.5	21.24	29.14	21.65
Marine hull	6.9	50.7	54.5	5.9	78.8	85.4	115.99	64.42	63.86
Aviation	53.5	4.7	(0.3)	65.7	6.1	5.8	81.58	77.68	(4.87)
Casualty	1,318.2	1,602.1	2,037.3	2,514.5	3,089.9	3,708.2	52.42	51.85	54.94
Auto and other motor vehicles	1,002.9	1,328.7	1,702.2	2,039.7	2,547.1	3,083.4	49.17	52.17	190.11
Health and accidents	163.0	170.5	176.7	301.0	347.2	415.4	54.15	49.10	42.54
Burglary/larceny/theft	46.1	39.6	42.7	62.6	61.8	77.4	73.64	64.04	55.12
Miscellaneous	82.0	17.3	83.9	46.1	51.8	75.6	52.51	33.37	111.04
Engineering	24.2	46.0	31.8	65.1	82.0	56.4	125.95	56.09	56.40
Suretyship-fidelity and surety bonds	33.1	46.4	104.0	267.3	311.1	413.5	12.38	14.93	25.15
Life for professional reinsurers	78.5	95.2	80.8	106.0	157.5	156.4	74.06	60.45	51.65

[1] Based on exact figures.

Source: Insurance Commission.

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Table 22.17 Number of Farmers, Farm Area and Amount of Insurance by Kind of Crop: 1983-1993

Particulars	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Number of farmers	220,633	156,417	186,166	141,868	121,497	174,398	253,299	254,379	335,837	253,677	203,186
Corn crop	40,498	26,129	26,363	15,809	9,721	24,597	33,578	40,410	33,809	28,584	25,316
Rice crop	180,135	130,288	159,803	126,059	111,776	149,801	219,721	213,969	301,954	224,703	177,512
Tobacco crop	-	-	-	-	-	-	-	-	74	390	358
Banana Crop	-	-	-	-	-	-	-	-	-	-	-
Area covered (hectares)	387,527	259,030	337,976	271,137	214,808	288,986	416,751	418,689	547,318	397,739	329,553
Corn crop	78,784	53,544	58,419	45,172	23,362	46,651	60,406	67,758	52,733	42,176	39,986
Rice crop	308,743	205,486	279,557	225,965	191,446	242,335	356,345	350,931	494,538	355,232	288,057
Tobacco	-	-	-	-	-	-	-	-	47	331	255
Banana crop	-	-	-	-	-	-	-	-	-	-	1,255
Amount of insurance covered (in thousand pesos)	606,877	648,454	1,167,669	1,014,111	786,053	1,101,468	1,600,888	1,954,088	3,138,705	2,482,868	2,267,423
Corn crop	160,765	186,416	302,557	240,686	120,103	236,118	305,164	337,734	299,397	262,594	255,528
Rice crop	446,112	462,038	865,112	773,425	665,950	865,350	1,295,724	1,616,354	2,838,811	2,216,870	1,883,255
Tobacco crop	-	-	-	-	-	-	-	-	497	3,404	3,109
Banana crop	-	-	-	-	-	-	-	-	-	-	125,531

Source: Philippine Crop Insurance Corporation.

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Table 22.18 Claims Incurred of Crop Insurance by Type of Loans: 1981-1993 (Million pesos)

Year	Total	Typhoons and floods	Drought	Pest infestation	Plant diseases	Other natural calamities
Rice						
1981	7.49	4.17	0.94	0.82	1.57	-
1982	24.72	13.72	3.26	2.62	5.12	-
1983	33.21	11.03	14.36	3.84	3.98	-
1984	53.08	19.27	5.39	17.16	11.27	-
1985	71.42	43.44	3.64	14.18	9.21	0.96
1986	98.14	69.17	4.73	13.20	9.26	1.78
1987	53.19	22.89	12.34	9.54	7.19	1.24
1988	162.15	88.14	25.65	30.07	15.15	3.14
1989	112.53	78.32	4.39	16.32	12.38	1.12
1990	115.60	63.75	20.15	17.42	12.14	2.14
1991	53.35	26.41	9.51	8.19	4.69	4.54
1992	143.00	58.02	57.13	15.66	7.08	5.12
1993	124.39	66.19	19.13	24.95	10.13	3.99
Corn						
1982[a]	2.07	0.70	1.15	0.13	0.09	-
1983	33.26	1.40	17.64	13.89	0.33	-
1984	34.16	2.38	4.35	26.08	1.36	-
1985	50.86	6.11	21.47	15.18	7.68	0.42
1986	31.97	10.07	9.45	6.95	4.29	1.21
1987	24.69	5.74	13.04	3.44	2.16	0.30
1988	41.65	10.04	18.67	7.03	4.11	1.80
1989	53.91	31.00	5.39	7.87	8.14	1.51
1990	34.46	6.68	21.13	3.77	2.48	0.40
1991	30.61	3.93	21.50	3.57	0.92	0.70
1992	29.50	1.81	22.10	4.48	0.86	0.26
1993	28.07	11.27	13.55	1.94	1.21	0.10

Note: Details may not add to totals due rounding.

[a] Covers operations from July to December.

Source: Philippine Crop Insurance Corporation.

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Chapter 23
National Accounts and Balance of Payments

This chapter presents information on three kinds of economic accounts in the country, namely: the national income accounts, the flow of funds accounts and the balance of payments accounts. These accounts provide a measure of macroeconomic variables such as output, income, savings, investments and balance of payments, and a conceptual framework for relating the various measures to one another. A detailed discussion on the country's economic performance in 1992 based on these three accounts are likewise presented.

23.1 The Philippine System of National Accounts

23.1.1 The Sectors of the Economy

The division of the economy into sectors is a primary feature of national accounting system. This sectoral classification of the transactors in the economy depends on the manner in which they participate in the production and use of goods and services. Sectors are so defined that each constitutes a group of entities similar to one another in general characteristics affecting economic behavior.

There are various ways in which the economy may be divided into sectors depending on the purpose for which the classification is to be used. For identifying the transactions which enter into consumption and capital accumulation flow, the economy is divided into four institutional sectors, namely: households, enterprises, general government and the rest of the world. The transactors may also be classified following the industrial classification of economic activities for the purpose of identifying the industrial sector from which production originates.

Institutional Sectors. The *household sector* includes all individuals in their capacity as consumers. Persons, in their role as producers, are excluded from this sector. Following international recommendations, nonprofit institutions serving the households such as churches, unions, private clubs, charitable institutions, nonprofit schools and hospitals, and other similar organizations are included in this sector.

The *enterprises sector* includes all organizations primarily engaged in producing goods and services for profit. It includes single proprietorship, private corporations, partnerships, and nonprofit institutions serving business.

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It also includes those individuals who undertake productive activities such as farmers, independent practitioners, and homeowners. It further includes, government establishments selling goods and services often produced by business establishments at prices more or less approximating their costs of production.

The *general government sector* refers to all levels of state organization - national and local. In discharging the functions of promoting the general welfare and national protection, the government produces services of value to the people. These services are valued at the amount of salaries and wages paid to government workers. Moreover, the government purchases goods and services from enterprises and from abroad. Such flows of income and product, whether from ordinary budgets or special appropriations, are included in this sector.

The presence of borderline cases presents difficulties in classifying a government activity as a service or a commercial activity. Public authorities which are financially integrated to the general government and hence obtain their money from, and turn over their profits to the general government are classified under the government sector. Public corporations, on the other hand, which are financially independent of the government and therefore have the power to maintain their own profits or borrow funds, are excluded from this sector. Public authorities embrace agencies such as the Postal Services Office and Telecommunications Office while public corporations include the Philippine National Bank, Government Service Insurance System, and similar agencies.

The *rest of the world* sector is not a sector of the domestic economy. Although it represents foreign elements, it is, nevertheless, considered to achieve a complete analysis of the flow of those goods and services produced by the economy which are not distributed internally. It also reveals the extent of expenditures of the local economy on goods and services provided by foreign countries and the extent of the purchases of foreign countries on goods and services supplied by the domestic economy.

Industrial Sectors. A different classification of the economy is also necessary for the purpose of measuring final output according to the industrial sector from which it originates. The Philippine Standard Industrial Classification (PSIC) has been adopted as basis for classifying the nation's output by industrial origin. This consists of eight principal industrial sectors with about seventy subsectors at the two-digit level of classification. The eight principal sectors are as follows: agriculture, fishery and forestry; mining and quarrying; manufacturing; construction; electricity, gas and water; transportation, communication and storage; commerce; and services. However, for purposes of classification consistent with planning requirements, these eight sectors have been aggregated into three main sectors, namely: agriculture, fishery and forestry; industrial ; and services.

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23.1.2 Transactions in the Gross National Product and Expenditure Account of the Philippines

The *Gross National Product and Expenditure Account* is a consolidated account for the economy as a whole. It summarizes the activities of the economy considered as an enterprise in the form of the balanced account. On the expenditure side, it shows the purchases of the institutional sectors: personal consumption expenditures, general government consumption expenditures, gross domestic capital formation, and net exports of goods and services. The sum of these four components is *Gross Domestic Product.* When net factor income from abroad is added to the expenditure items, the total is equal to *Gross National Product.*

The transactions which make up the Gross National Product and Expenditure Account are described below.

Compensation of Employees includes all wages, salaries and other remuneration in cash or in kind of public and private employees and wage earners before deduction of GSIS retirement and insurance premiums for government employees and SSS contributions for private employees. Income in kind refers to food, clothing, shelter and similar additional benefits provided by employers. Commissions, tips, bonuses and fees are included while reimbursements to employees of business expense like transportation and representation allowances are not included. Also included are the government's share of GSIS premiums and the employer's share of SSS contributions paid on behalf of the employees. Veterans' pensions and similar receipts from the government are excluded and treated as transfer payments.

Entrepreneurial and Property Income of Persons covers all income in cash and in kind before payment of direct taxes accruing to households and nonprofit institutions as remuneration of both labor and capital provided by them as entrepreneurs in connection with their own business and as owners of land and financial assets. It consists of income earned from farming activities, income from independent professional practices, net income from sole proprietorships and partnerships, net rents received, and dividends received from corporations and cooperatives.

General Government Income from Property and Entrepreneurship includes receipts by general government from rents, interests and dividends accruing to it from ownership of land and buildings or financial assets. Also included are earnings of government corporations which are financially integrated with general government. Profit of state monopolies, however, are treated as indirect taxes and their losses as subsidies.

Corporate Income consists of the incomes earned by private and government corporations and cooperatives before taxes are paid and dividends are distributed. Government corporations included here are those which are financial-

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ly independent of general government since they have full control of their funds through a board of directors.

It has two components: *corporate tax* which refers to direct taxes on profits, capital or net worth of the above institutions, and *corporate savings* which refer to their undistributed earnings.

Indirect Taxes Net of Subsidies. *Indirect taxes* are assessed on producers in production, sale, purchase, or use of goods and services which they charge to expenses of production. Examples are excise taxes, import duties, sales taxes, business licenses and real property taxes.

Subsidies consist mostly of government production and consumption subsidies with a view to price stabilization. Examples are subsidies granted to the National Food Authority, Philippine National Oil Company and the Postal Services Office.

Capital Consumption Allowance represents the provision made for "normal wear and tear" and foreseen obsolescence of all fixed capital, as well as accidental damage to it, estimated on replacement cost basis. No depreciation charge is made for government construction such as highways, roads and canals because of practical difficulties.

Personal Consumption Expenditures record the value of final expenditure by households and private nonprofit institutions on current goods and services less net sales of similar goods and services (mainly second-hand transactions) plus the value of gifts in kind received from the rest of the world. Since the flow refers to the expenditures of normal residents, purchases by residents abroad, except those chargeable to business expense, should be included and those made by visiting nonresidents should be excluded.

General Government Consumption Expenditures on Goods and Services include compensation of employees and net purchases of goods and services less sales of goods and services. Purchases by general government comprise (a) purchases for military purposes which include expenditures on arms, ammunition, aircraft, road vehicles, ships, new buildings for military service, and (b) purchases for civil, administrative or governing purposes which include the cost of operating services such as schools, hospitals, social services, police force, roads and other transport installations including gross rent of building for government use. Rental expenditure is also imputed on buildings owned and occupied by the government except historical buildings, museums, and the like.

In determining the scope of general government consumption expenditure, it is necessary to decide which purchases are to be treated as consumption expenditure as distinct from capital formation. In this connection, expenditure for defense purposes, excluding civil defense, is treated as *consumption expenditure,* whereas all expenditure on capital formation for civil purposes is included in *gross domestic capital formation*.

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Gross Domestic Capital Formation refers to the gross value of that part of a country's output and imports which are not consumed or exported during the accounting period but set aside as addition to its stock of capital goods. *Capital formation* is in the form of fixed capital formation and changes in stocks.

Fixed capital formation includes the value of the purchases and own-account construction of fixed assets such as machinery, equipment, plants, buildings, other construction and works by enterprises, households, private nonprofit institutions, and general government for civil defense. *Gross fixed capital formation* includes, besides the purchase price of capital goods, all expenses incurred by the purchaser and directly related to the acquisition of these goods, such as those for transportation and fees for engineering, architectural, legal and other services.

Stock is defined as goods produced or imported but not put to final use during the accounting period, i.e., consumed, exported or purchased for fixed capital formation. *Increase in stocks* refers to the value of the physical change in raw materials, work-in-progress (other than work-in-progress of the building and heavy construction industries which is included in fixed capital formation) and finished goods held by enterprises and in government stockpiles.

Net Exports of Goods and Services. In estimating expenditures on gross domestic product, it is not practicable to eliminate content from each kind of final expenditure. The statistics from which the estimated consumption and accumulation are derived relate to the total value of the final goods and services concerned, including their import content. Thus, expenditure on gross domestic product is equal to the total expenditure by residents on all final goods and services (exports less imports).

Net Factor Income from the Rest of the World consists of the net income receipts from the rest of the world such as: investment income including interest, dividends and branch profits; earnings of residents working abroad; and other factor incomes of normal residents. It includes the investment income of foreigners on their financial capital invested locally and of residents on their investments abroad. This item, therefore, represents the difference between factor incomes of residents from abroad and the income accruing to foreign suppliers of factor services.

Statistical Discrepancy is the difference between the estimates of total national output from the income side of the account on the one hand, and the expenditure side on the other. This is entered as the balancing item in this account.

23.1.3 National Income Estimation in the Philippines

In 1947, the Joint Philippine-American Finance Commission prepared the national income estimates for the years 1938 and 1948 to serve as bases for assessing the rehabilitation program of the country. That marked the first attempt at income estimation in the Philippines. The exercise was followed up

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in 1950 when the Department of Economic Research (DER) of the Central Bank presented a series for the period 1948-1950. The Central Bank continued the estimation and maintained the national income series up to the year 1956. The responsibility for national estimation was transferred to the Office of the Statistical Coordination and Standards (OSCAS) of the National Economic Council in 1957.

When the government reorganized in 1973, the function of the national economic planning was vested in the National Economic and Development Authority (NEDA) and the preparation of the national accounts had since become the responsibility of the National Accounts Staff (now the Economic and Social Statistics Office) of the NEDA Statistical Coordination Office (now the National Statistical Coordination Board or NSCB).

An overall revision of the national accounts series covering the period 1946 to 1967 was released in 1968. It was in this revision that an independent check in the GNP was first attempted. This was done by comparing the GNP obtained by the traditional value-added approach with the estimates obtained by the expenditure approach.

In 1970, the OSCAS prepared a manual on the methodology and explicit assumptions used in preparing the national income estimates. This manual then served as the basic working document of a three-day seminar/workshop on national accounts methodology held in 1971 and attended by statisticians and economists. Two sets of recommendations and suggestions for improving the estimation techniques as well as the data collection system were made. In consonance with this, the NEDA placed great emphasis in the improvement and expansion of the statistical machinery of the government.

With the aid of the Statistical Advisory Board, NEDA created several interagency committees for the purpose of assessing ongoing and proposed programs of activities of the different statistical agencies. One of these was the Inter-Agency Committee on the Philippine System of National Accounts whose primary purpose was to review the framework of the accounts and to recommend the necessary modifications, elaborations and extensions in order to make the accounts more meaningful and responsive to the requirements of development planning.

One of the first activities of the committee was to hold a second workshop on national accounts methodology in 1976. This led to the 1976 overall revision of national accounts series. Foremost in the revision of the new series was the shifting of base period for estimates at constant prices from 1967 to 1972 in compliance with NEDA Resolution No. 8 Series of 1976 requiring all current statistical series to be rebased to calendar year 1972 and the alignment of the conceptual framework to the revised United Nations System of National Accounts which aims primarily towards the integration of the various economic accounts into a single coherent set of economic statistics.

The 1990 Revision. The revision of the PSNA was undertaken in response to the increasing complexity of the various transactions in the economy as well as

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the increasing demand of users for new information from the PSNA. The program of revision of the National Accounts was proposed in 1985 in view of the recommendations made in the previous PSNA workshops; the recommendations for the 1968 United Nations System of National Accounts; and the recommendation of the Statistical Advisory Board, the forerunner of the National Statistical Coordination Board, to shift the base year of the National Accounts and price statistics to 1985.

For several years now, the Economic and Social Statistics Office of the NSCB has worked on the revision of the PSNA, focusing on the annual compilation of the accounts covering the period 1980- 1987. The revised and rebased series, which was finally brought up in the briefing held at the NEDA *sa* Makati Operations Room in September 1990, is the result of the efforts to develop and improve data and estimation techniques to reflect the recommendations of the 1968 UNSNA, and to some extent, the preliminary recommendations of the 1993 UNSNA. The new series likewise features additional accounts such as the Consolidated Accounts of the Nation which shows more articulation in the transaction flows; Gross Domestic Product by factor shares; Institutional Accounts, which was expanded to include those of the Government and Private Corporations; and Factor Shares by Institutions.

Specifically, the accounts include four consolidated accounts namely; (I) Gross Domestic Products and Expenditure at Current Prices, (II) National Disposable Income and Its Appropriation at Current Prices, (III) Gross Accumulation at Current Prices, and (IV) External Transactions at Current Prices; and four Income and Outlay accounts namely: (I) Private Corporations at Current Prices, (II) Government Corporations at Current Prices, (III) General Government at Current Prices, and (IV) Households and Unincorporated Enterprises at Current Prices.

Major changes in the revised PSNA include the following: (1) shift to a more recent base year, from 1972 to 1985; (2) adoption of definitional and conceptual changes; (3) development or improvement of methodologies using new sources of data; and (4) utilization of revised and more updated data.

23.2 Macroeconomic Performance in 1992

The Philippine economy in 1992 experienced setback primarily due to electric power shortage which started in the second quarter of the year. At constant 1985 prices, Gross Domestic Product (GDP), which measures the aggregate output of goods and services of the economy, merely increased by 0.05 percent from P712.32 billion in 1991 to P712.71 billion in 1992. However, net factor income from the rest of the world largely increased from P10.01 billion in 1991 to P17.06 billion in 1992, posting a 70.40 percent growth rate. It contributed significantly to Gross National Product (GNP) which, at constant 1985 prices, registered an increase of 1.03 percent from last year's figure of

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P722.33 billion to P729.77 billion in 1992. At current prices, GNP was valued at P1,374.59 billion or 8.89 percent more than the 1991 level.

With population growing at a rate of 1.98 percent in 1992, real per capita GNP was P11,322, down by 1.45 percent from P11,489 a year ago.

Of the three major industry groups, only the Services sector, which accounted for 41.84 percent of the GNP, posted an increase in real gross value added, growing by 0.72 percent from 1991. Transportation, communication and storage sector posted an increase of 1.71 percent. Likewise, the Trade sector recorded a growth of 1.44 percent. The Industry and Agriculture, Fishery and Forestry sectors posted declines of 0.49 percent and 0.36 percent in real terms, respectively. For the Industry sector, the decline was due to the 1.67 percent drop in real gross value added of the manufacturing sector. Other industry subsectors registered increases in real gross value added. See Tables 23.6 to 23.8.

23.2.1 Expenditures on Gross National Product

Table 23.6 presents the Gross National Product by expenditure share from 1988 to 1992.

Personal Consumption Expenditures (PCE). Personal consumption expenditures, composed of expenditures of households and nonprofit institutions, increased in 1992 with a growth rate of 3.25 percent in real terms whereas at current prices it registered an increase of 11.12 percent. Real per capita PCE increased by 1.03 percent from P8,647 in 1991 to P8,736 during the year.

General Government Consumption Expenditures. Government consumption, which accounts for 8.92 percent of final consumption, declined by 4.29 percent (at constant 1985 prices) as government intensified its cost-cutting measures beginning the early part of 1990. Government consumption expenditures at 1985 prices was registered at P54.97 billion in 1992.

Gross Domestic Capital Formation (GDCF). The inflow of investments into the economy in 1992 showed a significant improvement. Capital formation significantly increased by 9.75 percent in contrast to a negative growth rate of 16.21 percent realized in 1991. Construction, which accounted for 41.02 percent of total fixed capital formation, expanded by 4.94 percent due to massive rehabilitation of areas devastated by mudflows caused by Mount Pinatubo eruption.

On the other hand, expenditures for durable equipment increased by 14.47 percent, largely accounted for by investments in general industrial machinery equipment such as air-conditioning and refrigeration equipment and machinery accessories (See Table 23.9). Real investments in construction and durable equipment amounted to P63.57 billion and P80.04 billion in 1992, respectively. With the increase in industrial activities, change in stocks in real terms amounted to P2.46 billion in 1992 compared to P1.70 billion recorded in 1991.

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Export of Goods and Nonfactor Services. Export of goods and nonfactor services at constant 1985 prices reached P238.70 billion, an increase of 1.87 percent from P234.31 billion in 1991. Merchandise exports rose by 2.35 percent with large increases registered in gold from copper ores (150.83 percent), garments (19.71 percent) and lumber (10.91 percent). See also Table 23.6a.

Merchandise imports, on the other hand, grew by 13.42 percent. Principal imports (top 15) rose by 14.06 percent due mainly to increases in imported machinery other than electrical machinery, base metals, textile fibers, and manufactured fertilizers. Imports of nonfactor services grew by 7.34 percent. See Tables 23.6a to 23.6d.

23.2.2 Sectoral Production

23.2.2.1 Agriculture, Fishery and Forestry

Gross value added in agriculture, fishery and forestry sector decreased by 0.36 percent (at constant 1985 prices) in 1992. Coconut including copra, sugarcane, banana, other crops, livestock, poultry and fishery managed to increase their production levels in 1992, while the rest of agricultural subsectors such as palay and corn posted declines. Meanwhile, forestry declined further by 39.71 percent as log ban remained to be in force.

At current prices, the sector generated gross value added of P290.34 billion, an increase of 11.09 percent over the 1991 level.

23.2.2.2 Industry

The industry sector comprises mining and quarrying; manufacturing; construction; and electricity, gas and water.

Real gross value added in manufacturing registered negative growth rate, while construction; electricity, gas and water; and mining and quarrying did otherwise.

Mining and Quarrying. Mining and quarrying registered an increase of 6.73 percent in real gross value added in 1992, reaching P11.50 billion from P10.77 billion a year ago.

All mining subsectors posted increases, except for gold, copper and chromium ore mining which continued to decrease. Stone quarrying, clay and sandpits industry registered the highest increase among the subindustries.

At current prices, gross value added in mining and quarrying amounted to P16.26 billion, down by 7.09 percent over the 1991 level.

Manufacturing. Manufacturing, which accounted for 25.26 percent of GDP in 1992, decreased by 1.67 percent in real gross value added from P183.11 billion in 1991 to P180.06 billion in 1992. The sector was adversely affected by power shortage and increased production cost during the year. The following industries, namely, food, beverage and tobacco, chemical and chemical products, textile, wood and cork products, furniture and fixtures, paper and pulp, publish-

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ing and printing, leather and leather products, rubber products, nonmetallic mineral products, basic metal industries and other manufacturing industries suffered decreases in gross value added. On the other hand, footwear and wearing apparel and electrical machinery continued their uptrend, posting increases since 1989. Products of petroleum and coal, machinery, metal industries and transport equipment recovered from the negative growth experienced in 1991.

Gross value added in manufacturing at current prices reached P327.50 billion, up by 3.66 percent over the 1991 figure of P315.94 billion. Refer to Table 23.12.

Construction. Gross value added at constant 1985 prices in Construction industry in 1992 posted a slight increase of 2.75 percent from a negative growth rate of 15.70 in 1991. Gross value of government construction increased also by 24.87 percent while private construction decreased by 1.17 percent from the previous year.

Valued at current prices, gross value added in construction amounted to P68.70 billion, an increase of 10.87 percent from 1991. See Table 23.13.

Electricity, Gas and Water. Gross value added (at constant 1985 prices) in electricity, gas and water increased by 0.66 percent from P19.55 billion in 1991 to P19.68 billion in 1992. Growth rate in the water industry went up by only 0.67 percent compared to 0.86 percent in 1991. Electricity and gas subsector also increased by 0.66 percent in 1992.

At 1992 prices, gross value added in electricity, gas and water reached P32.74 billion, an increase of 12.52 percent over the previous year. See Table 23.14.

23.2.2.3 Services

The services sector comprising transportation, communication and storage, trade, finance and housing, and government and private services contributed a combined real output of P305.32 billion or 42.84 percent of GDP, a slight increase of 0.72 percent over the 1991 level of P303.13 billion.

Transportation, Communication and Storage. In 1992, gross value added in this sector amounted to P42.00 billion at constant prices, or an increase of 1.71 percent from the previous year's level of P41.29 billion.

Transportation and storage, which accounted for P31.26 billion or 74.43 percent of the total output, posted a growth of 2.17 percent. Land transport contributed P21.27 billion, and water, P3.70 billion. Air transport contributed P1.66 billion, registering the highest increase of 12.52 percent. This was due to the increase in international traffic, fare hike and efficiency in flight operations, bringing Philippine Airlines back to profitability. On the other hand, storage and services incidental to transportation posted a negative growth of 3.60 percent.

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Meanwhile, there was a minimal increase of 0.38 percent in the communication subsector from last year's level of P10.70 billion. At 1992 prices, the sector generated an output of P76.54 billion, an increase of 4.99 percent over 1991. See Table 23.15.

Trade. Among the services subsectors, trade, which registered real output of P107.45 billion, contributed the biggest share of 15.08 percent to GDP. It posted a positive growth rate of 1.44 percent as compared to last year's level of P105.92 billion. Wholesale and retail trade increased by 4.88 percent and 0.50 percent, repectively.

Gross value added in the trade sector at 1992 prices amounted to P188.65 billion, 6.64 percent higher than the 1991 level (P176.90 billion). See Table 23.16.

Finance and Housing. Finance comprising of banks, nonbanks and insurance corporations, exhibited a minimal growth of 0.35 percent in 1992. Banks which constituted 69.40 percent of the GVA in finance, increased by 0.01 percent during the year. Nonbanks and insurance registered growth rates of 1.92 percent and 0.71 percent, respectively. At 1992 prices, gross value added in finance amounted to P53.17 billion, 9.46 percent more than the previous year's level.

Ownership of dwellings and real estate at current 1992 prices amounted to P86.21 billion, posting a growth of 17.72 percent from last year. See Tables 23.17 to 23.18.

Other Services. In 1992, government and private services generated real output of P36.57 billion and P49.55 billion, respectively. Government services registered a downward trend from a positive 2.44 percent growth rate in 1991 to a 1.93 percent decline in 1992. This was attributed to the government policy of freeze hiring and the mandatory 10 percent reduction in government bureaucracy. Private services slightly increased by 0.56 percent largely due to the 4.42 percent and 3.75 percent increases in real output of hotel and restaurants and medical and health services, respectively. Medical and health services continued its upward trend brought about by the increase in medical and health service fee of practitioners. It registered an increase of 5.82 percent in 1991 and 3.75 percent in 1992. Business, recreational and personal services which exhibited positive growth rates in 1991 suffered setbacks as shown by their negative growths of 1.11 percent, 4.20 percent and 0.71 percent, respectively, in 1992.

Gross value added at current prices in government and private services amounted to P202.52 billion, an increase of 8.14 percent over the 1991 level. See Table 23.19.

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23.3 The Flow of Funds Accounts

The *flow of funds* (FOF) *account* is a statement of the capital accounts for the economy as a whole, showing investments (whether spent, lent or hoarded) in the use (U) columns and the means of financing these investments (whether earned or borrowed) in the source (S) columns. The accounts are primarily designed to show the linkages between the many financial activities which generate income and production.

The entire economy is divided into institutional groupings. Each sector's FOF account records the sector's purchases and sales of goods and services, and the movements in its financial uses are greater than (less than) financial sources.

In any one row of the matrix, the sum of all uses of funds is equal to the sum of all sources of funds in that row inasmuch as use of funds (payments) of the sector is a source of fund (receipt) of another sector. The sum of financial surpluses and deficits of all sectors of the economy, including the rest of the world, should be zero since a sector's lending is exactly matched by another sector's borrowing, and vice-versa.

For the economy as a whole, *gross savings* is equal to the sum of real investment and net lending to (borrowing from) the rest of the world. *Net borrowing from the rest of the world* is commonly referred to as the *investment-savings gap.*

23.3.1 Sectoral Structure

In the Philippine FOF system of accounts, the economy is divided into three major sectors: financial, nonfinancial, and the rest of the world. The financial and nonfinancial sectors are classified further into private and government.

In general, each sector or subsector is composed of deposit money banks, other banks, insurance companies, lending investors, investment houses, securities dealers or brokers, fund managers, investment companies, pawnshops, nonstock savings and loan associations, and mutual building and loan associations.

Government financial sector includes monetary authorities such as the Central Bank of the Philippines and National Treasury (only insofar as the latter's monetary functions and transactions with the International Monetary Fund are concerned); specialized government banks such as the Development Bank of the Philippines, Philippine Amanah Bank, and Land Bank of the Philippines; social security agencies; and other nonbank financial intermediaries.

Private nonfinancial sector includes the national government comprising the three branches of the central government, and all agencies and instrumentalities, local government, and government corporations.

Rest of the world sector includes nonresidents and international organizations such as the International Monetary Fund, World Bank and the Asian Development Bank.

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23.3.2 Transaction Categories

Transaction accounts in the FOF system are arranged to cover three major groupings: current nonfinancial, capital nonfinancial, and financial, which are summarized as gross savings, real investments, and financial investments, respectively.

Gross savings is the net income (the excess of income and transfers received over current expenditures) plus capital consumption allowances and other adjustments, such as allowance for doubtful accounts and valuation adjustments.

Real investments include consumer durables, real estate or other fixed assets, and inventory acquired during a given period.

Net financial investment is the difference between the total financial uses (acquisition of financial assets) and total financial sources (incurrence of financial liabilities). It measures net funds advanced to (borrowed from) other sources.

23.3.3 The Flow of Funds Accounts in 1992

Gross savings generated by the domestic economy amounted to P241.05 billion or 4.32 percent more than the 1991 level, as the economy managed to grow at a slow pace despite economic crises resulting from domestic and foreign disturbances. Likewise, there was an expansion in real investments by 16.42 percent, reaching a level of P292,888 million in 1992.

The households and noncorporate business organizations posted the biggest gross savings of P127,824 million or 53.03 percent of the total gross domestic savings. Government intermediaries, private corporations and financial intermediaries followed with 17.52 percent, 16.04 percent and 13.40 percent, respectively.

Private corporations registered the biggest real investments of P108,961 million or 37.20 percent of the total.

Among the sectors, households and noncorporate business and financial intermediaries posted net financial investment of P94,274 million and P19,275 million, respectively. On the contrary, private corporations and the government sector registered dissavings or net financial deficit of P66,717 million and P67,136 million, respectively.

The financial system continued to grow in terms of sources. In 1992, financial sources amounted to P420,469 million, up by 19.10 percent over the 1991 level. Financial intermediaries contributed the biggest share of P178,284 million or 42.40 percent of the total.

On the other hand, total financial uses of the economy reached P400,165 million, thus yielding a net financial investment deficit of P20,304 million. See Table 23.20.

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23.4 Balance of Payments (BOP)

The *balance of payments* is a statement which summarizes all the international transactions of a country. The BOP has two components: the current account and the capital account.

Current Account transactions involve physical movement of resources or the provision of services between residents and the rest of the world. It is broken down into visible accounts or merchandise trade (exports and imports) and invisible items or nonmerchandise trade (transactions involving services such as insurance, freight, investment income, tourist expenditures, and others). Also included in the invisible account are certain transfer payments such as donations to charitable institutions, remittances, gifts and grants.

Capital Account covers intergovernment loans, other official capital transfer and private investments. The remaining financial transactions cover monetary movements, that is, changes in gold and convertible currency reserves, transactions with the IMF, changes in banking liabilities and other capital transactions of monetary nature.

Relations to National Income Accounts. The balance of payments also affects the country's level of income and enters into the national income accounts. The balance of merchandise trade (exports minus imports) and nonmerchandise trade in the current account of the BOP may be shown in the gross domestic product account and the rest of the world account (ROW); transfers from the rest of the world and compensation of employees in the national disposable income account as well as the ROW account; and capital transfers from the ROW into capital finance account.

23.4.1 The Philippine Balance of Payments in 1992

The country's balance of payments decreased by 67.76 percent from $1,405 million in 1991 to $453 million in 1992. The decline may be largely attributed to the 55.69 percent decrease in nonmonetary capital accounts from $1,794 million in 1991 to $795 million in 1992. On the other hand, net current account increased by 3.29 percent. As of the first semester of 1993, overall position of the BOP amounted to $739 million.

Merchandise trade gap widened by 46.22 percent from a deficit of $3,211 million in 1991 to $ 4,695 million in 1992, due to the larger increase in imports (20.48 percent) relative to exports (11.13 percent).

The two other components of current account, nonmerchandise trade and transfers, continued to post surpluses in 1992, mainly due to the increased dollar remittances of contract workers. Nonmerchandise trade surplus in 1992 amounted to $2,879 million or an increase of more than 100 percent from $1,351 million realized in 1991. Meanwhile, surplus in transfers amounting to $817 million registered a minimal decrease of 1.21 percent from its previous level.

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Loan inflows amounted to $7,436 million, an increase of 105.81 percent from 1991, while loan repayments or outflows totalled $6,770 million, a surplus of $666 million in long-term loan account. Likewise, a surplus of $737 million in net direct investments was realized, an improvement of 12.69 percent compared to 1991 ($654 million). This was mainly due to the increase of new foreign investments and inflow of portfolio investments, reflecting regained confidence of nonresident investors. Meanwhile, net short-term capital registered a surplus of $350 million, a decrease of 5.15 percent from the 1991 level of $369 million. Refer to Table 23.21 for data on the country's balance of payments from 1986 to first semester 1993.

Sources:

23.1 National Statistical Coordination Board (NSCB), Economic and Social Statistics Office (ESSO).
23.3 Bangko Sentral ng Pilipinas (BSP), Department of Economic Research.

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Table 23.1 Account I - Gross Domestic Product and Expenditure Account: 1988-1992
(Million pesos at current prices)

Item	1988	1989	1990	1991	1992
1. Compensation of employees	278,874	324,386	374,312	435,625	482,398
2. Net operating surplus	396,410	452,177	528,445	594,967	621,646
A. Interest payment	64,729	73,847	94,953	112,605	117,603
B. Profit	331,681	378,330	433,492	481,379	504,043
3. Depreciation	67,162	72,384	82,456	100,905	109,975
4. Indirect taxes	59,454	82,705	101,185	122,476	132,275
5. Less: Subsidies	2,718	6,208	13,300	8,246	3.664
Gross Domestic Product	799,182	925,444	1,073,098	1,244,741	1,342,630
6. Personal consumption expenditure	558,765	649,276	767,061	916,367	1,018,225
7. Government consumption expenditure	72,183	88,186	108,843	127,053	129,776
8. Gross domestic capital formation	149,193	199,910	257,016	253,252	297,117
A. Fixed capital	142,226	192,665	248,954	250,147	293,456
B. Changes in stocks	6,967	7,245	8,062	3,105	3,661
9. Exports of goods and services	226,431	263,880	299,211	373,715	388,570
10. Less: Imports of goods and services	215,292	280,118	358,548	391,856	450,961
11. Statistical discrepancy	7,902	4,310	(485)	(33,790)	(40,097)
Expenditure of gross domestic product	799,182	925,444	1,073,098	1,244,741	1,342,630

Note: Figures from 1988 to 1992 were revised.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.2 Account II - National Disposable Income and Its Appropriation: 1988 - 1992
(Million pesos at current prices)

Item	1988	1989	1990	1991	1992
1. Personal consumption expenditure	558,765	649,276	767,061	916,367	1,018,225
2. Government consumption expenditure	72,183	88,186	108,843	127,053	129,776
3. Net saving	100,110	113,172	121,733	124,645	125,046
Appropriation of net national disposable income	731,058	850,634	997,637	1,168,065	1,273,047
4. Compensation of employees	304,941	355,444	415,535	493,021	547,559
A. From resident producers	278,874	324,386	374,312	434,625	482,398
B. From the rest of the world	26,277	31,145	41,345	57,644	65,339
C. Less: To the rest of the world	210	87	122	248	178
5. Net Operating surplus	353,040	400,939	478,049	538,165	576,240
A. From resident producers	396,410	452,177	528,445	593,984	621,646
B. From the rest of the world	6,237	7,793	9,501	12,427	3,656
C. Less: To the rest of the world	49,607	59,031	59,897	68,246	59,062
6. Indirect taxes	59,454	82,705	101,185	122,473	132,275
7. Less: Subsidies	2,718	6,208	13,300	8,246	3,664
8. Current transfers from the rest of the world	16,666	18,047	17,458	23,000	21,197
9. Less: Current transfers to the rest of the world	325	293	1,290	348	560
Net national disposable income	731,058	850,634	997,637	1,168,065	1,273,047
10. Memorandum items:					
A. Net national income (Net national product) at factor cost (4 + 5)	657,981	756,383	893,584	1,031,186	1,123,799
B. Net national income (Net national product) at market prices (10A + 6 - 7)	714,717	832,880	981,469	1,145,413	1,252,410

Note: Figures from 1988 to 1992 were revised.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.3 Account III - Gross Accumulation Account: 1988 - 1992
(Million pesos at current prices)

Items	1988	1989	1990	1991	1992
1. Gross fixed capital formation	142,226	192,665	248,954	250,147	293,456
2. Changes in stocks	6,967	7,245	8,062	3,105	3,661
3. Net lending to the rest of the world	10,372	(13,897)	(49,543)	7,747	(20,916)
Gross accumulation	159,565	186,013	207,473	260,999	276,201
4. Institutional saving, net	100,110	113,172	121,733	124,645	125,046
A. Private corporations	15,625	7,020	10,903	14,090	1,403
B. Government corporations	(6,360	(1,692)	(764)	(17,409)	(3,876)
C. General government	11,659	26,219	10,036	49,507	67,129
D. Households and unincorporated enterprises	79,186	81,625	101,558	78,457	60,390
5. Depreciation	67,162	72,384	82,456	100,905	109,975
6. Capital transfers from the rest of the world	195	4,767	2,799	1,659	1,083
7. Statistical discrepancy	7,902	4,310	(485)	(33,790)	(40,097
Finance of gross accumulation	159,565	186,013	207,473	260,999	276,201

Note: Figures from 1988 to 1992 were revised.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.4 Account IV - External Transactions Account: 1988-1992
(Million pesos at current prices)

Item	1988	1989	1990	1991	1992
1. Exports of goods and services	226,431	263,880	299,211	373,715	388,570
A. Merchandise FOB, SNA [1]	152,637	174,098	199,458	249,773	251,641
Merchandise FOB, FTS [2]	148,031	169,293	197,853	245,284	251,109
Less: Special transactions	1,966	1,535	2,570	2,306	2,837
Plus: Monetization of gold, BP [3]	6,572	6,340	4,175	6,795	3,369
B. Nonfactor services	73,794	89,782	99,753	123,942	136,929
2. Compensation of employees from the rest of the world	26,277	31,145	41,345	57,644	65,339
3. Property and entrepreneurial income from the rest of the world	6,237	7,793	9,501	12,427	13,656
4. Current transfers from the rest of the world	16,666	18,047	17,458	23,000	21,197
A. To general government	1,460	1,136	3,974	3,407	3,690
B. To households	15,206	16,911	13,484	19,593	17,507
Current Receipts	275,611	320,865	367,515	466,786	488,762
5. Imports of goods and services	215,292	280,118	358,548	391,856	450,961
A. Merchandise CIF, SNA [1]	175,129	237,450	311,040	348,295	389,998
Merchandise FOB, FTS [2]	170,894	226,995	297,794	328,598	366,347
Plus: Insurance and freight, FTS	7,763	10,455	20,339	27,052	30,350
Less: Special transactions	3,528	5,938	7,093	7,355	6,699
Plus: Demonetization of gold, BP [3]	-	-	-	-	-
B. Nonfactor services	40,163	42,668	47,508	43,561	60,693
6. Compensation of employees to the rest of the world	210	87	122	248	178
7. Property and entrepreneurial income to the rest of the world	49,607	59,031	59,897	68,246	59,062
8. Current transfers to the rest of the world	325	293	1,290	348	560
A. Government contributions to international organization	283	250	1,216	320	460
B. Households	42	43	74	28	100
9. Surplus on current transactions	10,177	(18,664)	(52,342)	6,088	(21,999)
Current Disbursements	275,611	320,865	367,515	466,786	488,762
10. Surplus on current transactions	10,177	(18,664)	(52,342)	6,088	(21,999)
11. Capital transfers from the rest of the world	195	4,767	2,799	1,659	1,083
12. Net lending to the rest of the world	10,372	(13,897)	(49,543)	7,747	(20,916)

Note: Figures from 1988 to 1992 were revised.

[1] SNA - System of National Accounts
[2] Foreign Trade Statistics, NSO
[3] Balance of Payments, CBP

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.5 Income and Outlay Account I: Private Corporations: 1988-1992
(Million pesos at current prices)

Item	1988	1989	1990	1991	1992
1. Net operating surplus	71,498	69,551	88,117	107,554	111,158
2. Property income	12,159	12,873	15,016	19,471	18,531
3. Casualty insurance claims	1,025	1,348	1,905	2,230	2,221
4. Net casualty insurance premiums	1,744	2,042	2,611	2,690	3,087
Total receipts	86,426	85,814	107,649	131,945	134,997
5. Interest payments	38,939	35,163	49,635	57,635	66,299
6. Dividends	15,057	25,329	23,364	30,005	31,526
7. Net casualty insurance premiums	1,025	1,348	1,905	2,230	2,221
8. Casualty insurance claims	1,744	2,042	2,611	2,690	3,087
9. Direct taxes	14,036	14,912	19,231	25,565	30,461
10. Saving	15,625	7,020	10,903	14,090	1,403
Total disbursements	86,426	85,814	107,649	131,945	134,997
11. Memorandum items:					
1. Disposable income = savings					
2. Primary Income (1 + 2) - (5 + 6)	29,661	21,932	30,134	39,655	31,864

Note: Figures from 1988 to 1992 were revised.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.5a Income and Outlay Account II: Government Corporations: 1988-1992
(Million pesos at current prices)

Item	1988	1989	1990	1991	1992
1. Net operating surplus	12,563	27,622	31,090	19,755	23,815
2. Interest income and dividends	3,430	3,879	6,057	9,204	13,986
3. Net casualty insurance premiums	341	492	776	887	704
4. Casualty insurance claims	488	426	639	617	634
Total receipts	16,822	32,419	38,562	30,463	39,139
5. Interest payments	21,057	31,301	32,322	41,418	37,386
6. Dividends	65	66	105	133	168
7. Casualty insurance claims	341	492	639	887	704
8. Net casualty insurance premiums	488	426	776	617	634
9. Current transfers to households	349	1,100	3,975	2,963	2,299
10. Direct taxes	882	726	1,509	1,854	1,824
11. Saving	(6,360)	(1,692)	(764)	(17,409)	(3,876)
Total disbursements	16,822	32,419	38,562	30,463	39,139
12. Memorandum Items:					
1. Disposable income = savings					
2. Primary income (1+2) - (5+6)	(5,129)	134	4,720	(12,592)	247

Note: Figures from 1988 to 1992 were revised.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.5b Income and Outlay Account III: General Government: 1988-1992
(Million pesos at current prices)

Item	1988	1989	1990	1991	1992
1. Net operating surplus	(553)	(710)	(609)	(795)	(94)
2. Property income	22,786	32,647	25,575	41,114	40,045
3. Indirect taxes excluding import duties and taxes	34,290	44,093	55,700	57,194	62,408
4. Import duties and taxes	25,164	38,612	45,485	65,279	69,867
5. Direct taxes	29,743	40,880	54,507	67,158	76,875
6. Compulsory fees and fines	3,226	4,511	6,974	7,401	7,097
7. Social security contributions	8,681	10,462	14,667	17,770	20,351
8. Casualty insurance claims	51	206	204	136	247
9. Current transfers	5,185	3,734	6,234	6,090	5,720
Total receipts	128,573	174,435	208,737	261,347	282,516
10. Government consumption expenditure	72,183	88,176	108,843	127,053	129,776
11. Interest payment on public debt	33,598	43,576	62,323	59,590	62,443
A. To domestic	23,655	34,714	47,840	43,550	50,240
B. To rest of the world	9,943	8,862	14,483	16,040	12,203
12. Subsidies	2,718	6,208	13,300	8,246	3,664
13. Social security benefits	6,059	6,876	9,294	12,981	15,968
14. Net casualty insurance premiums	51	206	204	136	247
15. Other current transfers	2,305	3,164	4,737	3,834	3,289
16. Saving	11,659	26,219	10,036	49,507	67,129
Total disbursements	128,573	174,435	208,737	261,347	282,516
17. Memorandum items:					
1. Disposable income (1 to 9) - (11 to 15) or (10 + 16)	83,842	114,405	118,879	176,560	196,905
2. Primary income (1 to 4) (11 + 12)	45,371	64,858	50,528	94,956	106,119

Note: Figures from 1988 to 1992 were revised.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.5c Income and Outlay Account IV: Household and Unincorporated Enterprises: 1988-1992 (Million pesos at current prices)

Item	1988	1989	1990	1991	1992
1. Net operating surplus	312,902	355,714	409,847	467,470	486,767
2. Compensation of employees	304,941	355,444	415,535	493,021	547,559
3. Interest on public debt from general government	23,655	34,714	47,840	43,550	50,240
4. Other interest income	9,831	10,095	38,872	36,737	47,403
5. Social security benefits	6,059	6,876	9,294	12,981	15,968
6. Casualty insurance claims	521	554	639	594	689
7. Current transfers	17,577	20,925	20,980	26,070	22,635
Total receipts	675,486	784,322	943,007	1,080,423	1,171,261
8. Personal consumption expenditure	558,765	649,276	767,061	916,367	1,018,225
9. Interest payment on consumer debt	1,782	2,628	3,011	3,562	3,871
10. Other interest payments	4,733	7,383	12,996	13,822	13,918
11. Other property income payment	-	-	-	-	-
12. Direct taxes	14,825	25,242	33,767	39,739	44,590
13. Compulsory fees, fines and penalties	3,226	4,511	6,974	7,401	7,097
14. Social security contributions	8,681	10,462	14,667	17,770	20,351
15. Net casualty insurance premiums	521	554	639	594	689
16. Current transfers	3,767	2,641	2,334	2,711	2,130
17. Saving	79,186	81,625	101,558	78,457	60,390
Total disbursements	675,486	784,322	943,007	1,080,423	1,171,261
18. Memorandum items:					
1. Personal disposable income (1 to 7) - (9 to 16) or (8 + 17)	637,951	730,901	868,619	994,824	1,078,615
2. Primary income (1 + 4) - (9 to 11)	644,814	745,956	896,087	1,023,394	1,114,180

Note: Figures from 1988 to 1992 were revised.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Figure 23.1 Gross National Product at Current and Constant 1985 Prices: 1982-1992

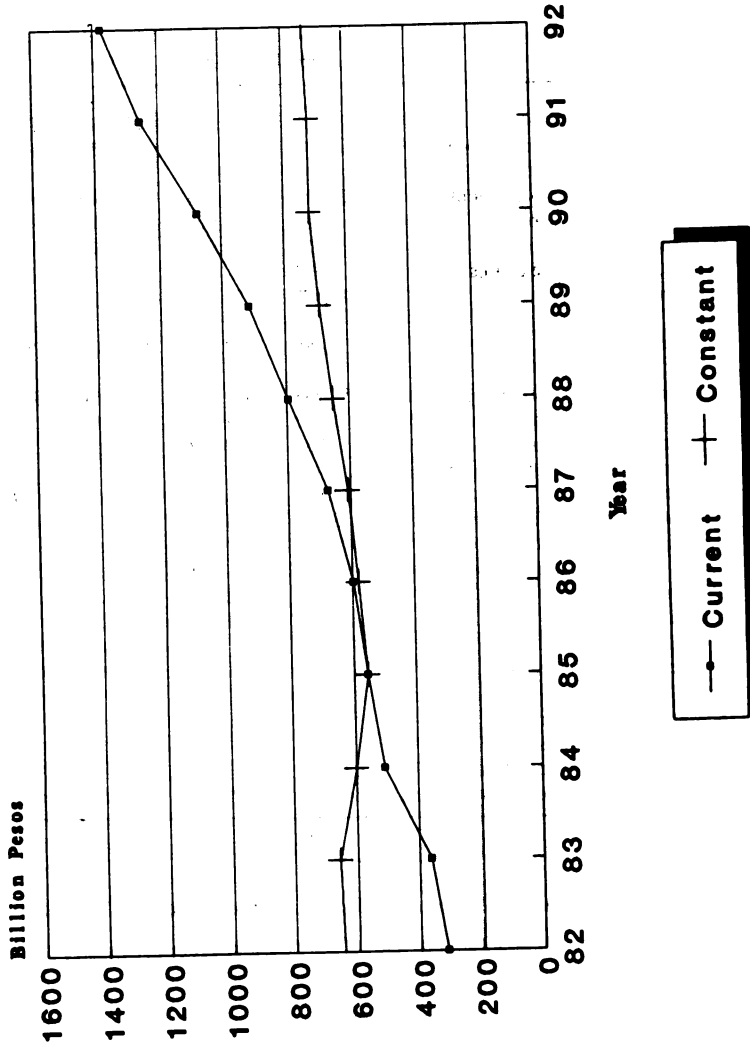

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Table 23.6 Gross National Product and Gross Domestic Product by Expenditure Share: 1988-1992
(Million pesos)

Type of expenditure	At current prices					At constant 1985 prices				
	1988	1989	1990	1991	1992	1988	1989	1990	1991	1992
Personal consumption expenditure	558,765	649,276	767,061	916,367	1,018,225	480,562	504,619	531,772	543,637	561,319
General government consumption expenditure	72,183	88,186	108,843	127,053	129,776	49,943	53,434	57,042	57,432	54,968
Gross domestic capital formation	149,193	199,910	257,016	253,252	297,117	123,960	149,310	171,208	143,449	157,439
A. Fixed capital formation	142,226	192,665	248,954	250,147	293,456	118,252	143,804	165,364	141,752	154,977
Construction	72,226	98,421	129,624	119,858	132,356	58,454	67,370	77,443	60,582	63,573
Durable equipment	56,951	79,030	101,968	109,521	137,103	49,635	65,760	76,976	69,922	80,042
Breeding stock and orchard development	13,049	15,214	17,362	20,768	23,997	10,163	10,674	10,945	11,248	11,362
B. Changes in stocks	6,967	7,245	8,062	3,105	3,661	5,708	5,506	5,844	1,697	2,462
Exports of goods and nonfactor services	226,431	263,880	299,211	373,715	388,570	195,997	216,980	219,703	234,311	238,703
Less: Imports of goods and nonfactor services	215,292	280,118	358,548	391,856	450,961	212,357	244,590	269,148	263,782	297,792
Statistical discrepancy	7,902	4,310	(485)	(33,790)	(40,097)	20,476	19,695	7,492	(2,731)	(1,931)
Gross domestic product	799,182	925,444	1,073,098	1,244,741	1,342,630	658,581	699,448	718,069	712,316	712,706
Net factor income from the rest of the world	(7,360)	(11,318)	5,310	17,617	31,958	(6,170)	(8,647)	3,693	10,014	17,064
Gross national product	791,822	914,126	1,078,408	1,262,358	1,374,588	652,411	690,801	721,762	722,330	729,770

Note: Figures from 1988 to 1992 were revised.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.6a. Merchandise Export of the Philippines: 1989-1992
(FOB value in million pesos)

Item	At current prices				At constant 1985 prices			
	1989	1990	1991[r]	1992	1989	1990	1991[r]	1992
Total	174,098	199,458	249,773	251,641	141,100	146,860	157,837	159,747
A. Monetization of gold[1]	6,340	4,175	6,795	3,369	4,701	3,473	3,903	2,200
B. Merchandise exports[2]	167,758	195,283	242,978	248,272	136,399	143,387	153,934	157,547
Principal merchandise exports	106,668	119,329	143,924	137,845	84,141	87,933	88,503	91,422
1. Garments	33,394	42,272	51,613	53,560	26,398	28,591	32,384	38,768
2. Semiconductors and electronic microcircuits	27,860	33,601	46,936	36,993	25,679	27,873	26,651	23,508
3. Crude coconut oil	7,755	7,349	7,086	10,244	7,117	9,357	7,195	7,730
4. Bars, rods of copper	7,126	6,783	6,154	6,033	2,739	2,635	2,520	2,477
5. Gold from copper ores	2,355	2,177	1,705	4,126	1,702	1,430	1,078	2,704
6. Banana and plaintains	3,156	3,610	4,643	4,076	2,256	2,228	2,559	2,214
7. Lumbers	2,938	464	533	479	1,799	301	165	183
8. Copper concentrates	5,114	5,003	4,665	4,262	1,937	1,945	1,839	1,627
9. Shrimps and prawns	4,894	5,252	7,133	5,549	3,930	3,768	4,684	3,834
10. Canned pineapple	1,952	2,106	2,563	2,974	1,761	1,543	1,741	1,767
11. Iron agglomerates	1,636	2,025	2,076	1,605	1,897	2,099	2,039	1,720
12. Centrifugal sugar	1,717	2,173	3,183	2,686	1,153	1,188	1,655	1,266
13. Copra oil, cake and meal	1,156	1,267	1,459	1,266	707	905	919	809
14. Coffee, not roasted	927	183	129	68	1,095	370	192	99
15. Plywood, ordinary	726	1,285	1,105	753	395	585	472	287
16. Prepared tuna	2,326	2,307	1,155	931	1,579	1,496	645	563
17. Dessicated coconut	1,636	1,472	1,786	2,240	1,997	1,619	1,765	1,866
Others	61,090	75,954	99,054	110,427	52,258	55,454	65,431	66,125

[1] Balance of Payments, Central Bank of the Philippines.
[2] Foreign Trade Statistics, National Statistics Office.

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Table 23.6b. Exports of Nonfactor Services: 1989-1992
(Million pesos)

Item	At current prices				At constant 1985 prices			
	1989	1990	1991[r]	1992	1989	1990	1991[r]	1992
Nonfactor services	89,782	99,753	123,942	136,929	75,880	72,843	76,474	78,956
Other transportation and communication	7,902	8,994	9,816	10,751	11,227	9,209	8,593	9,848
Insurance	290	371	571	578	228	257	340	318
Travel	31,792	31,391	36,814	37,822	25,325	22,194	22,008	20,807
Government	7,063	6,423	7,908	4,548	5,254	4,144	4,269	2,175
Miscellaneous	42,735	52,574	68,833	83,230	33,846	37,039	41,264	45,808

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.6c Merchandise Imports of the Philippines: 1989-1992
(CIF value in million pesos)

Item	At current prices				At constant 1985 prices			
	1989	1990	1991[r]	1992	1989	1990	1991[r]	1992
Total	237,450	311,040	348,295	389,998	217,269	245,562	240,944	273,277
A. Principal merchandise imports	169,351	224,069	238,732	274,780	164,448	182,880	172,279	196,493
1. Mineral fuels, lubricants and related materials	32,800	48,381	53,108	55,396	45,910	47,933	53,707	57,678
2. Machinery other than electrical machinery	25,078	35,878	34,827	48,366	25,716	29,674	24,572	31,503
3. Base metals	21,702	19,890	21,997	24,969	14,323	12,099	12,439	17,272
4. Electrical machinery, apparatus and appliances	17,443	25,197	34,680	40,014	22,971	23,753	27,756	27,925
5. Cereals and cereal preparation	8,556	13,152	7,462	9,096	8,140	15,592	6,125	7,471
6. Transport equipment	15,428	20,968	20,040	24,955	8,720	10,405	8,294	9,804
7. Chemical elements and compounds	9,759	11,680	13,284	13,139	7,906	8,801	7,812	8,791
8. Manufactures of metal	2,733	3,444	4,302	5,006	3,314	3,202	3,195	3,071
9. Textile yarns	10,173	13,784	15,372	17,087	9,280	10,018	9,225	10,460
10. Artificial resins and plastic materials	6,846	8,740	9,494	10,416	4,798	6,216	5,199	6,106
11. Dairy products	4,964	6,490	6,186	6,829	2,580	3,020	2,730	2,981
12. Textile fibers	3,766	4,041	4,966	4,919	2,739	2,474	2,725	4,188
13. Fertilizers manufacturing	2,631	3,748	4,156	4,413	2,405	3,616	2,970	3,660
14. Feeding stuff	4,339	4,859	4,927	5,546	2,943	3,100	2,916	3,015
15. Paper products	3,133	3,817	3,931	4,629	2,703	2,977	2,614	2,568
B. Imports on consignment	33,433	47,366	57,714	61,204	26,488	32,069	32,197	36,224
C. Others	34,666	39,605	51,849	54,014	26,333	30,613	36,468	40,560

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.6d Imports of Nonfactor Services: 1989-1992
(Million pesos)

Item	At current prices				At constant 1985 prices			
	1989	1990	1991[r]	1992	1989	1990	1991[r]	1992
Total	42,668	47,508	43,561	60,292	27,321	23,586	22,838	24,515
Other transportation and communication	3,414	4,394	7,745	7,268	2,146	2,216	3,199	3,004
Insurance	519	561	665	1,236	326	284	274	512
Travel	26,798	27,517	17,293	27,762	17,295	13,569	12,010	11,059
Government	614	989	586	77	371	491	240	31
Miscellaneous	11,323	14,047	17,272	23,949	7,183	7,026	7,115	9,909

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.7 Gross National Product and Gross Domestic Product by Industrial Origin: 1988-1992
(Million pesos)

Industry group	At current prices 1988	1989	1990	1991	1992	At constant 1985 prices 1988	1989	1990	1991	1992
1. Agriculture, fishery and forestry	183,515	210,009	235,956	261,348	290,338	155,292	159,964	160,734	160,465	159,895
2. Industry sector	280,957	322,964	371,347	424,504	445,202	232,052	249,175	255,548	248,718	247,491
Mining and quarrying	15,275	15,446	16,659	17,504	16,263	11,704	11,389	11,091	10,770	11,495
Manufacturing	204,784	230,163	267,485	315,938	327,501	169,316	179,152	183,925	183,111	180,061
Construction	42,814	57,281	64,903	61,962	68,695	33,235	39,878	41,858	35,285	36,254
Electricity, gas and water	18,084	20,074	22,300	29,100	32,743	17,797	18,756	18,674	19,552	19,681
3. Service sector	334,710	392,471	465,795	558,889	607,090	271,237	290,309	301,787	303,133	305,320
Transportation, communication and storage	40,762	43,460	53,191	72,908	76,543	37,898	40,243	41,108	41,291	41,997
Trade	114,085	133,224	150,453	176,903	188,647	95,180	102,729	104,807	105,920	107,447
Finance and housing	71,648	87,126	104,204	121,810	139,379	60,536	66,344	70,114	69,356	69,751
Other services (government and private)	108,215	128,661	157,947	187,268	202,521	77,623	80,993	85,758	86,566	86,125
Gross domestic product	799,182	925,444	1,073,098	1,244,741	1,342,630	658,581	699,448	718,069	712,316	712,706
Net factor income from the rest of the world	(7,360)	(11,318)	5,310	17,617	31,958	(6,170)	(8,647)	3,693	10,014	17,064
Gross national product	791,822	914,126	1,078,408	1,262,358	1,374,588	652,411	690,801	721,762	722,330	729,770

Note: Figures from 1998 to 1992 were revised.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.8 Per Capita Gross Domestic Product, Gross National Product, and Personal Consumption Expenditures: 1982-1992

Item	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
A. Estimates in current prices (Pesos)											
Gross domestic product	6,246	7,089	9,831	10,461	10,873	11,903	13,610	15,398	17,454	19,799	20,831
Gross national product	6,175	6,978	9,531	10,171	10,648	11,695	13,485	15,210	17,541	20,079	21,329
Personal consumption expenditures	4,098	4,562	6,790	7,698	7,938	8,409	9,516	10,803	12,477	14,576	15,848
B. Estimates in constant 1985 prices (Pesos)											
Gross domestic product	12,869	12,787	11,564	10,461	10,561	10,755	11,216	11,638	11,680	11,330	11,057
Gross national product	12,725	12,600	11,211	10,171	10,342	10,562	11,111	11,494	11,740	11,489	11,322
Personal consumption expenditures	8,312	8,157	7,981	7,698	7,765	7,887	8,184	8,396	8,650	8,647	8,736
C. Population estimates[1] (Million persons)	50.78	52.06	53.35	54.67	56.00	57.36	58.72	60.10	61.48	63.00	64.25

Note: Figures from 1982 to 1992 were revised.

[1] Based on the 1980 Census of Population.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.9 Gross Domestic Capital Formation in Durable Equipment by Major Type: 1989-1992 (Million pesos at current prices)

Type of equipment	1989	1990	1991[r]	1992
Total durable equipment	79,030	101,968	109,521	137,103
Machinery specialized for particular industries	22,838	29,910	32,684	38,108
Agricultural machineries	157	236	310	407
Tractors other than steam	373	309	389	388
Mining, construction machineries	2,844	2,713	4,438	4,039
Textile machineries	3,090	4,329	3,992	4,940
Sawmill and logging machineries	132	167	132	99
Sugarmill machineries	57	22	34	116
Pulp and paper machineries	389	763	511	698
Metalworking machineries	1,575	2,248	2,474	2,690
Telecommunications and sound recording and producing equipment	4,978	5,745	6,333	7,110
Other special industrial machineries	9,243	13,378	14,071	17,621
General industrial machinery and equipment	26,457	34,437	37,273	43,780
Air-conditioning and refrigeration equipment	9,033	9,860	9,464	11,901
Pump and compressors	1,898	2,410	2,658	3,013
Other electrical machinery and apparatus	6,121	10,364	12,523	7,778
Other general industrial machineries	9,405	11,803	12,628	21,088
Transport equipment	15,715	21,251	19,050	30,392
Road vehicles	8,943	11,598	11,449	15,876
Railway transport	11	16	40	880
Air transport	4,695	7,044	4,405	10,061
Water transport	2,066	2,593	3,156	3,575
Miscellaneous durable equipment	14,020	16,370	20,514	24,823
Office machines and automatic data processing	1,629	1,715	1,510	5,011
Other miscellaneous durable equipment	12,391	14,655	19,004	19,812

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.10 Gross Value Added in Agriculture, Fishery and Forestry: 1988-1992
(Million pesos)

Industry group	At current prices 1988	1989	1990[r]	1991[r]	1992	At constant 1985 prices 1988	1989	1990[r]	1991[r]	1992
Agriculture, fishery and forestry	183,515	210,009	235,956	261,348	290,338	155,292	159,964	160,734	160,465	159,895
Agriculture	135,751	162,408	186,216	207,531	234,366	115,447	121,066	122,631	123,720	124,685
Agricultural crops	99,438	117,640	130,290	141,360	156,098	84,067	86,541	85,870	86,240	85,375
Palay	25,147	31,565	36,416	36,373	35,761	23,138	25,281	24,873	25,821	24,332
Corn	11,766	15,329	16,469	14,699	18,233	10,466	10,203	10,950	10,567	10,261
Coconut including copra	12,494	12,050	12,515	13,819	20,352	9,008	7,007	7,084	6,782	6,860
Sugarcane	4,351	6,650	6,962	9,288	9,567	2,997	3,897	3,652	4,141	4,305
Banana	4,677	3,891	5,547	7,314	8,984	2,940	2,913	2,698	2,684	2,782
Other crops	41,003	48,155	52,381	59,867	63,201	35,518	37,240	36,613	36,245	36,835
Livestock	18,432	23,530	29,862	34,299	38,729	14,532	16,334	16,854	17,063	17,194
Poultry	10,474	12,622	16,163	20,660	26,365	9,990	11,082	12,215	12,594	13,962
Agricultural activities and services	7,407	8,616	9,901	11,212	13,174	6,858	7,109	7,692	7,823	8,154
Fishery	34,708	36,460	40,833	47,276	51,341	28,581	29,628	30,783	31,980	32,337
Forestry	13,056	11,141	8,907	6,541	4,631	11,264	9,270	7,320	4,765	2,873

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.11 Gross Value Added in Mining and Quarrying: 1988-1992
(Million pesos)

Industry group	At current prices					At constant 1985 prices				
	1988	1989	1990	1991	1992	1988	1989	1990	1991	1992
Mining and quarrying	15,275	15,446	16,659	17,504	16,263	11,704	11,389	11,091	10,770	11,495
Copper mining	4,315	4,340	4,276	4,076	3,396	3,017	2,726	2,605	2,170	2,068
Gold mining	7,338	6,454	7,395	8,134	6,884	4,701	4,915	4,800	4,862	4,584
Chromium ore mining	199	254	294	257	118	171	239	230	155	112
Nickel mining	104	297	544	534	494	78	116	108	100	103
Other metal mining	127	113	101	76	57	110	104	94	80	88
Stone quarrying, clay and sand pits	1,711	1,926	2,075	2,036	2,713	1,571	1,812	1,844	1,875	2,771
Other nonmetallic mining and quarrying	1,481	2,062	1,974	2,391	2,601	2,056	1,477	1,410	1,528	1,769

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.12 Gross Value Added in Manufacturing by Industry Group: 1988-1992
(Million pesos)

Industry group	At current prices					At constant 1985 prices				
	1988	1989	1990	1991	1992	1988	1989	1990	1991	1992
Manufacturing	204,784	230,163	267,485	315,938	327,501	169,316	179,152	183,925	183,111	180,061
Food manufacturing	88,016	97,329	111,794	125,188	133,274	68,264	69,633	69,633	68,559	66,595
Beverage industries	9,829	10,784	12,372	14,696	15,849	6,805	7,174	7,411	7,468	7,296
Tobacco manufactures	7,503	7,698	7,897	8,654	8,898	5,201	5,091	5,094	5,022	4,791
Textile manufactures	7,755	8,754	9,204	10,384	9,436	6,840	7,552	6,720	6,524	5,378
Footwear and wearing apparel	11,123	14,301	16,835	20,506	22,071	8,154	9,521	10,045	10,747	10,812
Wood and cork products	4,506	5,037	5,572	6,304	5,926	3,553	3,871	4,143	3,993	3,278
Furniture and fixtures	2,690	3,592	4,448	4,766	4,813	2,081	2,389	2,571	2,437	2,164
Paper and paper products	2,436	2,850	2,944	3,252	3,040	1,875	2,263	2,179	2,197	1,941
Publishing and printing	2,564	2,916	3,299	3,926	4,306	2,414	2,691	2,968	2,963	2,951
Leather and leather products	152	177	197	238	234	118	135	148	158	149
Rubber products	2,789	3,223	3,479	4,076	4,191	2,467	2,683	2,818	2,831	2,679
Chemical and chemical products	15,381	18,509	20,404	25,133	27,176	10,269	10,985	11,472	12,136	11,903
Products of petroleum and coal	19,319	16,182	26,090	37,429	35,510	26,231	26,233	30,008	28,878	32,213
Nonmetallic mineral products	4,454	6,937	7,547	9,953	10,182	3,811	5,014	4,552	5,004	4,718
Basic metal industries	6,664	7,905	8,539	9,553	8,120	5,532	5,446	4,893	4,936	3,909
Metal industries	4,536	5,716	6,452	6,955	8,007	3,558	4,308	4,455	4,125	4,331
Machinery except electrical	1,825	2,252	2,574	3,084	3,464	1,689	2,040	2,096	2,093	2,198
Electrical machinery	7,729	8,864	9,793	12,106	13,211	5,981	6,629	7,096	7,334	7,552
Transport equipment	1,852	2,626	2,934	3,190	3,896	1,347	1,785	1,874	1,726	1,988
Miscellaneous manufactures	3,661	4,511	5,111	6,545	5,897	3,126	3,709	3,749	3,980	3,215

Note: Figures from 1988 to 1992 were revised.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.13 Gross Value Added and Gross Value in Construction: 1988-1992
(Million pesos)

Industry group	At current prices 1988	1989	1990	1991	1992	At constant 1985 prices 1988	1989	1990	1991	1992
Gross value added in construction	42,814	57,281	64,903	61,962	68,695	33,235	39,878	41,858	35,285	36,254
Gross value in construction	72,226	98,421	129,624	119,858	137,934	58,454	67,370	77,443	60,582	66,064
Government	23,606	31,724	58,029	47,776	61,984	19,384	22,318	34,689	23,776	29,688
Private	48,620	66,697	71,595	72,082	75,950	39,070	45,052	42,754	36,806	36,376

Table 23.14 Gross Value Added in Electricity, Gas and Water: 1988-1992
(Million pesos)

Industry group	At current prices 1988	1989	1990	1991	1992	At constant 1985 prices 1988	1989	1990	1991	1992
Electricity, gas and water	18,084	20,074	22,300	29,100	33,875	17,797	18,756	18,674	19,552	20,379
Electricity and gas	15,780	17,364	19,375	25,518	29,830	16,322	17,156	17,037	17,901	18,717
Water	2,214	2,710	2,925	3,582	4,045	1,475	1,600	1,637	1,651	1,662

Note: Figures from 1988 to 1992 were revised.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.15 Gross Value Added in Transportation, Communication and Storage: 1988-1992
(Million pesos)

Industry group	At current prices					At constant 1985 prices				
	1988	1989	1990	1991	1992	1988	1989	1990	1991	1992
Transportation, communication and storage	40,762	43,460	53,191	72,908	76,543	37,898	40,243	41,108	41,291	41,997
Transportation and storage	31,898	33,242	41,151	57,983	59,865	29,871	31,184	31,220	30,595	31,260
Land	19,215	19,679	26,239	37,824	39,097	19,348	20,173	20,194	20,590	21,271
Water	3,757	4,443	5,044	6,377	6,568	3,295	4,122	4,197	3,724	3,696
Air	3,909	3,975	3,798	6,292	7,180	1,539	1,521	1,390	1,477	1,662
Storage and services incidental to transportation	5,017	5,145	6,070	7,490	7,020	5,059	5,368	5,439	4,804	4,631
Communication	8,864	10,218	12,040	14,925	16,678	8,027	9,059	9,888	10,696	10,737

Note: Figures from 1988 to 1992 were revised.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.16 Gross Value Added in Trade: 1988-1992
(Million pesos)

Industry group	At current prices 1988	1989	1990	1991	1992	At constant 1985 prices 1988	1989	1990	1991	1992
Total trade	114,085	133,224	150,453	176,903	188,647	95,180	102,729	104,807	105,920	107,447
Wholesale	23,000	32,693	36,774	38,514	42,181	18,556	24,176	24,643	22,832	23,947
Retail	91,085	100,531	113,679	138,389	146,466	76,624	78,553	80,164	83,088	83,500

Table 23.17 Gross Value Added in Finance: 1988-1992
(Million pesos)

Industry group	At current prices 1988	1989	1990	1991	1992	At constant 1985 prices 1988	1989	1990	1991	1992
Finance	27,125	34,334	42,531	48,572	53,166	23,845	27,261	29,968	29,114	29,217
Banks	18,684	24,046	30,433	33,802	36,874	16,417	19,094	21,443	20,274	20,277
Nonbanks	2,864	3,629	4,225	5,119	5,695	2,516	2,883	2,979	3,067	3,126
Insurance	5,577	6,659	7,873	9,651	10,597	4,912	5,284	5,546	5,773	5,814

Note: Figures from 1988 to 1992 were revised.

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.18 Gross Value Added in Ownership of Dwellings and Real Estate: 1988-1992
(Million pesos)

Industry group	At current prices					At constant 1985 prices				
	1988	1989	1990	1991	1992	1988	1989	1990	1991	1992
Ownership of dwellings and real estate	44,523	52,792	61,673	73,238	86,213	36,691	39,083	40,146	40,242	40,534
Real estate	7,931	9,541	11,183	13,120	14,526	6,970	7,585	7,897	7,867	7,987
Ownership of dwellings	36,592	43,251	50,490	60,118	71,687	29,721	31,498	32,249	32,375	32,547

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.19 Gross Value Added in Other Services: 1988-1992
(Million pesos)

Industry group	At current prices					At constant 1985 prices				
	1988	1989	1990	1991	1992	1988	1989	1990	1991	1992
Other services r	108,215	128,661	157,947	187,268	202,521	77,623	80,993	85,758	86,566	86,125
Government r	50,571	60,909	77,031	89,880	92,196	32,322	33,459	36,405	37,293	36,574
Private r	57,644	67,752	80,916	97,388	110,325	45,301	47,534	49,353	49,273	49,551
Education	6,459	8,353	10,281	13,075	15,402	4,951	5,217	5,303	5,366	5,472
Medical and health	7,204	8,370	9,661	12,468	14,421	6,006	6,643	6,859	7,258	7,530
Business	7,466	8,530	10,505	13,052	14,865	5,413	5,447	5,652	5,783	5,719
Recreational	7,790	8,573	9,921	11,377	12,085	6,725	6,949	7,197	7,263	6,958
Personal	15,549	18,141	22,742	26,836	29,814	12,193	12,850	13,901	13,321	13,227
Hotel and restaurant	11,169	13,631	15,492	17,809	20,810	8,200	8,550	8,503	8,334	8,702
Others	2,007	2,154	2,314	2,771	2,928	1,813	1,878	1,938	1,948	1,943

Source: National Statistical Coordination Board, Economic and Social Statistics Office.

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Table 23.20 Flow of Funds Summary Matrix by Sector: 1991-1992
(Million pesos)

	Domestic economy											
	Households and non-corporate business		Private corporations		Government[1]		Financial intermediaries		Total		Rest of the world	
	Use	Source	Use	Source	Use	Source	Use	Source	Use	Source	Use	Source
1992												
Gross savings	-	127,824	-	42,244	-	38,680	-	32,303	-	241,051	-	20,304
Capital consumption	-	66,183	-	25,655	-	13,395	-	4,626	-	109,859	-	-
Net savings	-	61,641	-	16,589	-	25,285	-	27,677	-	131,192	-	20,304
Gross investments	127,824	-	42,244	-	38,680	-	32,303	-	241,051	-	20,304	-
Real investments	65,083	-	108,961	-	105,816	-	13,028	-	292,888	-	-	-
Consumer durables	9,560	-	-	-	-	-	-	-	9,560	-	-	-
Real estate/fixed assets	84,979	-	87,786	-	94,309	-	13,210	-		280,284	-	-
Inventory change	(29,456)	-	21,175	-	11,507	-	(182)	-	3,044	-	-	-
Net financial investment	94,274	-	(66,717)	-	(67,136)	-	19,275	-	(20,304)	-	20,304	-
Total financial uses	87,836	-	59,083	-	55,687	-	197,559	-	400,165	-	52,831	-
Total financial sources	(6,438)	-	125,800	-	122,823	-	178,284	-	420,469	-	32,527	-
Gold and foreign exchange holdings	-	-	-	-	-	(12,526)	-	(12,526)	-	-	(12,526)	-
Foreign currency deposits	-	-	-	-	-	-	(4,226)	953	(4,226)	953	953	(4,226)
Foreign loans	-	-	-	37,073	-	28,687	1,870	(42,470)	1,870	23,290	23,290	1,870
Other foreign claims	-	-	-	-	-	47,409	28,588	47,409	28,588	28,588	47,409	
Domestic currency	(11,757)	-	8	-	11,339	-	7,660	7,250	7,250	7,250	-	-
Demand deposits	68,608	-	308	-	12,465	-	10,932	92,313	92,313	92,313	-	-
Savings and time deposits	50,106	-	(156)	-	3,921	-	(2,298)	51,573	51,573	51,573	-	-

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Table 23.20 Flow of Funds Summary Matrix by Sector: 1991-1992 (continued)
(Million pesos)

	Domestic economy											
	Households and non-corporate business		Private corporations		Government[1]		Financial intermediaries		Total		Rest of the world	
	Use	Source	Use	Source	Use	Source	Use	Source	Use	Source	Use	Source
Deposit substitutes	(8,611)	-	7,786	-	709	-	-	(116)	(116)	(116)	-	-
Domestic loan	-	1,294	5,063	39,453	5,378	23,361	58,062	4,395	68,503	68,503	-	-
Investments/securities	(29,482)	-	26,855	15,932	12,363	58,933	77,383	12,254	87,119	87,119	-	-
Insurance reserves	18,142	-	240	-	-	-	(346)	18,036	18,036	18,036	-	-
Trust funds	830	-	(59)	-	-	-	2	773	773	773	-	-
Trade credits	-	(2,594)	7,789	26,181	7,530	(7,840)	1,561	1,133	16,880	16,880	-	-
Taxes payable	-	-	944	920	3,298	(247)	(1)	(3,028)	(2,355)	(2,355)	-	-
Interfinancial claims	-	-	-	-	-	-	(14,572)	(14,572)	(14,572)	(14,572)	-	-
Intergovernmental claims	-	-	-	-	8,148	8,148	-	-	8,148	8,148	-	-
Miscellaneous	-	(5,138)	10,305	6,241	(2,868)	11,781	26,649	21,202	34,086	34,086	-	-
Statistical discrepancy	(31,533)	-	-	-	-	-	-	-	(31,533)	-	-	-
1991												
Gross savings	-	129,613	-	14,645	-	59,540	-	27,275	-	231,073	-	(6,352)
Capital consumption	-	96,146	-	(10,467)	-	18,519	-	(1,694)	-	102,504	-	-
Net savings	-	33,467	-	25,112	-	41,021	-	28,969	-	128,569	-	(6,352)
Gross investments	129,613	-	14,645	-	59,540	-	27,275	-	231,073	-	(6,352)	-
Real investments	41,569	-	107,121	-	93,841	-	9,042	-	251,573	-	-	-
Consumer durables	4,812	-	-	-	-	-	-	-	4,812	-	-	-
Real estate/fixed assets	53,116	-	94,857	-	88,039	-	8,632	-	244,644	-	-	-
Inventory change	(16,359)	-	12,264	-	5,802	-	410	-	2,117	-	-	-

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Table 23.20 Flow of Funds Summary Matrix by Sector: 1991-1992 (concluded)
(Million pesos)

	Domestic economy											
	Households and non-corporate business		Private corporations		Government[1]		Financial intermediaries		Total		Rest of the world	
	Use	Source	Use	Source	Use	Source	Use	Source	Use	Source	Use	Source
Net financial investment	114,896	-	(92,476)	-	(34,301)	-	18,233	-	6,352	-	(6,352)	-
Total financial uses	62,948	-	29,409	-	75,369	-	191,673	-	359,399	-	54,637	-
Total financial sources	-	(51,948)	-	121,885	-	109,670	-	173,440	-	353,047	-	60,989
Gold and foreign exchange holdings	-	-	-	-	-	-	3,985	-	3,985	-	-	3,985
Foreign currency deposits	-	-	-	-	-	-	14,181	(4,579)	14,181	(4,579)	(4,579)	14,181
Foreign loans	-	-	-	56,704	-	19,994	4,948	(9,542)	4,948	67,156	67,156	4,948
Other foreign claims	-	-	-	-	-	-	37,875	(7,940)	37,875	(7,940)	(7,940)	37,875
Domestic currency	5,358	-	83	-	14,041	-	(9,592)	9,890	9,890	9,890	-	-
Demand deposits	14,365	-	4,945	-	18,108	-	(78)	37,340	37,340	37,340	-	-
Savings and time deposits	30,089	-	11,694	-	2,492	-	1,400	45,675	45,675	45,675	-	-
Deposit substitutes	(6,475)	-	(3,027)	-	6,619	-		(2,883)	(2,883)	(2,883)	-	-
Domestic loan	-	178,191	(1,410)	4,942	1,310	(6,586)	184,019	7,372	183,919	183,919	-	-
Investments/securities	4,956	-	(7,611)	30,994	16,162	52,832	120,246	49,927	133,753	133,753	-	-
Insurance reserves	14,570	-	2,214	-	-	-	(185)	16,599	16,599	16,599	-	-
Trust funds	85	-	(111)	-	-	-	(1)	(27)	(27)	(27)	-	-
Trade credits	-	(25,724)	18,784	21,407	(4,294)	18,678	378	507	14,868	14,868	-	-
Taxes payable	-	-	759	(373)	2,273	-	(1)	3,404	3,031	3,031	-	-
Interfinancial claims	-	-	-	-	-	-	(194,513)	(194,513)	(194,513)	(194,513)	-	-
Intergovernmental claims	-	-	-	-	11,852	11,852	-	-	11,852	11,852	-	-
Miscellaneous	-	(204,415)	3,089	8,211	6,806	12,900	29,011	222,210	38,906	38,906	-	-
Statistical discrepancy	(26,852)	-	-	-	-	-	-	-	(26,852)	-	-	-

[1] National and local government-owned or controlled corporations.

Source: Central Bank of the Philippines.

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Table 23.21 Balance of Payments of the Philippines: 1986-1993
(Million dollars)

Item	1986	1987	1988	1989	1990	1991	1992	1993[a]
I. Current account								
A. Merchandise trade	(202)	(1,017)	(1,085)	(2,598)	(4,020)	(3,211)	(4,695)	(2,902)
Exports	4,842	5,720	7,074	7,821	8,186	8,840	9,824	5,135
Imports	5,044	6,737	8,159	10,419	12,206	12,051	14,519	8,037
B. Nonmerchandise trade	783	-	(80)	303	618	1,351	2,879	1,819
Inflow	3,791	3,454	3,592	4,586	4,836	5,624	7,497	4,408
Outflow	3,008	3,454	3,672	4,283	4,218	4,273	4,618	2,589
C. Transfers	441	573	775	830	714	827	817	361
Inflow	445	575	778	832	717	828	826	365
Outflow	4	2	3	2	3	1	9	4
Current account, total	1,022	(444)	(373)	(1,456)	(2,688)	(1,033)	(999)	(722)
II. Capital account								
D. Foreign investments	114	326	986	854	469	654	737	285
Inflow	186	439	1,077	972	695	798	1,364	1,322
Outflow	72	113	91	118	226	144	627	1,037
E. Medium and long-term loans	815	159	(519)	379	392	922	666	958
Inflow	2,545	2,598	2,412	2,811	4,398	3,613	7,436	2,296
Outflow	1,730	2,439	2,931	2,432	4,006	2,691	6,770	1,338
F. Short-term capital, net	(814)	80	(303)	(91)	9	369	350	32

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Table 23.21 Balance of Payments of the Philippines: 1986-1993 (concluded)
(Million dollars)

Item	1986	1987	1988	1989	1990	1991	1992	1993[a]
G. Errors and omissions	(101)	(144)	479	385	620	(151)	(497)	(194)
Nonmonetary capital, net	14	421	643	1,527	1,490	1,794	787	1,081
H. Monetization of gold	279	365	314	288	218	245	130	43
III. Unremittable arrears/ adjustments[*]								
Of which: Debt reduction	(72)	(78)	83	101	797	264	527	67
IV. Overall position	1,242	264	650	451	(183)	1,405	445	739

[*] Of which $50 million is due to revaluation adjustments on KB liabilities for prior reporting periods.

[a] First semester (January to June).

Source: Central Bank of the Philippines.

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Chapter 24
Comparative International Statistics

The principal sources of data presented in this chapter are the international summary publications prepared by the Statistical Office and Population Division of the United Nations and other international publications. The list of countries included is based on but not limited to the membership rosters of the United Nations and the larger specialized agencies of the United Nations.

The quality and comparability of the data are affected by a number of factors:

1) The year for which the data are presented may not be the same for all subjects for a particular country, or for a given subject for different countries although the data shown are the latest available. All such variations have been noted. The data shown are for calendar years except otherwise stated in headnotes or footnotes.

2) The bases, method of estimation, data collection, extent of coverage, precision of definition, scope of territory and margins of error may vary from different items within a particular country, and for like items or between countries. Footnotes and headnotes to the tables give a few of the major time-period and coverage qualifications attached to the figures; considerably more detailed information is presented in the source of publications. Many of the measures shown are at best, merely rough indicators of magnitude. In this regard, the following should be of particular points of interest:

a) One of the basic concepts relating to population size is the difference between *de facto* and *de jure* population. A *de facto* population includes all persons physically present in the country or area of the reference date. The *de jure* population, by contrast, includes all usual residents of the given country, whether or not they were physically present there at the reference date. The population statistics presented in the tables are *de facto*. Figures not otherwise qualified may therefore, be assumed to have been reported by countries as *de jure*. Those reported as *de jure* are identified as such. This concept also applies to data relating to vital statistics.

b) The statistics presented are official data unless otherwise indicated. Figures not otherwise qualified are official estimates and projections. Estimates and projections have been used in certain instances to supplement official data. Figures identified as such are noted when they appear in the tables.

c) In cases when data in this issue of the Yearbook differ from those published in earlier issues, statistics in this publication may be assumed to reflect revisions. It should be noted that, in particular, data shown as provisional are subject to further revision.

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Table 24.1 Population, Area and Density by Continent and Group of Countries: 1984-1989
(Population in millions; area in thousand square kilometers)

Continent/group of countries	Midyear estimates 1984	1985	1986	1987	1988	1989	Area 1987	1988	1989	Density[1] 1987	1988	1989
World	4,757	4,822	4,902	4,990	5,072	5,162	135,742	135,740	135,906	37	37	38
Africa	539	555	572	594	611	624	30,313	30,307	30,307	20	20	20
Non-Arab States	412	424	437	453	466	477	20,363	20,362	20,362	22	23	23
Arab States	127	131	135	141	145	147	9,950	9,945	9,945	14	15	15
America	657	666	677	688	702	711	42,073	42,059	42,225	16	17	17
Northern America	261	265	267	270	272	274	21,525	21,525	21,525	13	13	13
Latin America and the Caribbean	396	401	410	410	429	437	20,548	20,535	20,700	20	21	21
Asia	2,771	2,806	2,854	2,905	2,958	3,015	27,572	27,582	27,582	105	107	109
Non-Arab States	2,715	2,747	2,795	2,824	2,892	2,947	23,841	23,848	23,848	119	121	124
Arab States	56	59	59	81	66	68	3,731	3,734	3,734	22	18	18
Europe (incl. USSR)	765	770	774	778	781	786	27,276	27,281	27,282	29	29	29
Oceania	24	24	25	25	26	26	8,509	8,510	8,510	3	3	3
Developed countries	1,178	1,187	1,196	1,203	1,210	1,218	55,944	55,952	55,952	22	22	22
Developing countries	3,579	3,634	3,706	3,788	3,867	3,943	79,798	79,788	79,954	47	48	49

[1] Inhabitants per square kilometer.

Developed countries: All European countries (except for Yugoslavia), U.S.S.R., U.S.A., Japan, Australia, New Zealand and South Africa.
Developing countries: Rest of the world.
Northern America: Bermuda, Canada, Greenland, St. Pierre and Miquelon, and U.S.A.
Latin America and the Caribbean: Rest of America.
Arab States: Algeria, Djibouti, Egypt, Libyan Arab Jamahiriya, Mauritania, Morocco, Somalia, Sudan, Tunisia, Bahrain, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates and Yemen.

Source: United Nations Educational, Scientific and Cultural Organization Statistics Yearbook 1991. France, 1991.

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Table 24.1a Population, Surface Area and Density by Continent and Group of Countries: Selected Years
(Population in millions; area in thousand square kilometers)

Macroregions and regions[1]	Estimates of midyear population								Annual rate of population increase (percent)	Surface area	Density[1]
	1950	1960	1970	1975	1980	1985	1990	1991	1985-1990	1991	1991
World	2,516	3,020	3,698	4,079	4,448	4,851	5,292	5,385	1.7	136,255	39
Africa	222	279	362	413	477	553	642	662	3.0	30,305	22
Eastern Africa	65	82	108	124	144	168	197	203	3.2	6,354	32
Middle Africa	26	32	40	45	52	60	70	73	3.0	6,613	11
Northern Africa	52	65	83	94	107	123	141	144	2.6	8,525	17
Southern Africa	16	20	26	29	32	36	41	42	2.4	2,675	16
Western Africa	63	81	105	122	141	165	194	200	3.2	6,138	33
Latin America	166	218	286	323	363	404	448	457	2.1	20,535	22
Caribbean	17	20	25	27	29	31	34	34	1.5	235	145
Central America	37	50	70	81	93	105	118	120	2.3	2,481	48
South America	112	147	191	215	241	268	297	302	2.0	17,819	17
Northern America[2]	166	199	226	239	252	265	276	278	0.8	21,962	13
Asia[3, 4]	1,377	1,668	2,102	2,354	2,583	2,835	3,113	3,171	1.9	27,582	115
Eastern Asia[3]	671	792	987	1,097	1,176	1,249	1,336	1,354	1.3	11,763	115
Southern Asia	481	596	754	849	948	1,070	1,201	1,229	2.3	6,781	181
South Eastern Asia	182	225	287	324	360	401	445	454	2.0	4,493	101
Western Asia[4]	42	56	74	85	99	115	132	135	2.8	4,545	30
Europe[3, 4]	393	425	460	474	484	492	498	500	0.2	4,933	101

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Table 24.1a Population, Surface Area and Density by Continent and Group of Countries: Selected Years (continued)
(Population in millions; area in thousand square kilometers)

Macroregions and regions[1]	Estimates of midyear population								Annual rate of population increase (percent)	Surface area	Density[1]
	1950	1960	1970	1975	1980	1985	1990	1991	1985-1990	1991	1991
Oceania[2]	12.6	15.8	19.3	21.2	22.8	24.6	26.5	26.9	1.5	8,536	3
Australia and New Zealand	10.1	12.7	15.4	16.7	17.8	19.0	20.3	20.5	1.3	7,985	3
Melanisea	2.1	2.6	3.3	3.7	4.2	4.7	5.3	5.4	2.3	541	10
Micronesia	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	1.6	3	128
Polynesia	0.2	0.3	0.4	0.4	0.5	0.5	0.5	0.6	1.5	7	80
Former U.S.S.R.	180	214	243	254	266	278	289	291	0.8	22,402	13

Note: Unless otherwise specified all figures are estimates of the order of magnitude and are subject to a substantial margin of error.

[1] Population per square kilometer of surface area. Figures are merely the quotients of populations divided by the surface area and are not to be considered as either reflected density in the urban sense or as indicating the supporting power of a territory's land and resources.
[2] Hawaii, a state of the United States of America is included in North America rather than Oceania.
[3] Excluding the U.S.S.R., shown separately above.
[4] The European portion of Turkey is included in South Asia rather than Europe.

Composition of Macroregions and regions:

AFRICA. Eastern Africa: British Indian Ocean Territory, Burundi, Comoros, Djibouti, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Reunion, Rwanda, Seychelles, Somalia, Uganda, United Republic of Tanzania, Zambia, and Zimbabwe; Middle Africa: Angola, Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea, Gabon, Sao-Tome and Principe, and Zaire; Northern Africa: Algeria, Egypt, Libyan Arab Jamahiriya, Morocco, Sudan, Tunisia, and Western Sahara; Southern Africa: Botswana, Lesotho, Namibia, South Africa, and Swaziland; Western Africa: Benin, Burkina Faso, Cape Verde, Cote de' Ivoire (Ivory Coast), Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, St. Helena, Senegal, Sierra Leone, and Togo.

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Table 24.1a Population, Surface Area and Density by Continent and Group of Countries: Selected Years (concluded)
(Population in millions; area in thousand square kilometers)

NORTHERN AMERICA. Bermuda, Canada, Greenland, St. Pierre and Miquelon and United States.

LATIN AMERICA. Caribbean: Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, British Virgin Islands, Cayman Islands, Cuba, Dominica, Dominican Republic, Grenada, Guadaloupe, Haiti, Jamaica, Martinique, Montserrat, Netherlands Antilles, Puerto Rico, St. Kitts-Nevis, Saint Lucia, St. Vincent and the Grenadines, Trinidad and Tobago, Turks and Caicos Islands, and United States Virgin Islands; Central America: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, and Panama; South America: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Falkland Islands (Malvinas), French Guiana, Guyana, Paraguay, Peru, Suriname, Uruguay, and Venezuela.

ASIA. Eastern Asia: China, Hongkong, Japan, Democratic People's Republic of Korea, Republic of Korea, Macau, and Mongolia; Southern Asia: Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Maldives, Nepal, Pakistan, and Sri Lanka; South Eastern Asia: Brunei Darussalam, Cambodia, East Timor, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam; Western Asia: Bahrain, Cyprus, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine (Gaza Strip), Qatar, Saudi Arabia, Syrian Arab Republic, Turkey, United Arab Emirates, and Yemen.

EUROPE. Eastern Europe: Bulgaria, Czechoslovakia, Hungary, Poland and Romania; Northern Europe: Channel Islands, Denmark, Faeroe Islands, Finland, Iceland, Ireland, Isle of Man, Norway, Sweden, and United Kingdom; Southern Europe: Albania, Andorra, Gibraltar, Greece, Holy See, Italy, Malta, Portugal, San Marino, Spain, and Yugoslavia; Western Europe: Austria, Belgium, Germany, France, Liechtenstein, Luxembourg, Monaco, Netherlands, and Switzerland.

OCEANIA. Australia and New Zealand: Australia, Christmas Islands, Cocos (Keeling) Islands, New Zealand, Norfolk Island; Melanesia: Fiji, New Caledonia, Papau New Guinea, Solomon Islands and Vanuatu; Micronesia: Canton and Enderbury Islands, Federated States of Micronesia, Guam, Johnston Island, Kiribati, Marshall Island, Midway Islands, Nauru, Northern Mariana Islands, Pacific Islands (Palau), and Wake Island; Polynesia: American Samoa, Cook Islands, French Polynesia, Niue, Pitcairn, Samoa, Tokelau, Tonga, Tuvalu and Wallis and Futuna Islands.

FORMER UNION OF SOVIET SOCIALIST REPUBLICS. Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Source: United Nations Demographic Yearbook, 1991. New York, 1992.

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Table 24.1b Population, Surface Area and Density of Selected Countries: Latest Census and Midyear Estimates for 1985 and 1991
(Population estimates in thousands; area in square kilometers)

Continent/country	Latest census		Midyear estimates		Annual rate of increase (percent)	Surface area	Density[1]
	Date	Both sexes	1985	1991	1985-1991	1991	1991
Africa							
Algeria[2]	20-IV-87	23,038,942	[e]21,850	[x]25,660	2.7	2,381,741	11
Angola[3]	15-XII-70	5,646,166	[x]8,754	[x]10,303	2.7	1,246,700	8
Botswana	14-VIII-91	[e]1,325,291	1,088	[e]1,348	3.6	581,730	2
Burundi	16-VIII-79	4,114,135	4,718	[e]5,620	2.9	27,834	202
Cameroon	IV-87	[e]10,493,655	10,166	[x]12,239	3.1	475,442	26
Cape Verde	2-VI-80	289,027	333	[x]382	2.3	4,033	95
Comoros	15-IX-80	[c]385,890	[x]463	[x]570	3.5	2,235	255
Congo	22-XII-84	1,843,421	[x]1,939	[x]2,346	3.2	342,000	7
Cote d' Ivoire	30-IV-75	6,709,600	[x]9,933	[x]12,464	3.8	322,463	39
Djibouti	1960-1961	81,200	430	[x, d]421	b	23,200	18
Egypt	18-IX-86	48,254,238	46,473	[x]54,688	2.7	1,001,449	55
Equatorial Guinea[4]	4-XII-83	300,000	[x]312	[e]356	2.2	28,051	13
Ethiopia	9-V-84	[e]42,169,203	44,255	[e]53,383	3.1	1,221,900	44
Gabon	8-X-60	448,564	[x]985	[x]1,212	3.5	267,667	5
Gambia	15-IV-83	687,817	745	[x]884	2.9	11,295	78
Ghana	11-III-84	12,296,081	12,717	[x]15,509	3.3	238,533	65
Guinea[5]	4-11-83	[e]4,533,240	4,661	[x]5,931	4.0	245,857	24
Guinea-Bissau	16-IV-79	753,313	869	[x]984	2.1	36,125	27
Kenya	24-VIII-89	[e]21,400,080	20,333	[e, d]25,905	b	580,367	45
Lesotho	12-IV-86	1,447,000	1,503	[x]1,826	3.2	30,355	60
Liberia	1-II-84	[e]2,101,628	2,189	[e]2,705	3.5	111,369	24
Libyan Arab Jamahiriya[2]	31-VII-84	[e]3,637,488	3,363	[x, d]4,712	b	1,759,540	3

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Table 24.1b Population, Surface Area and Density of Selected Countries: Latest Census and Midyear Estimates for 1985 and 1991 (continued)
(Population estimates in thousands; area in square kilometers)

Continent/country	Latest census		Midyear estimates		Annual rate of increase (percent)	Surface area	Density[1]
	Date	Both sexes	1985	1991	1985-1991	1991	1991
Madagascar	1-1-75	7,603,790	9,985	[e]11,493	2.3	587,041	20
Malawi	1-IX-87	7,982,607	7,059	[e]8,556	3.2	118,484	72
Mali	1-IV-87	7,696,348	[d]8,206	[x]9,507	b	1,240,192	8
Mauritania	5-IV-88	[e]1,864,236	1,766	[e]2,306	2.4	1,025,520	2
Mauritius	30-VI-72	851,334	1,021	[x]1,094	1.2	2,040	536
Morocco	3-IX-82	20,419,555	[x]22,025	[x]25,698	2.6	446,550	58
Mozambique[5]	1-VIII-80	11,673,725	13,810	[x]16,084	2.5	801,590	20
Niger	10-V-88	[e]7,249,596	[x]6,608	[x]7,984	3.2	1,267,000	6
Nigeria	XI-91	[e]88,514,501	95,690	[x]112,163	2.6	923,768	121
Reunion[2]	15-III-90	597,828	546	[x]608	1.8	2,510	242
Rwanda	15-VII-91	[e]7,164,994	[x]6,102	[x]7,491	3.4	26,338	284
Senegal	27-V-88	[e]6,928,405	6,547	[x]7,533	2.3	196,722	38
Sierra Leone[5]	15-XII-85	[e]3,515,812	[x]3,665	[x]4,260	2.5	71,740	59
Somalia	1986-1987	[e]7,114,431	[x]6,370	[x]7,691	3.1	637,657	12
South Africa[5]	5-III-85	[f]23,385,645	[x]31,569	[x]36,070	2.2	1,221,037	30
Sudan	1-II-83	20,594,197	[x]21,822	[x]25,941	2.9	2,505,813	10
Swaziland	25-VIII-86	681,059	638	[x]817	4.1	17,364	47
Togo	22-XI-81	2,703,250	[x]3,028	[x]3,643	3.1	56,785	64
Tunisia	30-III-84	6,966,173	7,261	[x]8,362	2.4	163,610	51
Uganda	12-I-91	16,582,674	[x]15,647	[x]19,517	3.7	235,880	83
United Rep. of Tanzania	26-VIII-78	17,512,611	21,733	[x, d]28,359	b	945,087	30
Western Sahara[6]	31-XII-70	76,425	[x]155	[x]183	2.8	266,000	1
Zaire	1-VII-84	29,916,800	30,981	[e]36,672	2.8	2,344,858	16

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Table 24.1b Population, Surface Area and Density of Selected Countries: Latest Census and Midyear Estimates for 1985 and 1991 (continued)
(Population estimates in thousands; area in square kilometers)

Continent/country	Latest census		Midyear estimates		Annual rate of increase (percent)	Surface area	Density[1]
	Date	Both sexes	1985	1991	1985-1991	1991	1991
Zambia	25-VIII-90	•7,818,447	6,725	x, d8,780	b	752,618	12
Zimbabwe	18-VIII-82	•7,608,432	8,379	x10,019	3.0	390,759	26
America, North							
Antigua and Barbuda	7-IV-70	65,525	76	x76	0.1	440	173
Bahamas	2-V-90	254,685	232	258	1.8	13,878	19
Barbados	2-V-90	•257,082	253	x255	0.2	430	593
Bermuda	12-V-80	67,761	E56	E61	1.5	53	1,155
Canada[2]	3-VI-86	25,309,330	25,165	•26,992	1.2	9,976,139	3
Costa Rica[2]	10-VI-84	2,416,809	2,642	•3,062	2.5	51,100	60
Cuba	11-IX-81	9,723,605	10,098	•10,736	1.0	110,861	97
Dominica	7-IV-81	74,625	80	x83	0.7	751	111
Dominican Republic	12-XII-81	5,647,977	6,416	x7,321	2.2	48,734	150
El Salvador	28-VI-71	3,554,648	4,856	x5,376	1.7	21,041	256
Grenada[7]	30-IV-81	89,088	91	x, d84	b	344	244
Guadaloupe[2, 8]	9-III-82	327,002	349	x345	(0.2)	1,705	202
Guatemala[5]	26-III-81	6,054,227	7,963	x9,467	2.9	108,889	87
Haiti[2]	30-VIII-82	5,053,792	5,865	•6,625	2.0	27,750	239
Honduras	V-88	4,248,561	4,372	•5,265	3.1	112,088	47
Jamaica	8-VI-82	•2,205,507	2,311	•2,366	0.4	10,990	215
Martinique[2]	15-III-90	•359,379	337	x, d343	b	1,102	311
Mexico[2]	12-III-90	•81,140,922	77,938	•81,836	2.0	1,958,201	45
Netherlands Antilles[2, 5, 9]	1-II-81	171,620	x181	x189	0.7	800	236
Nicaragua[2]	20-IV-71	1,877,952	3,272	•3,999	3.3	130,000	31

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Table 24.1b Population, Surface Area and Density of Selected Countries: Latest Census and Midyear Estimates for 1985 and 1991 (continued)
(Population estimates in thousands; area in square kilometers)

Continent/country	Latest census		Midyear estimates		Annual rate of increase (percent)	Surface area	Density[1]
	Date	Both sexes	1985	1991	1985-1991	1991	1991
Panama	13-V-90	•2,329,329	2,180	•2,466	2.1	75,517	33
Puerto Rico[10]	1-IV-90	•3,522,039	3,283	•3,605	1.6	8,897	405
United States of America[11]	1-V-90	•248,709,873	238,492	•256,688	1.0	99,809,431	26
America, South							
Argentina	15-V-91	•32,608,560	30,331	•32,713	1.3	2,766,889	12
Bolivia[5]	29-IX-76	4,613,486	6,429	•7,612	2.8	1,098,581	7
Brazil[12]	1-IX-80	121,148,582	135,564	•153,322	2.1	8,511,965	18
Chile	21-IV-82	11,329,736	12,122	•13,386	1.7	756,945	18
Colombia[13]	15-X-85	27,837,932	28,624	x, d33,613	b	1,138,914	30
Ecuador[14]	25-XI-90	9,648,189	9,378	•10,851	2.4	283,561	38
French Guiana[2]	9-III-82	73,012	90	x102	2.0	90,000	1
Guyana	12-V-80	758,619	x790	x800	0.2	214,969	4
Paraguay	11-VII-82	3,029,830	3,693	•4,397	2.9	406,752	11
Peru[5,12]	12-VII-81	17,005,210	19,417	•21,998	2.1	1,285,216	17
Suriname	1-VII-80	352,041	x383	x429	1.9	163,265	3
Uruguay[5]	23-X-85	2,955,241	3,008	•3,112	0.6	177,414	18
Venezuela[12]	20-X-90	•18,105,265	17,317	•20,226	2.6	912,050	22
Asia							
Afghanistan	23-VI-79	h13,051,358	18,136	h16,430	b	652,090	25
Armenia	12-I-89	a3,304,776	3,339	n.a.	n.a.	29,800	n.a.
Azerbaijan	12-I-89	a7,021,178	6,661	n.a.	n.a.	86,600	n.a.
Bahrain	5-IV-81	350,798	425	•516	3.3	678	762

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Table 24.1b Population, Surface Area and Density of Selected Countries: Latest Census and Midyear Estimates for 1985 and 1991 (continued)
(Population estimates in thousands; area in square kilometers)

Continent/country	Latest census		Midyear estimates		Annual rate of increase (percent)	Surface area	Density[1]
	Date	Both sexes	1985	1991	1985-1991	1991	1991
Bangladesh[5]	6-III-81	87,119,965	99,434	[x]118,745	3.0	143,998	825
Bhutan	XI-69	1,034,774	[x]1,362	[x]1,551	2.2	47,000	33
Brunei Darussalam[5, 15]	26-VIII-81	192,832	222	[x]273	3.5	5,765	47
Cambodia[16]	17-IV-62	5,728,771	[x]7,284	[x]8,442	2.5	181,035	47
China[17]	1-VII-90	116,017,381	[x]1,059,522	[x]1,155,795	1.4	9,596,961	120
Cyprus[2]	30-IX-76	612,851	665	710	1.1	9,251	77
East Timor	31-X-90	747,750	[x]659	[x]752	2.2	14,874	51
Georgia	12-I-89	[a]5,400,841	5,218	n.a.	n.a.	69,700	n.a.
Hongkong[13]	11-III-86	5,395,997	5,456	[x]5,912	1.3	[o]1,045	5,657
India[18]	1-III-91	[•]844,324,222	750,859	[•]849,638	2.1	3,287,590	258
Indonesia[19]	31-X-90	179,321,641	164,630	[x]187,765	2.2	1,904,569	99
Iran, Islamic Rep. of	22-IX-86	49,445,010	47,820	[•]55,762	2.6	1,648,000	34
Iraq	17-X-87	16,335,199	15,585	[x]19,581	3.8	438,317	45
Israel[2, 20]	4-VI-83	4,037,620	4,233	[•]4,975	2.7	21,056	236
Japan[21]	1-X-90	[•]123,611,167	120,837	[•]123,921	0.4	377,801	328
Jordan[22]	10-XI-79	[i]2,100,019	[x]3,407	[x]4,145	3.3	97,740	42
Kazakstan	12-I-89	[a]16,464,464	15,935	n.a.	n.a.	2,717,300	n.a.
Korea, Dem. People's Republic of	1-V-44	n.a.	[x]19,888	[x]22,193	1.8	n.a.	n.a.
Korea, Republic of[5, 23]	1-XI-85	40,448,486	40,806	[•]43,268	1.0	99,016	437
Kuwait	21-IV-85	1,697,301	1,712	[x]2,101	3.4	17,818	118
Kyrgyzstan	12-I-89	[a]4,257,755	4,009	n.a.	n.a.	198,500	n.a.
Lao People's Dem. Rep.	1-III-85	[•]3,584,803	[x]3,594	[x]4,262	2.8	236,800	18
Lebanon[24]	15-XI-70	[j]2,126,325	[x]2,668	[x]2,745	0.5	10,400	264

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Table 24.1b Population, Surface Area and Density of Selected Countries: Latest Census and Midyear Estimates for 1985 and 1991 (continued)
(Population estimates in thousands; area in square kilometers)

Continent/country	Latest census		Midyear estimates		Annual rate of increase (percent)	Surface area	Density[1]
	Date	Both sexes	1985	1991	1985-1991	1991	1991
Macau[25]	16-III-81	247,826	392	[x]497	4.0	16	31,063
Malaysia	10-VI-80	13,136,109	15,681	[x]18,333	2.6	329,749	56
Maldives	25-III-85	180,088	184	223	3.2	298	748
Mongolia	5-I-89	2,043,000	1,878	[x]2,250	3.0	1,566,500	1
Myanmar	31-III-83	[n]35,307,913	38,541	[x]42,561	1.7	676,578	63
Nepal[2]	22-VI-81	15,022,839	16,687	[x]19,605	2.7	140,797	139
Oman[3]	n.a.	n.a.	[x]1,242	[x]1,559	3.8	212,457	7
Pakistan[26]	1-III-81	84,253,644	96,180	115,524	3.1	796,095	145
Palestine[27]	18-XI-31	1,035,821	n.a.	n.a.	n.a.	n.a.	n.a.
Philippines[2]	1-V-90	60,684,881	54,668	62,868	2.3	300,000	210
Qatar	16-III-86	369,079	[x]299	[x]381	4.0	11,000	35
Saudi Arabia	9-IX-74	7,012,642	[x]11,595	[x]14,691	3.9	2,149,690	7
Singapore[28]	30-VI-90	2,705,115	2,558	2,763	1.3	618	4,471
Sri Lanka	17-III-81	14,846,750	15,842	17,240	1.4	65,610	263
Syrian Arab Rep.[29]	7-IX-81	9,046,144	10,267	[x]12,993	3.9	185,180	70
Tajikistan	12-I-89	[a]5,092,603	4,574	n.a.	n.a.	143,100	n.a.
Thailand	1-IV-90	54,532,300	51,580	56,923	1.6	513,115	111
Turkey	20-X-85	50,664,458	50,231	60,777	3.2	779,452	78
Turkenistan	12-I-89	[a]3,522,717	3,230	n.a.	n.a.	488,100	n.a.
United Arab Emirates[30]	15-XII-80	1,043,225	[x]1,349	[x]1,629	3.1	83,600	19
Uzbekistan	12-I-89	[a]19,810,077	18,231	n.a.	n.a.	447,400	n.a
Vietnam	1-IV-89	64,411,713	[x]59,902	[x]68,183	2.2	331,689	206
Yemen Arab Rep.[4]	1-II-86	9,274,173	[x]7,621	[x]9,547	3.8	195,000	49

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Table 24.1b Population, Surface Area and Density of Selected Countries: Latest Census and Midyear Estimates for 1985 and 1991 (continued)
(Population estimates in thousands; area in square kilometers)

Continent/country	Latest census		Midyear estimates		Annual rate of increase (percent)	Surface area	Density[1]
	Date	Both sexes	1985	1991	1985-1991	1991	1991
Europe							
Albania	12-IV-90	[e]3,182,400	2,957	[e]3,301	1.8	28,748	115
Austria[2]	12-V-81	7,555,338	7,555	[e]7,823	0.6	83,853	93
Belarus	12-I-89	[a]10,151,806	9,999	n.a.	n.a.	207,600	n.a.
Belgium[2]	1-III-81	9,848,647	9,858	[x]9,844	(0.0)	30,519	323
Bulgaria	4-XII-85	8,948,388	8,960	[e]8,982	(0.0)	[p]110,912	81
Czechoslovakia	1-XI-80	15,283,095	15,499	[e]15,583	0.1	127,876	122
Denmark[2,31]	1-I-81	5,123,989	5,114	[x]5,148	0.1	43,077	120
Estonia	12-I-89	[a]1,565,662	n.a.	n.a.	n.a.	45,100	n.a.
Finland[2]	31-XII-90	4,998,478	4,902	[e]5,029	0.4	3,381,445	15
France[32, 33]	5-III-90	[l]56,556,000	55,170	[e]57,049	0.6	551,500	103
German, Democratic Republic[2]	31-XII-81	16,705,635	16,644	[x]16,214	(0.4)	108,333	150
Germany, Federal Republic of[2]	25-V-87	61,077,042	60,975	[e]64,120	0.8	248,577	258
Greece	17-III-91	[m]10,269,074	[n]9,934	[x, n]10,063	0.2	131,990	76
Hungary	1-I-90	10,374,823	10,579	[e]10,344	(0.4)	93,032	111
Iceland[2]	1-XII-70	204,930	241	[e]258	1.1	103,000	3
Ireland	13-IV-86	3,540,643	3,540	[e]3,523	(0.1)	70,284	50
Italy	25-X-81	56,556,911	[a]57,141	[x, d]57,052	b	301,268	189
Latvia	12-I-89	[a]2,666,567	2,594	n.a.	n.a.	64,500	n.a.
Lithuania	12-I-89	[a]3,674,802	3,545	[e]3,741	0.9	65,200	57
Luxembourg[2]	31-III-81	364,602	367	[x]373	0.3	2,586	144
Malta[34]	16-XI-85	345,418	336	[e]357	1.0	315,591	1
Monaco[2]	4-III-82	27,063	[x]27	[x]28	0.6	[q]1	28,100

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Table 24.1b Population, Surface Area and Density of Selected Countries: Latest Census and Midyear Estimates for 1985 and 1991 (continued)
(Population estimates in thousands; area in square kilometers)

Continent/country	Latest census		Midyear estimates		Annual rate of increase (percent)	Surface area	Density[1]
	Date	Both sexes	1985	1991	1985-1991	1991	1991
Netherlands[2]	28-II-71	13,060,115	14,484	•15,065	0.7	40,844	369
Norway[2]	1-XI-80	4,091,132	4,153	•4,262	0.4	323,895	13
Poland[35]	6-XII-88	37,878,641	37,203	•38,244	0.5	312,250	118
Portugal[36]	16-III-81	9,833,014	9,904	•10,582	1.1	92,389	115
Republic of Moldova	12-I-89	[a]4,335,360	4,214	•4,363	0.6	33,700	129
Romania	5-I-77	21,559,910	22,725	•23,193	0.3	237,500	98
Russian Federation[37]	12-I-89	[a]147,021,869	143,585	n.a.	n.a.	17,075,400	n.a.
Spain	1-III-81	37,746,260	38,474	•39,025	0.2	504,782	77
Sweden[2]	1-XI-85	8,360,178	8,350	•8,635	0.6	449,964	19
Switzerland[2]	2-XII-80	6,365,960	6,470	•6,791	0.8	41,293	164
United Kingdom[38]	2-IV-81	55,678,079	56,618	[x]57,367	0.2	244,100	235
Yugoslavia[2]	31-III-81	22,424,687	23,124	•23,928	0.6	255,804	94
Oceania							
Australia[5]	30-VI-86	15,602,156	15,788	•17,336	1.6	7,713,364	2
Fiji	31-XII-86	715,375	697	[x]776	1.8	18,274	42
Guam[10]	1-IV-80	105,979	[x]113	[x]119	0.9	541	220
New Zealand[39]	4-III-86	3,307,083	3,247	•3,380	0.7	270,986	12
Pacific Islands	n.a.	n.a.	[x]15	[x]17	2.1	n.a.	n.a.
Papua New Guinea[40]	22-IX-80	3,010,727	3,337	•3,772	2.0	462,840	8

• Provisional.
[x] Estimate prepared by the Population Division of the United Nations.

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Table 24.1b Population, Surface Area and Density of Selected Countries: Latest Census and Midyear Estimates for 1985 and 1991 (continued)
(Population estimates in thousands; area in square kilometers)

[1] Population per square kilometer of surface area in 1991. Figures are the quotients of population divided by the surface area and are not to be considered either as reflecting density in the urban sense or as indicating the supporting power of a territory's land and resources. [2] De jure population. [3] Including the enclave of Cabinda. [4] Comprising Bioko (which includes Pagalu) and Rio Muni (which includes Corisco and Elobeys). [5] Midyear estimates have been adjusted for under-enumeration. Census data have not been adjusted for this underenumeration, estimated as follows:

	Percentage adjustment	Adjusted census total
Australia	1.80	*89,949,000
Bangladesh	3.10	-
Bolivia	6.99	-
Brunei Darussalam	1.06	-
Guatemala	13.7	-
India	1.70	-
Kenya	5.00	-
Korea, Republic of	1.90	-
Mozambique	3.80	-
Netherlands Antilles	2.00	-
Saint Lucia	7.24	-
Sierra Leone	10.00	*3,002,426
Uruguay	2.6	-

[6] Comprising the Northern Region (former Saguia el Hamra) and Southern Region (former Rio de Oro). [7] Including Carriacou and other dependencies in the Grenadines. [8] Including dependencies: Marie-Galante, La Desirade, Les Saintes, Petite-Ferre, St. Barthelomy and French part of St. Martin. [9] Com prising Bonaire, Curacao, Saba, St. Eustatius, and Dutch part of St. Martin. [10] De jure population, but excluding armed forces in the area. [11] De jure population, but excluding civilian citizens absent from country for extended period of time. Census figures also exclude armed forces overseas. [12] Excluding Indian jungle population. [13] Mid-year estimates for 24 October. [14] Excluding Nomadic tribes. [15] Excluding transients afloat. [16] Excluding foreign diplomatic personnel and their dependents. [17] This total population of China, as given in the communique of the State Statistical Bureau realising the major figures of the census, includes a population of 6,300,000 for Hongkong and Macau. [18] Including data for the Indian held part of Jammu and Kashmir, the final status of which has not yet been determined. [19] Figures provided by Indonesia including East Timor, shown separately. [20] Including data for East Jerusalem and Israeli residents in certain other territories under occupation by Israeli military forces since June 1967.

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Table 24.1b Population, Surface Area and Density of Selected Countries: Latest Census and Midyear Estimates for 1985 and 1991 (continued)
(Population estimates in thousands; area in square kilometers)

[21] Comprising Hokkaido, Honshu, Shikoku, Kyushu. Excluding diplomatic personnel outside the country and foreign military and civilian personnel and their dependents stationed in the area. [22] Including military and diplomatic personnel and their families abroad, numbering 933 at 1961 census, but excluding foreign military and diplomatic personnel and their families in the country, numbering 389 at 1961 census. Also including registered Palestinian refugees, numbering 654,092 and 722,687 at 30 June 1963 and 31 May 1967, respectively. [23] Excluding alien armed forces, civilian aliens employed by armed forces, foreign diplomatic personnel and their dependents and Korean diplomatic personnel and their dependents outside the country. [24] Excluding Palestinian refugees in camps. [25] Comprising Macau City and islands of Taipa and Coloane. [26] Excluding data for Jammu and Kashmir, the final status of which has not yet been determined, Junagardh, Manavadar, Gilgit and Baltistan. [27] Former mandated territory administered by the United Kingdom until 1948. [28] Excluding transients afloat and nonlocally domiciled military and civilian services personnel and their dependents and visitors, numbering 5,553; 5,187 and 8,985, respectively at 1980 census. [29] Including Palestinian refugees numbering 193,000 on 1 July 1977. [30] Comprising 7 Sheikdoms of Abu Dhabi, Dubai, Sharjah, Ajamen, Umm al Qaiwain, Ras al Khaimah and Fujairah, and the area lying within the modified Riyadh line as announced in October 1955. [31] Excluding Faeroe Islands and Greenland. [32] Excluding Overseas Departments, namely French Guiana, Guadaloupe, Martinique and Reunion. [33] De jure population, but excluding diplomatic personnel outside the country and including foreign diplomatic personnel not living in embassies or consulates. [34] Including Gozo and Comino Islands. Excluding non-Maltese armed forces stationed in the area, but including civilian nationals temporarily outside the country. [35] Excluding civilian aliens within the country, but including civilian nationals temporarily outside the country. [36] Including the Azores and Madeira islands. [37] Including the Balearic and Canary Islands, and Alhucemas, Ceuta, Chafarinas, Mililla and Penon de Veles de la Gomera. [38] Excluding Channel Islands and Isle of Man. [39] Including Campbell and Kermadec Islands (population 20 in 1961, surface area 148 km^2) as well as Antipodes, Auckland, Bounty, Snares, Solander and Three Kings Islands, all of which are uninhabited. Excluding diplomatic personnel and armed forces outside the country, the latter numbering 1,936 at 1966 census; also excluding alien armed forces within the country. [40] Comprising the eastern part of New Guinea, the Bismarck Archipelago, Bougainville and Buka of Solomon Islands groups and about 600 smaller islands.

[a] De jure population. [b] Rate not computed because of apparent lack of comparability between estimates shown for 1985 and 1991. [c] Including an estimated figure of 50,740 for the island of Mayotte, not covered by the census. [d] Estimate not accord with the latest census and/or the latest estimate. [e] Including an estimate of 224,095 for nomad population. [f] Excluding Bophutthatswana, Ciskei, Transkei and Venda. [g] De jure population, but excluding persons residing in institutions. [h] Excluding nomad population. [i] Excluding data for Jordanian territory under occupation since June 1967 by Israeli military forces. [j] Based on results of sample survey. [k] Excluding United Kingdom armed forces, numbering 2,507. [l] Excluding military personnel stationed outside the country who do not have personal residence in France. [m] Including armed forces stationed outside the country, but excluding alien armed forces stationed in the area. [n] Excluding armed forces stationed outside the country, but including alien armed forces stationed in the area. [o] Land area only. Total including ocean area with administrative boundaries is 2,916 km^2. [p] Excluding surface area of frontier river. [q] Surface area is 1.49 km2.

Source: United Nations Demographic Yearbook, 1991. New York, 1992.

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Table 24.2 The 25 Most Populous Countries, Ranked by Size: 1985, 2000, and 2025
(Population in thousands)

1985		2000		2025	
Country	Population	Country	Population	Country	Population
1. China	1,059,521	1. China	1,255,895	1. China	1,475,159
2. India	758,927	2. India	964,072	2. India	1,228,829
3. USSR	278,618	3. USSR	314,736	3. USSR	368,234
4. USA	239,020	4. USA	268,239	4. Nigeria	338,105
5. Indonesia	166,440	5. Indonesia	211,367	5. USA	311,936
6. Brazil	135,564	6. Brazil	179,487	6. Indonesia	272,744
7. Japan	120,742	7. Nigeria	161,930	7. Brazil	245,809
8. Bangladesh	101,147	8. Bangladesh	145,800	8. Bangladesh	219,383
9. Pakistan	100,380	9. Pakistan	140,961	9. Pakistan	209,976
10. Nigeria	95,198	10. Japan	129,725	10. Mexico	154,085
11. Mexico	78,996	11. Mexico	109,180	11. Japan	132,082
12. Germany, Fed. Rep. of	60,877	12. Vietnam	79,870	12. Ethiopia	122,285
13. Vietnam	59,713	13. Philippines	74,057	13. Vietnam	108,462
14. Italy	57,300	14. Ethiopia	66,509	14. Philippines	102,787
15. United Kingdom	56,125	15. Thailand	65,503	15. Iran	97,011
16. France	54,621	16. Turkey	65,351	16. Turkey	91,925
17. Philippines	54,498	17. Iran	65,161	17. Egypt	90,399
18. Thailand	51,411	18. Egypt	63,941	18. Zaire	90,097
19. Turkey	49,289	19. Germany, Fed. Rep. of	59,484	19. Thailand	85,929
20. Egypt	46,909	20. Italy	58,642	20. Tanzania, United Rep.	83,805
21. Iran	44,632	21. France	57,162	21. Kenya	82,850
22. Ethiopia	43,557	22. United Kingdom	56,354	22. South Africa	76,381
23. Korea, Republic of	41,258	23. Korea, Republic of	50,981	23. Burma	65,960
24. Spain	38,542	24. Burma	48,499	24. Korea, Republic of	61,572
25. Poland	37,187	25. Zaire	47,581	25. France	58,431

Note: The figures cited are from the median variant of the United Nations estimates and projections based on data available as of January 1, 1985.

Source: **United Nations World Population Prospects (Estimates and Projections as Assessed in 1984).** New York, 1986.

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Table 24.3 Population of Capital Cities by Selected Countries: Latest Year Available

Capital City	Country	Year	Population
Manila	Philippines	1990 (E)	1,876,195
Canberra	Australia	1990 (E)	310,103
Vienna	Austria	1991 (E)	[a]1,543,154
Brazilia	Brazil	1990 (E)	[a, b]1,803,478
Ottawa	Canada	1989 (E)	[c]853,200
Beijing (Peking)	China	1982	5,531,460
Copenhagen	Denmark	1990 (E)	[a]617,637
Cairo	Egypt	1991 (E)	6,663,000
Helsinki	Finland	1990 (E)	492,400
Paris	France	1982	[d, e]2,188,960
Berlin	Germany	1990 (E)	[a]3,433,695
Athens	Greece	1981	[f]885,737
Budapest	Hungary	1990 (E)	2,017,405
New Delhi	India	1981	273,036
Jakarta	Indonesia	1985 (E)	7,885,519
Tehran	Iran	1986	6,042,584
Baghdad	Iraq	1970 (E)	[g]1,984,142
Dublin	Ireland	1991	477,675
Jerusalem[1]	Israel	1990 (E)	524,500
Rome	Italy	1984 (E)	2,828,692
Tokyo[2]	Japan	1990	8,163,573
Alma-Ata	Kazakstan	1990 (E)	1,147,000
Seoul	Korea, Republic of	1985	[a]9,639,110
Mexico City	Mexico	1980	8,831,079
Amsterdam	Netherlands	1990 (E)	[a, h]698,918
Lagos	Nigeria	1975 (E)	1,060,848
Lisbon	Portugal	1981	826,140
Bucharest	Romania	1990 (E)	2,127,194
Moscow	Russian Federation	1990 (E)	8,801,000
Riyadh	Saudi Arabia	1974	666,840
Singapore	Singapore	1991 (E)	[e, i]2,763,000
Madrid	Spain	1989 (E)	2,991,223
Cape Town[3]	South Africa	1985	776,617
Stockholm	Sweden	1989 (E)	672,187
Bern	Switzerland	1990 (E)	[a]134,510
Bangkok	Thailand	1990	[a]5,876,000
Kiev	Ukraine	1990	2,616,000

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Table 24.3 Population of Capital Cities by Selected Countries: Latest Year Available (concluded)

Capital City	Country	Year	Population
London[4]	United Kingdom	1990	[j]6,794,400
Washington D.C.	United States	1990	[k]606,900
Caracas	Venezuela	1990	1,824,892

[E] Indicates estimated data (including results of sample surveys); all other data are national or municipal census results.

[1] Designation and data provided by Israel. The position of the United Nations on the question of Jerusalem is contained in General Assembly resolution 181 (11) and subsequent resolutions of the General Assembly and Security Council concerning this question.
[2] Data for city proper refer to 23 wards (km) of the old city.
[3] Pretoria is the administrative capital, Cape town is the legislative capital.
[4] "Greater London" conurbation as reconstituted in 1965 and comprising 32 new Greater London Boroughs.

[a] De jure population.
[b] For "municipios" which may contain rural as well as urban centre.
[c] Urban agglomeration only.
[d] Data for cities proper refer to communes which are centres for urban agglomeration.
[e] De jure population, but excluding diplomatic personnel outside the country and including foreign diplomatic personnel not living in embassies or consulates.
[f] Including armed forces stationed outside the country but excluding alien armed forces stationed in the area.
[g] Including Karkh, Rassaiah, Adhamiya and Kadhimain Qadha Centres and Maamon, Monsour and Karradah-Sharquiya Nahlyas.
[h] Data for cities proper refer to administrative units (municipalities).
[i] Excluding transients afloat and nonlocally domiciled military and civilian services personnel and their dependents.
[j] For district council area.
[k] De jure population, but excluding armed forces overseas and civilian citizens absent from the country for extended period of time.

Source: United Nations Demographic Yearbook, 1991. New York, 1992.

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Table 24.4 Vital Statistics Rates by Selected Countries: Latest Year Available

Country	Year	Crude birth rate[1]	Crude death rate[1]	Natural increase[1]	Infant mortality[2]	Crude marriage rate[1]
Philippines	1985-90	[a]33.2	[a]7.7	[a]25.5	[a]45.0	[d]5.0
Australia	1990	15.4	7.0	8.3	8.2	6.8
Austria	1991	12.0	10.6	1.4	7.5	5.6
Belgium	1988	12.0	10.6	1.4	[f]8.4	[e]6.0
Brazil	1985-90	[a]28.6	[a]7.9	[a]20.7	[a]63.0	[d]5.6
Canada	1991	15.3	7.3	8.0	[e]6.8	[d]7.3
Chile	1990	22.2	6.0	16.2	16.8	7.5
[a]China	1985-90	21.2	6.7	14.5	32.0	n.a.
Czechoslovakia	1991	13.3	11.5	1.9	11.5	6.7
Denmark	1990	12.4	11.9	0.5	[f]7.5	6.1
Egypt	1988	37.9	8.5	29.5	[a]43.3	[b]8.5
Finland	1991	13.1	9.8	3.3	[d]6.0	4.7
France	1991	13.3	9.2	4.1	7.2	4.9
German Dem. Rep.	1989	12.0	12.4	(0.4)	7.6	7.9
Germany, Fed. Rep. of	1991	11.2	10.9	0.3	7.0	6.5
India	1985-90	[g]24.9	[g]9.6	20.3	[e, g]80.0	n.a.
Ireland	1991	14.9	8.9	6.0	[e]8.2	[d]5.2
Israel[3]	1990	22.2	6.2	16.0	9.6	7.0
Italy	1990	9.8	9.3	0.4	8.5	5.4
Japan	1991	9.9	6.7	3.2	4.4	6.0
Korea, Republic of	[h]1989	14.5	5.4	9.0	[a]25.0	[d]7.3
Mexico	1985-90	[a]29.0	[a]5.8	[a]23.2	[a]43.0	[c]7.4
Netherlands	1991	13.2	8.6	4.6	6.5	6.3
New Zealand	1991	17.8	7.8	9.9	8.3	6.8
Norway	1991	14.2	10.5	3.7	[c]6.9	[c]5.2
Peru	1990	34.1	8.6	25.4	109.9	[a]6.0
Poland	1991	14.3	10.6	3.7	14.8	6.2
Portugal	1991	11.0	9.7	1.3	9.8	6.8
Puerto Rico	1990	18.5	7.3	11.2	14.8	9.2
Singapore	1991	17.8	5.0	12.8	5.5	9.0
South Africa	1985-90	32.1	9.9	22.2	72.0	n.a.
Spain	1990	10.2	8.5	1.7	7.7	5.5
Sweden	1991	14.3	11.0	3.3	3.8	4.6
Switzerland	1991	12.6	9.0	3.6	6.8	6.8
Thailand	1990	[h]20.4	[h]6.8	[h]14.4	[h]38.0	8.2
United Kingdom	1991	13.8	11.3	2.5	7.4	[d]6.8
Russian Federation	1989	14.6	10.7	3.9	18.1	7.4
United States	1991	16.3	8.6	7.7	8.9	9.9
Venezuela	1989	28.0	4.5	23.5	23.3	5.9
Yugoslavia	1990	14.0	9.0	5.0	20.2	6.3

[a] Estimate for 1985-1990 prepared by the Population Division of the United Nations.
[1] Per thousand population.
[2] Per thousand live birth.
[3] Including data for East Jerusalem and Israeli residents in certain other territories under occupation by Israeli military forces since June 1967.

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Table 24.4 Vital Statistics Rates by Selected Countries: Latest Year Available (concluded)

[a] For 1982.
[b] For 1986.
[c] For 1988.
[d] For 1989.
[e] For 1990.
[f] For 1991.
[g] Based on a sample registration scheme.
[h] Based on the result of continuous demographic sample survey.

Source: **United Nations Demographic Yearbook, 1991.** New York, 1992.

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Table 24.5 Total and Economically Active Population by Sex and Selected Countries: Latest Year Available

Country	Code	Reference date	Both sexes: Total population	Both sexes: Economically active	Male: Total population	Male: Economically active	Female: Total population	Female: Economically active
Africa								
Botswana	C	(14-23.VIII.91)	1,326,796	443,455	634,400	273,115	692,396	170,340
Egypt	LFSS	(XII.89)	52,289,700	16,033,600	26,672,900	11,423,900	25,616,800	4,609,700
Ethiopia	QE	(XII.92)	56,899,600	23,518,000	28,556,200	13,863,100	28,343,400	9,654,900
Malawi	C	(20.IX.87)	7,988,507	3,457,753	3,867,136	1,695,852	4,121,371	1,761,901
Nigeria	LFSS	(IX.86)	98,936,800	30,765,500	49,960,300	20,513,900	48,976,500	10,251,600
Senegal	C	(20.V.88)	6,896,808	2,347,556	3,353,599	1,746,555	3,543,209	601,001
South Africa	C	(7.III.91)	30,986,920	11,624,368	15,479,528	7,043,053	15,507,392	4,581,314
America								
Argentina	OE	(1990, average)	32,321,887	12,305,346	16,001,997	8,870,990	16,319,890	3,434,356
Bolivia	HS	(XI.91)	2,469,800	942,100	1,217,200	557,000	1,252,600	385,100
Brazil	HS	(IX.90)	147,305,524	64,467,981	72,372,248	41,599,870	74,933,276	22,868,111
Canada	LFSS	(1992, average)	n. a.	13,797,000	n. a.	7,582,000	n. a.	6,215,000
Chile	LFSS	(X-XII.92)	13,301,780	4,990,430	6,509,560	3,393,230	6,792,220	1,597,200
Costa Rica	HS	(VII.92)	2,938,377	1,086,988	1,455,016	762,094	1,483,361	324,894
Ecuador	C	(25.XI.90)	9,648,189	3,359,767	4,796,412	2,471,433	4,851,777	888,334
Guatemala	HS	(1989, average)	8,663,859	2,898,316	4,245,033	2,158,399	4,418,826	739,917
Honduras	LFSS	(X.92)	4,968,320	1,728,599	2,430,116	1,189,793	2,538,204	538,806
Jamaica	LFSS	(X.90)	2,382,900	1,060,100	1,167,400	567,000	1,215,500	493,100
Panama	C	(13.V.90)	1,769,488	839,695	896,588	594,408	876,900	245,287
Paraguay	HS	(X-XI.91)	1,205,614	521,986	561,448	309,450	644,166	212,536
Peru	HS	(VIII-IX.91)	6,328,212	2,523,282	3,077,192	1,532,749	3,251,749	990,533
Puerto Rico	LFSS	(III.93)	n. a.	1,211,000	n. a.	739,000	n. a.	473,000
United States	LFSS	(1992, average)	255,082,000	128,548,000	124,493,000	70,588,000	130,589,000	57,960,000
Venezuela	HS	(VII-XII.91)	19,890,092	7,417,929	10,031,488	5,028,599	9,858,604	2,389,330

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Table 24.5 Total and Economically Active Population by Sex and Selected Countries: Latest Year Available (continued)

Country	Code	Reference date	Both sexes Total population	Both sexes Economically active	Male Total population	Male Economically active	Female Total population	Female Economically active
Asia								
Hongkong	HS	(1992, average)	5,646,700	2,793,000	2,868,200	1,766,500	2,778,500	1,026,500
India	C	(1.III.91)	836,605,522	314,903,642	433,791,705	223,506,153	402,813,817	91,397,489
Iran, Islamic Rep. of	C	(22.IX.86)	49,445,010	12,854,702	25,280,961	11,534,997	24,164,049	1,319,705
Israel	LFSS	(1992, average)	n. a.	1,857,500	n. a.	1,080,900	n. a.	776,600
Japan	LFSS	(1992, average)	124,310,000	65,780,000	61,030,000	38,990,000	63,280,000	26,790,000
Korea, Republic of	LFSS	(1992, average)	n. a.	19,385,000	n. a.	11,615,000	n. a.	7,770,000
Kuwait	LFSS	(III.88)	1,878,000	729,915	1,033,327	552,570	844,673	177,345
Pakistan	OE	(1992-93)	120,956,000	33,829,000	62,606,000	29,026,000	58,350,000	4,803,000
Philippines	HS	(X.92)	[a]64,258,611	26,938,000	32,289,791	16,921,000	31,968,820	10,017,000
Singapore	LFSS	(VI.92)	n. a.	1,619,560	n. a.	970,746	n. a.	648,796
Europe								
Austria	LFSS	(1991, average)	7,825,300	3,607,300	3,758,800	2,126,200	4,066,500	1,481,100
Belarus	C	(12.I.89)	10,151,806	5,327,000	4,749,324	2,718,000	5,402,482	2,609,000
Belgium	OE	(VI.90)	9,967,379	4,179,236	4,870,392	2,440,347	5,056,987	1,738,889
Denmark	LFSS	(IV-V.91)	5,146,479	2,912,008	2,536,391	1,558,969	2,610,088	1,353,039
Estonia	OE	(1990, average)	1,574,300	795,500	738,900	398,900	835,400	396,600
Finland	LFSS	(1992, average)	5,038,000	2,526,000	2,449,000	1,341,000	2,589,000	1,185,000
France	OE	(1991, average)	56,893,200	25,330,300	27,702,600	14,151,100	29,190,600	11,179,200
Germany, Fed. Rep. of	LFSS	(IV.91)	63,889,000	31,360,000	30,947,000	18,571,000	32,942,000	12,789,000
Greece	LFSS	(IV-VI.88)	10,009,401	3,960,801	4,927,037	2,501,145	5,082,364	1,459,656
Hungary	OE	(1992, average)	10,337,200	4,241,800	4,960,500	2,276,500	5,376,700	1,965,300
Italy	LFSS	(1991, average)	57,114,000	24,245,000	27,778,000	15,244,000	29,335,000	9,001,000
Latvia	C	(12.I.89)	2,666,567	1,470,000	1,238,806	735,000	1,427,761	735,000
Lithuania	C	(12.I.89)	3,674,802	1,901,232	1,738,953	982,695	1,935,849	918,537

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Table 24.5 Total and Economically Active Population by Sex and Selected Countries: Latest Year Available (concluded)

Country	Code	Reference date	Both sexes Total population	Both sexes Economically active	Male Total population	Male Economically active	Female Total population	Female Economically active
Maldova	C	(12.I.89)	4,335,360	2,117,592	2,063,192	1,084,504	2,272,168	1,033,088
Netherlands	LFSS	(1991, average)	n. a.	7,011,000	n.a.	4,230,000	n.a.	2,782,000
Portugal	LFSS	(1992, average)	9,833,100	4,737,200	4,699,500	2,639,400	5,133,600	2,097,800
Russian Federation	C	(12.I.89)	147,021,869	77,283,000	68,713,869	39,767,000	78,308,000	37,516,000
Spain	LFSS	(1992, average)	38,816,500	15,154,800	18,937,200	9,662,200	19,879,300	5,492,500
Switzerland	OE	(1992, average)	6,936,000	3,572,800	3,410,100	2,206,100	3,525,900	1,366,600
Sweden	C	(1.XI.90)	8,587,353	4,491,493	4,242,351	2,333,809	4,345,002	2,157,684
Ukraine	C	(12.I.89)	51,452,034	26,160,175	23,745,108	13,296,193	27,706,926	12,863,982
United Kingdom	OE	(1991, average)	57,649,000	28,769,000	28,132,000	16,288,000	29,518,000	12,481,000
Oceania								
Australia	LFSS	(1992, average)	n.a.	8,626,800	n.a.	5,024,600	n.a.	3,602,200
Guam	C	(1.IV.90)	133,152	66,138	70,945	41,416	62,207	24,722
New Zealand	C	(5.III.91)	3,373,929	1,564,173	1,662,555	885,777	1,711,374	678,396
USSR[1]	C	(12.I.89)	285,742,511	143,323,993	134,686,992	74,119,810	151,055,519	69,204,183

* - Provisional data.
C - Complete count, final data
CS - Sample tabulation, size not specified
LFSS - Labor force sample survey
HS - Household survey.
OE - Official estimates

[1] Data were taken before September 1991.
[a] Projected population of the Philippines.

Source: ILO Yearbook of Labour Statistics, 1993. Geneva, 1993.

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Table 24.5a Employment Levels in Selected Countries: 1983 - 1992
(In thousands)

Continent/country	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Africa										
Algeria	3,632.6	3,758.4	3,884.0	n.a.	4,137.7	n.a.	4,417.8	4,282.0	4,334.0	n.a.
Botswana[1,2]	100.5	110.0	[a]116.8	130.1	150.2	169.5	[b]175.6	209.0	[b]227.8	[b]227.5
Egypt[3,4,5]	11,526.0	11,819.0	n.a.	n.a.	n.a.	n.a.	[c]14,926.0	n.a.	n.a.	n.a.
Malawi[6,7]	391.3	384.4	415.2	432.3	412.0	432.1	441.4	473.4	n.a.	n.a.
Mauritius[8,9,10]	191.5	195.7	209.5	230.7	252.3	267.2	270.5	278.8	281.4	282.2
Niger[11]	20.3	21.4	22.5	26.1	28.0	26.0	28.0	25.2	24.1	n.a.
Zimbabwe[11,12,13]	1,033.4	1,036.4	1,055.0	1,081.1	1,085.4	1,131.0	1,167.1	1,192.2	1,244.0	[d]1,221.5
America										
Bolivia[4,14]	1,678.6	1,705.5	1,685.8	1,661.4	1,670.3	1,769.4	1,662.0	1,843.4	n.a.	n.a.
Brazil[4,14,15]	48,466.0	50,209.0	53,761.0	55,436.0	57,410.0	58,729.0	60,622.0	62,100.0	n.a.	n.a.
Canada[4,16]	10,675.0	10,932.0	11,221.0	11,531.0	11,861.0	12,245.0	12,486.0	12,572.0	12,340.0	12,240.0
Colombia[2,17,18]	3,099.4	3,099.1	3,099.9	3,247.6	3,442.6	3,572.2	3,668.3	4,324.7	4,610.6	4,841.2
Costa Rica[4,18,19]	767.6	[e]839.7	826.7	854.2	[f]923.3	951.2	986.8	1,017.2	1,006.6	1,043.0
Chile[4,16,20]	3,215.8	3,349.3	[g]3,720.6	3,895.7	4,010.8	4,265.8	4,424.8	4,459.5	4,540.4	4,773.3
Guatemala[1]	583.5	594.9	631.7	660.4	679.0	779.6	788.4	785.8	786.9	n.a.
Honduras[14,21]	n.a.	n.a.	280.7	406.0	[h]391.4	1,354.0	1,394.3	1,212.9	1,494.4	1,674.7
Jamaica[4,22]	742.4	779.0	781.7	[n]820.6	845.4	871.8	881.1	893.5	n.a.	n.a.
Mexico[11]	[j]5,150.0	5,406.0	5,850.0	6,023.0	6,216.0	6,768.0	7,385.0	8,029.0	8,550.0	8,738.0
Panama[4,16,48]	597.3	613.9	627.0	643.8	678.3	654.4	686.3	n.a.	720.1	795.1
Paraguay[4,18,49]	334.2	360.6	407.0	411.8	425.8	447.5	490.0	486.1	495.4	n.a.
Peru[22,23,24]	n.a.	n.a.	n.a	1,988.3	2,061.1	n.a.	2,169.5	n.a.	2,377.0	n.a.
Puerto Rico[4,25]	731.0	773.0	776.0	834.0	880.0	923.0	952.0	971.0	979.0	987.0
United States[4,25]	100,834.0	105,005.0	107,150.0	109,597.0	112,440.0	114,968.0	117,342.0	117,914.0	116,877.0	[k]117,598.0
Uruguay[21,22,24]	n.a.	[l]932.6	n.a.	[l]1,021.2	1,090.8	1,103.1	1,134.4	1,136.2	1,128.4	n.a.
Venezuela[4,16]	4,934.0	4,938.0	5,106.1	5,396.0	5,694.2	6,035.4	6,177.1	6,402.2	6,728.2	n.a.
Virgin Islands(US)[11,26]	36.6	36.8	37.1	37.9	39.8	41.7	42.2	43.5	44.3	44.7

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Table 24.5a Employment Levels in Selected Countries: 1983 - 1992 (continued)
(In thousands)

Continent/country	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Asia										
China[27,28]	464,360.0	481,970.0	498,730.0	512,820.0	527,830.0	543,340.0	553,290.0	567,400.0	583,640.0	594,320.0
Hongkong[4,16]	2,426.7	2,505.2	[m]25,43.3	2,625.4	2,688.5	2,740.7	2,748.6	2,741.0	2,748.5	2,738.3
Indonesia[13,14]	n.a.	n.a.	[n]62,457	68,338	70,402	72,518	73,425	75,851	76,423	78,104
Israel[4,16,50]	1,339.3	1,359.0	[o]1,349.4	1,367.9	1,403.7	1,453.1	1,460.8	1,491.5	1,583.2	1,650.0
Japan[13,16]	57,330.0	57,660.0	58,070.0	58,530.0	59,110.0	60,110.0	61,280.0	62,490.0	63,690.0	64,360.0
Korea, Republic of[4,16]	14,505.0	14,429.0	14,970.0	15,505.0	16,354.0	16,870.0	17,515.0	18,036.0	18,576.0	18,921.0
Malaysia[4,29]	5,457.0	5,566.7	5,653.3	5,760.1	5,983.9	6,175.8	6,390.9	6,685.0	n.a.	n.a.
Philippines[4,16,51]	19,366.0	19,368.0	20,327.0	20,926.0	[n]20,795.0	21,497.0	21,849.0	22,532.0	22,979.0	23,917.0
Singapore[16,30]	1,251.2	1,269.2	1,234.6	1,214.4	1,266.9	1,331.6	1,394.0	1,469.2	1,524.3	1,576.2
Sri Lanka[14,31]	n.a.	n.a.	5,131.7	n.a.	n.a.	n.a.	n.a	5,963.7	[r]5,130.0	[r]4,985.8
Thailand[4,32,33]	22,911	[s]23,804	25,853	26,691	27,639	29,464	[t]30,844	30,844	n.a	n.a.
Europe										
Austria[13,16]	3,158.4	3,235.3	3,234.5	3,282.5	3,299.8	3,310.6	3,346.4	3,420.0	3,481.7	n.a.
Belgium[22,34,35]	3,432.0	3,466.3	3,513.8	3,524.8	3,479.8	3,495.9	3,594.9	3,636.7	n.a.	n.a.
Bulgaria[11,36]	4,113.5	4,098.0	4,094.7	4,076.5	4,108.5	4,077.6	4,085.2	3,846.3	3,204.6	2,653.9
Croatia[11]	1,4456.3	1,478.7	1,508.6	1,550.9	1,580.4	1,576.0	1,566.7	1,513.6	1,314.7	1,159.0
Denmark[37,38]	2,389.3	[u]2,488.4	2,553.4	2,662.5	2,678.7	2,694.9	2,645.3	2,670.0	2,647.2	n.a.
Estonia[4,34,35]	801.7	808.2	810.9	819.7	n.a.	818.2	811.5	795.5	790.0	n.a.
Finland[13,37]	2,419.0	2,442.0	2,466.0	2,458.0	2,452.0	2,458.0	2,494.0	2,488.0	2,366.0	2,199.0
Germany[16,35,39]	[d]26,477.0	[d]26,608.0	[d]26,626.0	26,940.0	[b]27,083.0	27,366.0	27,742.0	29,334.0	29,684.0	n.a.
Greece[22,24,40]	3,540.0	3,553.0	3,588.5	3,600.8	3,597.4	3,657.4	3,670.9	3,719.1	3,632.4	n.a.
Hungary[11,41]	3,706.5	3,654.8	3,609.4	3,549.0	3,480.2	3,356.6	[v]3,211.3	3,006.1	2,608.5	2,412.6
Italy[22,24,42]	20,725.0	20,809.0	20,894.0	21,006.0	20,986.0	21,253.0	21,154.0	21,454.0	21,595.0	n.a.
Latvia	1,382.6	1,389.6	1,394.8	1,403.7	1,412.6	16,413.1	1,406.9	1,408.7	1,396.8	1,350.0
Netherlands[13,29]	5,007.0	n.a.	5,145.0	n.a.	[w]5,864.0	6,032.0	6,155.0	6,356.0	6,521.0	n.a.
Portugal[24,43]	4,352.8	4,288.2	4,279.2	4,287.1	4,402.7	n.a.	4,613.1	4,717.5	4,857.4	4,843.1

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Table 24.5a Employment Levels in Selected Countries: 1983 - 1992 (continued)
(In thousands)

Continent/country	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Romania[11,36]	7,600.1	7,585.0	7,661.3	7,751.9	7,790.0	7,842.6	7,997.1	8,102.2	7,389.5	n.a.
Slovenia[13]	908.4	919.5	938.4	954.5	963.7	954.4	943.3	908.7	840.0	789.8
Spain[24,25]	11,044.0	10,743.0	10,641.0	10,881.0	11,369.0	11,773.0	12,258.0	12,579.0	12,609.0	12,366.0
Switzerland[4]	3,256.5	3,288.2	3,352.1	3,398.1	3,440.0	3,480.6	3,518.4	3,563.2	3,560.3	3,480.5
Sweden[24,44]	4,224.0	4,255.0	4,299.0	[y]4,299.0	4,337.0	4,399.0	4,466.0	4,508.0	4,430.0	4,250.0
Ukraine[27]	20,450.0	20,554.0	20,679.0	20,747.0	20,742.0	20,523.0	20,249.0	19,886.0	19,119.0	n.a.
United Kingdom[25,30,45]	23,624.0	24,235.0	24,539.0	24,568.0	25,083.0	25,914.0	26,684.0	26,943.0	26,055.0	25,463.0
Oceania										
Australia[4,16]	6,300.4	[z]6,493.9	6,697.5	[ab]6,974.5	7,128.8	7,398.3	7,727.5	7,872.1	7,713.2	7,693.7
Fiji[11,30]	80.6	78.6	81.1	79.9	78.2	77.6	88.2	89.0	91.5	92.5
Guam[4,25]	31.5	31.1	31.9	33.9	[d]34.7	36.4	38.3	43.7	45.5	n.a.
New Zealand[4,16]	n.a	n.a.	n.a.	1,544.1	1,556.8	1,508.2	1,468.4	1,481.4	1,460.8	1,466.6
Solomon Islands[11,30]	21.1	23.0	24.0	24.0	24.7	22.1	25.4	26.1	26.6	n.a.
USSR										
USSR[46,47]	138,766.0	139,474.0	130,303.0	130,881.0	130,729.0	128,903.0	127,057.0	124,971.0	n.a.	n.a.

[1] Civilian employees [2] September of each year [3] Persons aged 12 to 64 years [4] Civilian labour force employed [5] May of each year [6] All persons engaged [7] Excluding domestic services [8] Employees; including development workers [9] Establishments with 10 or more persons employed [10] March and September of each year [11] Employees [12] Excluding small establishments in rural areas [13] Including armed forces [14] Persons aged 10 years old and over [15] Excluding rural population of Rondonia, Acre, Amazonas, Roraima, Para and Amapa [16] Persons aged 15 years and over [17] Seven main cities of the country [18] Persons aged 12 years old and over [19] July of each year [20] 4th quarter of each year [21] Urban areas [22] Persons aged 14 years and over [23] Lima; excluding unpaid family workers who worked less than 15 hours [24] Including professional army; excluding compulsory military service [25] Persons aged 16 years and over [26] Based on an establishment survey plus an estimator for agriculture [27] Whole national economy [28] Excluding armed forces and reemployed retired persons [29] Persons aged 15 to 64 years old [30] June of each year [31] 1st quarter of each year [32] Persons aged 13 years and over [33] Third round (August) of each year [34] Excluding armed forces [35] April of each year [36] State and cooperative sector [37] Persons aged 15 to 74 years [38] April-May of each year [39] The series relates to the territory of the Federal Republic of Germany before March 10, 1990 [40] Second quarter of each year [41] Legal economic

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Table 24.5a Employment Levels in Selected Countries: 1983 - 1992 (concluded)
(In thousands)

units with 50 or more employees [42] Including permanent members of institutional households [43] Persons aged 12 years and over; including the Azores and Madeira [44] Persons aged 16 to 64 years [45] Employed persons including armed forces; excluding private domestic services and unpaid family workers [46] Whole national economy; employees [47] USSR before September 1991 [48] August of each year [49] Metropolitan area [50] Including the residents of East Jerusalem [51] October of each year

[a] Prior to 1985: August of each year [b] March [c] December [d] June [e] November [f] Beginning 1987 [g] Beginning 4th quarter 1985 [h] 5 Major cities [i] October [j] Beginning 1983: series revised, new methodology; data not strictly comparable [k] 1990 Census industrial and occupational classification [l] First semester [m] Beginning 1985: including unpaid family workers who worked for one hour or more [n] Intercensal population survey results [o] Prior to 1985: persons aged 14 years and over [p] Sample design revised [q] Prior to 1987: Fourth quarter of each year [r] Including Northern and Eastern provinces [s] Prior to 1984: second round [t] Prior to 1989: persons aged 11 years and over [u] Prior to 1984: civilian labor force employed [v] Prior to 1989: all legal economic units in the socialised sector [w] Prior to 1987: persons aged 15 years and over [x] Prior to 1991: including logging and fishing [y] Prior to 1986: persons aged 16 to 74 years; excluding unpaid family workers who worked for less than 15 hours [z] Beginning 1984: estimates based on 1986 census benchmarks [ab] Prior to 1986: excluding unpaid family workers who worked less than 15 hours.

* Provisional data.

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Table 24.5b Unemployment Levels in Selected Countries: 1983 - 1992
(In thousands)

Continent/country	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Africa										
Algeria[1,2]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	946.0	1,156.0	1,261.0	n.a.
Burundi	3.4	2.6	2.0	6.8	8.2	9.3	11.1	14.5	13.8	7.3
Cote d'Ivoire[4,5]	59.1	73.5	86.4	92.0	107.8	120.6	128.5	140.2	136.9	114.9
Ethiopia[6,7]	57.2	54.7	56.4	52.6	58.2	55.3	51.3	44.2	44.3	70.9
Nigeria[8]	31.0	34.3	28.3	32.5	57.3	60.5	57.6	57.1	60.2	n.a.
Senegal[9,4]	11.8	12.8	10.8	10.2	8.1	17.3	8.3	10.4	14.4	12.0
South Africa[10,11,12]	483.0	492.0	495.0	519.0	[a]1,018.0	874.0	755.0	n.a.	n.a.	n.a.
America										
Bolivia[13]	76.1	85.3	58.2	46.2	78.0	n.a.	96.1	79.2	67.3	n.a.
Brazil[14,15,16]	2,474.2	2,234.3	1,875.3	1,380.2	2,133.0	2,319.4	1,819.0	2,367.5	n.a.	n.a.
Canada[8]	1,434.0	1,384.0	1,311.0	1,215.0	1,150.0	1,031.0	1,018.0	1,109.0	1,417.0	1,556.0
Colombia[16,17,18]	377.0	463.2	499.9	482.8	429.0	403.0	356.5	491.6	501.6	486.6
Costa Rica[18,44]	76.2	[b]44.4	60.8	56.7	[c]54.5	55.0	38.7	49.5	59.1	44.0
Chile[8,19]	551.9	541.3	[d]516.5	374.2	343.5	286.1	249.8	268.9	253.6	217.1
El Salvador[14]	n.a.	n.a.	280.2	[e]28.3	n.a.	[f]74.1	72.0	97.9	[p]72.47	81.0
Guatemala[14,20]	3.6	4.8	2.7	2.7	2.2	1.9	1.7	1.8	n.a.	n.a.
Jamaica[21]	266.0	266.8	260.8	250.5	224.3	203.3	177.4	166.6	n.a.	n.a.
Nicaragua[14]	n.a.	n.a.	34.6	51.8	66.6	71.8	107.2	145.6	194.2	n.a.
Panama[8,22]	64.2	68.8	88.3	75.8	91.1	127.8	133.7	n.a.	138.4	125.4
Paraguay[18,23]	30.1	28.5	22.0	26.7	24.8	22.2	32.0	34.1	26.6	n.a.
Peru[21,24]	[g]137.8	[g]153.1	n.a.	111.7	103.5	n.a.	186.7	n.a.	146.3	n.a.
Puerto Rico[25,26]	223.0	202.0	216.0	194.0	178.0	165.0	163.0	160.0	186.0	197.0
United States[25]	10,717.0	8,539.0	8,312.0	8,237.0	7,425.0	6,701.0	6,528.0	6,874.0	8,426.0	9,384.0
Venezuela[8]	552.0	734.9	766.8	667.4	575.3	478.2	621.1	741.7	701.0	n.a.
Virgin Islands(US)[27]	3.6	3.3	2.6	2.1	1.4	1.5	1.7	1.3	1.4	1.8

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Table 24.5b Unemployment Levels in Selected Countries: 1983 - 1992 (continued)
(In thousands)

Continent/country	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Asia										
China[28,29]	2,714.0	2,357.0	2,385.0	2,644.0	2,766.0	2,960.0	3,779.0	3,832.0	3,522.0	3,603.0
Hongkong[8]	113.8	101.0	[h]83.6	76.1	47.5	38.0	30.0	37.0	50.3	54.7
Indonesia[14]	n.a.	n.a.	[i]1,368	1,855.0	1,843.0	2,106.0	2,083.0	1,952.0	2,032.0	2,199.0
Israel[8,30,31]	63.2	85.1	[j]97.0	104.2	90.1	100.0	142.5	158.0	187.4	207.5
Japan[8]	1,560.0	1,610.0	1,560.0	1,670.0	1,730.0	1,550.0	1,420.0	1,340.0	1,370.0	1,420.0
Korea, Republic of[8]	613.0	568.0	622.0	611.0	519.0	435.0	459.0	451.0	436.0	464.0
Malaysia[8,29]	67.5	72.1	80.7	87.0	78.6	n.a.	n.a.	n.a.	n.a.	n.a.
Philippines[32,8]	1,003.0	1,465.0	1,316.0	1,438.0	[k]2,085.0	1,954.0	2,009.0	1,993.0	2,267.0	2,263.0
Singapore[12,8]	41.5	35.2	53.2	84.1	62.4	46.2	30.7	25.2	30.0	43.2
Thailand[33,34]	1,148.4	[l]1,279.8	994.6	968.7	1,721.6	929.2	[m]433.1	710.0	n.a.	n.a.
Europe										
Austria[8]	135.3	127.7	120.7	105.8	[n]130.2	122.0	108.6	114.8	125.4	n.a.
Belgium[21,35]	464.9	486.3	455.3	444.8	396.0	326.1	396.0	326.1	285.2	282.4
Croatia	108.0	114.0	120.0	123.0	123.0	135.0	140.0	161.0	254.0	267.0
Denmark[36,37]	312.0	231.4	199.5	153.6	200.0	207.9	253.9	242.4	264.8	n.a.
Finland[38,39]	138.0	133.0	129.0	138.0	130.0	116.0	89.0	88.0	193.0	328.0
France[25]	2,911.2	2,709.1	2,504.7	2,531.9	2,562.9	2,621.7	2,516.6	2,458.4	2,340.3	2,911.2
Germany[40,8,35]	[o]2,065.0	[o]2,207.0	[o]2,385.0	2,290.0	[p]2,359.0	2,314.0	2,147.0	1,971.0	1,676.0	n.a.
Greece[21,41]	301.7	315.0	303.9	286.9	286.2	303.4	296.0	280.8	301.1	n.a.
Italy[21]	2,264.0	2,303.0	2,392.0	2,611.0	2,832.0	2,885.0	2,865.0	2,621.0	2,653.0	2,799.0
Netherlands[38]	676.5	n.a.	620.5	n.a.	[q]622.0	609.0	558.0	516.0	490.0	n.a.
Portugal[42]	365.7	393.9	397.0	393.4	329.0	n.a.	243.4	231.1	207.5	194.1
Slovenia	15.8	15.3	14.7	14.2	15.2	21.3	28.2	44.6	75.0	102.6
Spain[25]	2,340.5	2,728.2	2,938.5	2,933.0	24.7	22.3	17.4	18.1	39.2	92.3
Switzerland[8]	26.3	[r]35.2	30.3	25.71	24.7	22.3	17.4	18.1	39.2	92.3

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Table 24.5b Unemployment Levels in Selected Countries: 1983 - 1992 (concluded)
(In thousands)

Continent/country	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Sweden[43]	151.0	136.0	125.0	[a]98.0	84.0	72.0	61.0	69.0	122.0	214.0
United Kingdom[25]	n.a.	3,206.0	3,076.0	3,073.0	2,979.0	2,489.0	2,063.0	1,949.0	2,385.0	2,732.0
Yugoslavia	910.3	974.8	1,039.6	1,086.7	1,080.6	1,131.8	1,201.2	1,308.5	n.a.	n.a.
Oceania										
Australia[8]	697.0	[t]641.2	602.9	[u]613.1	628.9	576.2	509.1	587.1	821.1	933.1
Fiji[8]	14.9	16.8	18.6	18.2	23.0	23.0	15.0	16.0	15.0	15.8
Guam[25]	3.3	2.9	2.7	2.2	1.6	1.6	1.1	1.3	n.a.	n.a.
New Zealand[8]	n.a.	n.a.	64.2	66.0	89.0	112.6	124.6	167.4	168.9	n.a.

[1] Persons aged 16 to 60 years [2] December [3] Bujumbura [4] Persons aged 14 to 55 years [5] 31st December of each year [6] Persons aged 18 to 55 years [7] Year ending in June of the year indicated [8] Persons aged 15 years and over [9] Dakar [10] Blacks [11] Excluding Trankei, Bophuthatswana, Venda, Ciskei; elsewhere persons enumerated at de facto dwelling place [12] June of each year [13] Urban areas [14] Persons aged 10 years old and over [15] Excluding rural population of Rondonia, Acre, Amazonas, Roraima, Para and Amapa [16] September of each year [17] 7 main cities of the country [18] Persons aged 12 years old and over [19] 4th quarter of each year [20] Guatemala City [21] Persons aged 14 years old and over [22] August of each year [23] Metropolitan area [24] Lima [25] Persons aged 16 years old and over [26] Excluding persons temporarily laid off [27] Persons aged 16 to 65 years old [28] Unemployed in urban areas [29] December of each year [30] Including the residents of East Jerusalem [31] Including persons who did not work in the country during the previous 12 months [32] October of each year [33] Persons aged 13 years and over [34] Third round (August) of each year [35] April of each year [36] Persons aged 15 to 74 years [37] April-May of each year [38] Persons aged 15 to 64 years [39] Excluding elderly unemployment pensioners no longer seeking work [40] The series relates to the territory of the Federal Republic of Germany before 2/10/90 [41] Second quarter of each year [42] Persons aged 12 yearls and over; including the Azores and Madeina [43] Persons aged 16 to 74 years old [44] July of each year

[a] Beginning July 1986: new sample based on 1985 population census [b] November [c] Beginning 1987: methodology revised. Data not strictly comparable [d] Beginning 4th quarter 1985: sample design revised. 1985: quarter November. 1985 - January 1986 [e] Metropolitan area [f] Urban area [g] Excluding domestic services [h] Beginning 1985: excluding unpaid family workers who worked for 1 hour or more [i] Intercensal population survey results [j] Prior to 1985: person aged 14 years and over [k] Prior to 1987: fourth quarter of each year [l] Prior to 1984: second round [m] Prior to 1989: persons aged 11 years and over [n] Prior to 1987: excluding the unemployed not previously employed [o] June [p] March [q] Prior to 1987: persons aged 15 years and over; biennial survey (March - May) [r] Including persons partially without employment [s] Prior to 1986: persons aged 16 to 74 years [t] Beginning 1984: estimates based on 1986 census benchmarks [u] Prior to 1986: including unpaid family workers who worked for less than 15 hours

• Provisional data.

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Table 24.5c Wages in Agriculture in Selected Countries: 1983 - 1992

Continent/country	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Africa										
Botswana(E/m-Pula)[1,2]	74.49	65.83	[a]64.42	87.54	92.56	98.62	129.40	161.00	[b]212.00	[b]166.00
Cote d'Ivoire(E/m-Francs, CFA)[3]	n.a.	44.30	45.70	48.40	46.50	47.70	46.70	47.70	n.a.	n.a.
Egypt(E/w-Pounds)[4,5]	n.a.	n.a.	25.00	22.00	25.00	n.a.	n.a.	n.a.	n.a.	n.a.
Kenya(E/m-Shillings)[6,7,8]	539.10	585.00	633.70	720.50	794.30	933.90	990.80	1,084.90	1,225.40	n.a.
Mauritius(E/d-Rupees)[9,10,11]	36.00	39.00	40.00	43.00	[c]43.00	53.00	62.00	64.00	81.00	95.00
Tunisia(R/d-Dinars)	2.60	2.64	2.64	2.90	3.03	3.20	3.32	3.66	3.76	4.06
Zimbabwe(E/m-Dollars)[12,6,13]	88.00	98.10	103.90	114.60	122.20	138.10	150.70	182.90	203.30	n.a.
America										
Barbados(E/w-Dollars)	n.a.	n.a.	n.a.	n.a.	n.a.	198.65	201.85	218.26	234.00	n.a.
Canada(E/w-Dollars)[14,7]	n.a.	542.18	546.02	567.22	597.24	599.83	637.90	658.40	702.99	n.a.
Costa Rica(E/m-Colones)[15,16]	3,559.00	[d]4,556.00	5,295.00	6,038.00	7,769.00	9,241.00	10,973.00	13,539.00	16,521.00	22,503.00
Cuba(E/m-Pesos)[17,18,7]	167.00	175.00	179.00	181.00	178.00	185.00	n.a.	n.a.	n.a.	n.a.
Paraguay(E/m-Guaranies)[7]	19,639.00	22,466.00	31,903.00	44,278.00	n.a.	75,735.00	115,438.00	91,408.00	168,817.00	184,756.00
Peru(E/d-Nuevos Soles)[19,20]	n.a.	n.a.	n.a.	40.69	97.52	454.77	11,073.00	[e]0.16	[f]3.36	n.a.
Uruguay(E/m-Nuevos Pesos)[21,22]	2,787.00	5,425.00	9,586.00	16,177.00	25,579.00	43,456.00	49,136.00	n.a.	n.a.	n.a.
Asia										
Bangladesh(R/d-Taka)[23]	21.60	23.59	27.83	29.53	32.92	41.02	45.68	n.a.	n.a.	n.a.
China(E/m-Yuan)[24,7]	58.42	65.50	75.08	89.58	96.83	109.25	118.05	131.42	141.92	158.17
Cyprus(E/w-Pounds)[5,20,25]	35.95	40.08	45.12	48.4	49.63	53.29	56.75	63.14	72.00	76.44
Israel(E/m-New Shekels)[27,28,29]	22,683.00	108,700.00	[g]390.00	657.00	[h]869.00	1,049.00	1,252.00	[h]1,381.00	1,442.00	1,652.00
Philippines(R/d-Pesos)[30]	16.33	21.24	27.46	29.69	32.43	35.96	41.72	n.a.	n.a.	n.a.
Singapore(E/m-Dollars)[31,32]	n.a.	n.a.	n.a.	607.84	643.92	704.77	704.99	733.44	n.a.	n.a.

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Table 24.5c Wages in Agriculture in Selected Countries: 1983 - 1992 (continued)

Continent/country	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Europe										
Bulgaria(E/m-Leva)[33,34,7]	179.70	193.20	190.30	203.30	209.30	234.00	268.30	400.80	933.90	[g]1,642.00
Croatia(E/m-New Dinars)[7]	1.80	2.60	4.30	8.70	18.00	49.00	771.00	4,688.00	7,883.00	35,675.00
Czechoslovakia(E/m-Koruny)[35,36,7]	2,806.00	2,881.00	2,950.00	2,997.00	3,055.00	3,139.00	3,240.00	3,374.00	[i]3,720.00	n.a.
Denmark(R/h-Kroner)[37,38,25]	51.96	55.58	56.69	57.53	63.65	66.76	69.76	70.90	n.a.	n.a.
Estonia(R/m-Kroons)[7]	232.70	251.7	260.60	275.80	276.50	287.80	305.60	338.00	n.a.	401.00
Finland(E/h-Markkaa)[39]	18.39	20.45	22.47	24.23	25.90	27.60	30.70	33.21	37.19	37.96
Hungary(E/m-Forint)[40]	4,076.00	4,499.00	4,839.00	5,184.00	5,531.00	[j]6,915.00	8,017.00	9,379.00	11,037.00	[k]13,219.00
Italy[41,42,43]	60.60	67.30	75.40	79.30	83.70	89.40	95.50	100.00	106.70	n.a.
Netherlands[42,7,44]	124.10	126.50	130.70	133.00	134.20	136.00	138.70	[l]100.00	103.30	108.60
Romania(E/m-Lei)[33,45]	2,429.00	2,555.00	2,640.00	2,677.00	2,678.00	2,706.00	2,873.00	3,485.00	[m]6,364.00	n.a.
Slovenia(E/m-Tolars)[7]	3.00	5.00	11.00	23.00	38.00	151.00	2,707.00	12,751.00	19,854.00	61,161.00
Sweden(E/h-Kronor)[46,39,47]	37.50	41.12	43.65	[n]53.30	58.23	64.81	69.59	n.a.	84.49	89.16
Ukraine(E/m-Roubles)[35,7]	149.10	154.90	161.10	170.80	177.90	191.50	n.a.	n.a.	n.a.	n.a.
Oceania										
Australia(E/w-Dollars)[48,49]	231.00	248.00	275.00	287.00	321.00	346.00	369.00	359.00	287.00	380.00
Fiji(R/d-Dollars)[8,43]	6.96	8.64	8.32	8.24	8.64	8.56	11.92	n.a.	n.a.	n.a.
Guam(E/h-Dollars, US)[22,50]	5.16	4.71	4.97	4.44	4.37	5.29	5.51	5.36	6.60	n.a.
USSR										
USSR(E/m-Roubles)[35,7,**]	168.50	176.40	182.10	192.00	198.30	210.60	233.50	270.00	n.a.	n.a

Note:

E/m = earnings per month.
E/w = earnings per week
E/d = earnings per day.
E/h = earnings per hour.

R/d = rate per day.
R/h = rate per hour.
R/m = rate per month.

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Table 24.5c Wages in Agriculture in Selected Countries: 1983 - 1992 (concluded)

[1] Citizens only; employees [2] September of each year [3] Modern sector [4] Establishments with 10 or more persons employed [5] October of each year [6] Including the value of payments in kind [7] Employees [8] June of each year [9] Including sugar and tea factories [10] Wage earners on daily rates of pay [11] March of each year [12] Agriculture and forestry [13] All persons engaged [14] Forestry [15] Employees. Labor force sample survey [16] July of each year [17] Excluding fishing [18] State sector(civilian) [19] Lima [20] Wage earners [21] General farm hands [22] December of each year [23] Skilled wage earners [24] Socialised sector [25] Adults [26] Year ending in June of the year indicated [27] Including forestry and fishing [28] Including payments subject to income tax [29] Insurance statistics [30] Rice, corn, coconut and sugarcane [31] Establishments employing 25 or more employees [32] August of each year [33] State and cooperative sector [34] Including veterinary services [35] State sector [36] Including forestry; excluding agricultural cooperatives [37] From collective agreements [38] Casual skilled workers [39] Agriculture and livestock production [40] Prior to 1989: all legal economic units in the socialised sector [41] Excluding forestry, logging and fishing [42] Index of hourly wage rates (1990 = 100) [43] Agricultural workers [44] Including juveniles [45] Net earnings after deduction of income taxes [46] Second quarter of each year - adults [47] Including holidays and sick leave payments and the value of payments in kind [48] Agriculture and hunting [49] Full-time employees [50] Production workers

[a] Prior to 1985: August of each year [b] March [c] Prior to September 1987: including workers on piece rates of pay [d] November [e] Prior to 1990: intis; [1] new sol = 1 million intis [f] June [g] Prior to 1985: shekels; one new shekel is equivalent to 1,000 shekels [h] Sample design revised [i] Beginning 1991: excluding enterprises with less than 100 employees [j] Prior to 1988: gross earnings before income tax deduction [k] Enterprises with more than 50 employees; provisional data [l] Prior to 1990: index base: 1980 = 100 [m] Prior to 1991: agriculture and forestry [n] Prior to 1986: excluding holiday and sick leave payments and the value of payments in kind

* Provisional data.
** USSR before September 1991.

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Table 24.5d Wages in Non-Agricultural Activities in Selected Countries: 1983 - 1992

Continent/country	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Africa										
Botswana(E/m-Pula)[1,2,3]	208.17	228.74	[a]263.05	302.36	309.17	347.29	398.00	457.00	[b]475.00	[b]619.00
Cote d'Ivoire(E/m-Francs)[4]	n.a.	195.60	197.10	248.50	211.80	220.80	215.30	233.50	n.a.	n.a.
Egypt(E/w-Pounds)[5,6]	n.a.	n.a.	32.00	34.00	38.00	n.a.	n.a.	n.a.	n.a.	n.a.
Kenya(E/m-Shillings)[7,8,9]	1,707.80	1,870.40	2,015.60	2,204.10	2,344.60	2,683.70	2,849.70	3,106.10	3,394.10	n.a.
Mauritius(E/d-Rupees)[10,11,12]	33.17	35.46	36.87	37.25	[b]40.97	50.66	53.36	69.33	90.82	103.36
Zimbabwe(E/m-Dollars)[7,13]	312.80	344.20	338.10	425.40	471.50	453.90	588.00	716.40	773.50	[d]932.30
America										
Bolivia(R/m-Bolivianos)[3,8]	n.a.	n.a.	73.00	208.00	308.00	449.00	532.00	692.00	755.00	[e]884.00
Brazil(E/m-Cruzeiros)[14,8]	n.a.	385.10	1,422.70	3,421.00	11,152.00	72,679.00	n.a.	n.a.	n.a.	n.a.
Canada(E/h-Dollars)[15,16]	9.86	10.19	10.49	10.76	11.1	11.53	12.15	12.67	13.33	13.80
Costa Rica(E/m-Colones)[17,8]	5,905.00	[c]8,258.00	9,290.00	10,919.00	[f]14,922	17,512.00	20,876.00	24,776.00	29,829.00	35,798.00
Cuba(E/m-Pesos)[8,18,19]	183.00	188.00	190.00	189.00	186.00	187.00	n.a.	n.a.	n.a.	n.a.
Chile[20,8]	108.33	129.97	162.60	198.30	237.27	289.98	345.77	443.83	566.84	683.96
Nicaragua(E/h-Cordobas)[8]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	[g]5.64	[g]555.40	[h]3.69	5.98
Paraguay(E/m-Guaranies)[8]	38,900.00	48,569.00	65,174.00	85,609.00	n.a.	154,932.00	201,293.00	245,183.00	339,252.00	370,520.00
Peru(E/d-Nuevos Soles)[21,22,37]	8.29	14.86	33.80	80.55	162.43	779.63	19,088.00	n.a.	n.a.	n.a.
United States(E/h-Dollars)	8.02	8.32	8.57	8.76	8.98	[i]9.28	9.66	10.01	10.33	10.59
Uruguay[23,24,8]	n.a.	100.00	168.50	322.20	572.80	953.80	1,774.90	3,522.30	7,713.20	n.a.
Asia										
China(E/m-Yuan)[25,8]	68.83	81.17	91.83	105.82	116.58	145.58	164.08	181.33	198.25	225.74
Hongkong(R/d-Dollars)[26,27]	81.30	92.00	100.80	109.20	122.20	139.50	[j]160.30	[k]183.70	[k]207.00	[k]227.70
Israel(E/m-New Shekels)[8,28]	38,189.00	185.00	[l]658.00	1,085.00	[m]1,401.00	1,724.00	2,020.00	[m]2,299.00	2,699.00	3,054.00
Japan(E/m-Yen)[29,8]	297,269.00	310,463.00	[m]317,091.00	327,041.00	335,944.00	341,160.00	357,079.00	370,169.00	384,787.00	392,608.00
Korea, Republic of(E/m-Won)[30,8]	273,119.00	296,907.00	324,283.00	350,966.00	386,536.00	446,370.00	540,611.00	642,309.00	754,673.00	[n]869.00
Philippines(E/m-Pesos)[31,32,8]	1,383.00	1,805.00	2,085.00	2,375.00	2,700.00	3,131.00	3,689.00	n.a.	n.a.	n.a

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Table 24.5d Wages in Non-Agricultural Activities in Selected Countries: 1983 - 1992 (continued)

Continent/country	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Singapore(E/m-Dollars)[33,8]	947.00	1,048.00	1,131.00	1,139.80	1,175.80	1,272.70	1,397.90	1,527.80	1,668.60	1,794.40
Sri Lanka(E/h-Rupees)[34,35]	3.99	4.43	5.30	5.60	6.28	6.73	7.77	9.23	11.38	n.a.
Thailand(E/m-Baht)[8]	1,803.00	3,313.00	3,358.00	3,175.00	n.a.	n.a.	3,580.00	3,753.00	4,395.00	n.a.
Europe										
Belgium(E/h-Francs)[36,37,6]	272.06	283.35	295.17	296.37	303.11	310.35	327.62	342.71	362.88	n.a.
Bulgaria(E/m-Leva)[38,37,8]	205.30	211.40	220.30	230.60	240.80	256.60	275.70	352.30	964.20	[o]2,123.00
Croatia(E/m-New Dinars)[8]	2.10	2.70	4.80	9.40	19.00	54.00	820.00	4,990.00	13,442.00	37,517.00
Czechoslovakia(E/m-Koruny)[38,8]	2,788.00	2,835.00	2,879.00	2,922.00	2,981.00	3,049.00	3,116.00	3,229.00	[n]3,771.00	n.a.
Denmark(E/h-Kroner)[40,41]	77.05	80.89	84.78	89.43	98.10	104.13	108.32	112.74	117.48	n.a.
France(E/h-Frans)[43,6]	33.30	35.39	[o]37.51	38.74	40.27	[p]41.33	43.03	45.08	n.a.	n.a.
Germany(E/h-Mark)[44,45,56]	15.41	15.77	16.39	16.99	17.68	18.43	19.16	20.21	21.45	22.66
Hungary(E/m-Forint)[46,8,47]	4,694.00	5,286.00	5,972.00	6,260.00	6,842.00	[q]8,832.00	10,461.00	13,107.00	16,752.00	[r]22,283.00
Italy[45,48]	60.10	67.00	74.20	77.80	82.80	87.9	93.30	100.00	109.80	n.a.
Netherlands(E/h-Guilders)[6,8]	18.42	18.46	18.55	18.86	19.15	19.42	19.78	20.58	21.52	n.a.
Romania(E/m-Lei)[38,47]	2,537.00	2,711.00	2,757.00	2,781.00	2,802.00	2,883.00	2,990.00	3,277.00	[s]7,265.00	n.a.
Slovenia(E/m-Tolars)[8]	3.00	4.00	8.00	17.00	38.00	120.00	2,121.00	10,157.00	16,778.00	50,945.00
Spain(E/h-Pesetas)[42,8]	452.00	508.00	558.00	616.00	667.00	720.00	802.00	876.00	956.00	1,036.00
Ukraine(E/m-Roubles)[49,8]	167.30	170.80	175.10	179.70	185.60	200.50	218.20	247.80	476.90	n.a.
United Kingdom(E/h-Pounds)[50]	n.a.	n.a.	3.53	3.77	4.00	4.27	4.61	5.03	5.46	5.79
Oceania										
Australia[22,52,53]	196.80	206.70	[t]103.80	106.50	112.10	120.10	127.80	134.20	139.10	140.40
Guam(E/h-Dollars,US)[22,54,11]	5.64	5.91	5.96	6.24	6.23	6.72	7.18	7.84	8.42	8.61
New Zealand(E/h-Dollars)[15,55,8]	7.55	7.82	8.21	10.32	11.46	12.61	13.33	14.19	14.71	14.98
USSR										
USSR(E/m)[49,8,**]	182.10	186.00	191.20	196.30	203.70	221.10	241.40	272.00	n.a.	n.a.

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Table 24.5d Wages in Non-Agricultural Activities in Selected Countries: 1983 - 1992 (concluded)

Note:

E/m = earnings per month.
E/w = earnings per week.
E/d = earnings per day.
E/h = earnings per hour.
R/d = rate per day.
R/m = rate per month.

[1] Including agriculture, hunting, forestry and fishing; excluding government sector [2] Citizens only; employees [3] September of each year [4] Modern sector [5] Establishments with 10 or more persons employed [6] October of each year [7] Including the value of payments in kind [8] Employees [9] June of each year [10] Excluding sugar and tea factories [11] Wage earners on daily rates of pay [12] March of each year [13] All persons engaged [14] Figures in thousands [15] Including forestry and logging [16] Emolyees paid by the hour [17] July of each year [18] Including fishing [19] State sector (civilian) [20] Index of monthly earning (December 1982 = 100) [21] Lima [22] Including agriculture, hunting, forestry and fishing [23] Excluding mining and quarrying [24] Index of average monthly earnings (Oct.- Dec. 1984 = 100) [25] Socialised sector; including agriculture and forestry [26] Excluding major divisions 2, 5, 6 and 8 [27] March, June, September and December of each year [28] Insurance statistics; statistics [29] Including family allowances and mid- and end-of-year bonuses [30] Including family allowances and the value of payments in kind [31] Computed on the basis of annual wages [32] Establishments with 10 or more persons employed [33] Social security statistics [34] Excluding major divisions 4, 8 and 9 [35] Minimum rates [36] Excluding major divisions 4, 6, 7, 8 and 9 [37] Wage earners [38] State and cooperative sector [39] Excluding veterinary services [40] Series covering mainly manufacturing and construction and parts of major divisions 4, 6, 7 and 8 [41] Adults [42] Excluding major division 9 [43] Excluding major divisions 2, 4, public sector and private domestic services [44] The series relates to the territory of the Federal Republic of Germany before March 10, 1990 [45] Excluding major division 6, 7, 8 and 9 [46] Socialised sector until 1988; excluding major divisions 8 and 9 [47] Net earnings after deduction of income taxes [48] Index of hourly wage rates (1990 = 100) [49] Socialised sector [50] Full-time workers on adult rates of pay [51] April; excluding Northern Ireland [52] Index of hourly award rates of pay (June 1985 = 100) [53] Full-time adult employees - December of each year [54] December of each year [55] Establishments with the equivalent of more than 2 full time paid employees [56] Including family allowances paid directly by the employers.

[a] Prior to 1985: August of each year [b] March [c] Prior to September 1987: individual workers on piece rates of pay [d] Second quarter [e] November [f] Beginning 1987: methodology revised [g] Figures in thousands [h] Prior to 1991: old cordobas; 1 new cordoba = 1,000 old cordobas [i] New industrial classification [j] March, June and September [k] March and September [l] Prior to 1985:shekels; one new shekel = 1,000 hekels [m] Sample design revised [n] Beginning 1991: excluding enterprises with less than 100 employees [o] Beginning April 1985: revised series [p] Methodology revised; data not strictly comparable [q] Prior to 1988: gross earnings before income tax deductions [r] Enterprises with more than 50 employees; provisional data [s] Prior to 1991: including logging and fishing [t] Prior to 1985: index base: June 1976 = 100

• Provisional data.
•• USSR before September 1991.

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Table 24.6 National Income and Gross Domestic Product by Selected Countries, in Current Prices: 1983-1990
(Billions of national currency units)

Country/unit		1983	1984	1985	1986	1987	1988	1989	1990
A. National income									
B. Gross domestic product									
Philippines	A	334,188	460,111	499,400	536,259	609,164	727,997	839,250	987,655
(Pesos)	B	369,077	524,481	571,883	608,887	685,068	802,519	922,569	1,066,224
Australia	A	160,029	176,902	194,983	213,408	241,758	276,242	298,243	301,432
(Australian dollars)	B	194,777	216,150	240,319	264,564	298,335	340,440	370,805	377,114
Austria	A	1,043.17	1,110.03	1,173.83	1,234.34	1,284.61	1,353.89	1,443.88	1,556.84
(Schillings)	B	1,201.22	1,276.78	1,348.43	1,4422.50	1,481.39	1,561.70	1,663.89	1,789.39
Belgium	A	3,661,022	3,945,953	4,206,241	4,449,860	4,651,774	4,941,161	5,385,468	5,742,393
(Belgian francs)	B	4,122,259	4,429,036	4,738,039	4,985,952	5,205,543	5,542,673	6,015,975	6,429,346
Brazil	A	110	364	1,309	3,499	11,101	82,777	1,227,975	-
(Cruzeiros)	B	117	386	1,383	3,662	11,537	86,197	1,266,348	-
Canada	A	341,319	376,078	404,036	423,620	464,508	513,435	550,281	565,006
(Canadian dollars)	B	402,229	441,311	474,339	501,426	546,778	599,969	643,406	665,236
Chile	A	1,217,068	1,478,445	2,107,851	-	-	-	-	-
(Pesos)	B	1,535,676	1,902,702	2,576,638	3,246,106	4,159,762	5,411,025	6,778,442	8,477,861
China[1]	A	518.5	625.1	771.9	867.6	1,014.4	1,268.1	14,405	1,601.5
(Yuan)	B	578.7	692.8	852.7	968.8	1,130.7	1,402.4	1,592.1	1,767.1
Denmark	A	447,211	491,224	534,101	581,404	610,742	639,521	669,731	693,985
(Kroner)	B	512,541	565,284	615,072	666,496	699,908	732,055	769,801	800,014
Finland	A	227,207	256,418	278,797	297,016	325,789	368,493	411,622	428,175
(Markka)	B	274,647	308,357	334,986	357,566	391,597	441,539	496,935	524,781
France	A	3,486,225	3,786,766	4,085,084	4,420,715	4,650,685	-	-	-
(Francs)	B	4,006,498	4,361,913	4,700,143	5,069,296	5.,336,652	5,723,206	6,136,070	6,484,109
Germany, Fed. Rep. of	A	1,460,770	1,536,930	1,599,140	1,692,410	1,750,700	1,844,910	1,965,790	2,125,810
(Deutsche mark)	B	1,668,540	1,750,890	1,823,180	1,925,290	1,990,480	2,095,980	2,220,880	2,404,540
Greece/	A	2,836,988	3,478,180	4,180,987	4,941,782	5,617,094	6,808,225	7,899,796	9,452,982
(Drachmas)	B	3,079,178	3,805,686	4,617,816	5,514,766	6,258,478	7,526,471	8,777,535	454,979

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Table 24.6 National Income and Gross Domestic Product by Selected Countries, in Current Prices: 1983-1990 (continued)
(Billions of national currency units)

Country/unit		1983	1984	1985	1986	1987	1988	1989	1990
Hongkong	A	-	-	-	-	-	-	-	-
(HK dollars)	B	206,217	247,933	261,070	298,515	367,603	433,657	496,385	-
India[2]	A	1,874.16	2,078.72	2,342.54	2,603.46	2,963.11	3,525.76	3,939.13	-
(Rupees)	B	2,075.89	2,313.87	2,619.20	2,919.74	3,326.16	3,949.92	4,427.69	-
Indonesia	A	70,459	81,208	88,206	93,356	112,554	128,078	150,958	179,009
(Rupiahs)	B	77,623	89,885	96,997	102,683	124,817	142,105	167,495	197,721
Iran, Islamic Rep. of[3]	A	12,809.9	13,956.2	15,197.6	16,701.1	19,755.5	21,507.5	25,811.9	-
(Rials)	B	13,749.5	15,029.6	16,555.8	18,125.5	21,270.4	23,587.9	28,288.0	-
Ireland	A	12,067.0	13,171.0	14,100.3	15,072.3	16,288.5	17,152.2	18,896.0	20,328.0
(Irish pounds)	B	14,779.2	16,406.6	17,789.9	18,877.0	20,262.8	21,815.1	24,307.0	25,693.0
Israel	A	1,569	7,431	27,978	44,736	57,764	70,776	85,303	104,806
(Shekels)	B	1,639	8,047	30,402	47,813	61,267	74,385	89,165	108,810
Italy	A	550,763	631,864	705,110	785,336	860,580	95,712.9	1,041,706	1,135,763
(Lire)	B	633,436	725,760	810,580	899,903	983,803	1,091,837	1,192,725	1,306,833
Japan[2]	A	243,564	260,157	277,780	289,508	302,708	323,133	343,147	367,898
(Yen)	B	281,767	300,543	320,419	334,609	348,425	371,429	396,197	425,735
Korea, Rep. of	A	55,970	63,222	70,162	81,567	94,990	112,967	127,084	151,523
(Won)	B	63,833	72,644	80,847	93,426	108,428	127,963	143,001	169,701
Kuwait	A	7,250	7,448	6,787	6,534	7,136	7,033	8,612	
(Dinars)	B	6,134	6,381	5,830	4,816	6,154	5,586	6,779	
Mexico	A	14,648	24,495	39,939	64,409	158,668	327,908	432,499	589,330
(Pesos)	B	17,879	29,472	47,392	79,536	192,802	389,259	503,668	678,923
Netherlands	A	381,580	399,750	418,860	427,630	429,440	447,400	476,020	509,000
(Guilders)	B	381,020	400,250	418,180	428,610	430,170	449,820	475,300	508,310
New Zealand	A	33,621	37,526	42,915	52,321	58,645	63,377	67,367	69,942
(New Zealand dollars)	B	34,896	39,529	45,435	55,088	61,850	66,605	71,549	73,746

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Table 24.6 National Income and Gross Domestic Product by Selected Countries, in Current Prices: 1983-1990 (continued)
(Billions of national currency units)

Country/unit		1983	1984	1985	1986	1987	1988	1989	1990
Norway	A	329,581	376,857	424,183	432,065	468,631	478,542	506,864	545,849
(Kroner)	B	402,198	452,512	500,200	513,718	561,480	583,278	621,383	661,669
Poland[1]	A	5,924.0	7,181.8	8,586.4	10,697.1	14.013.2	-	-	-
(Zlotych)	B	-	-	-	-	-	-	-	-
Portugal	A	2,079,771	2,516,643	3,175,856	4,080.6	-	-	-	-
(Escudos)	B	2,301,713	2,815,728	3,523,945	4,420,400	5,174,732	6,002,751	7,130,260	8,507,434
Singapore	A	31,660.7	35,332.7	3,4540.9	33,370.5	36,493.1	42,466.8	48,234.9	55,147.3
(Singapore dollars)	B	36,732.8	40,047.9	38,923.5	38,652.9	42,662.5	49,694.2	56,235.1	62,711.3
South Africa	A	73,077	86,244	96,963	109,612	129,040	157,732	185,253	210,734
(Rand)	B	91,457	107,221	123,126	142,135	164,524	197,910	233,134	263,812
Spain	A	19,238.6	21,684.9	24,282.7	28,169.7	31,661.8	35,173.1	39,648.0	44,146.1
(Pesetas)	B	22,234.7	25,111.3	28,200.9	32,324.0	36,144.0	40,164.0	45,024.9	50,074.1
Sweden	A	608,925	682,740	745,232	818,347	886,606	961,555	1,058,405	1,158,921
(Kronor)	B	709,852	794,298	865,788	945,583	1,019,547	1,110,471	1,226,313	1,350,138
Switzerland	A	193,050	204,360	217,955	230,530	240,450	255,205	274,650	293,245
(Swiss francs)	B	203,865	213,230	227,950	243,350	254,685	268,410	290,360	312,355
Thailand	A	838,657	888,985	915,366	979,500	1,127,538	1,363,695	1,608,824	1,869,069
(Baht)	B	910,054	973,412	1,014,399	1,095,368	1,253,147	1,506,977	1,775,978	2,051,208
USSR[1]	A	548.3	570.5	577.5	576.0	585.8	-	-	-
(Roubles)	B	-		777.0	798.5	825.0	875.4	-	-
United Kingdom	A	268,799	286,862	314,257	338,070	371,473	412,358	451,838	486,537
(Pounds sterling)	B	303,377	324,081	354,911	381,731	419,983	466,477	510,020	549,181
United States	A	2,947,710	3,292,870	3,504,900	3,687,240	3,930,590	4,259,730	4,540,700	4,781,400
(Dollars)	B	3,349,390	3,717,770	3,962,220	4,176,100	4,452,880	4,809,080	5,132,000	5,392,200
Venezuela	A	256,600	373,565	412,158	431,269	621,926	776,840	1,340,597	2,038,554
(Bolivares)	B	290,492	420,072	464,741	489,172	696,421	873,283	1,510,361	2,264,039
Yugoslavia	A	387	610	1,092	2,133	4,764	14,687	223,114	1,119,518
(Dinars)	B	428	665	1,195	2,340	5,234	15,833	235,395	1,147,787

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Table 24.6 National Income and Gross Domestic Product by Selected Countries, in Current Prices: 1983-1990 (concluded)
(Billions of national currency units)

[1] Item 'National Income' refers to net material product by kind of activity of the material sphere.
[2] Item 'National Income' includes consumption of fixed capital.
[3] Item 'National Income' includes statistical discrepancy.

Source: **United Nations National Accounts Statistics: Main Aggregates and Detailed Tables, 1987.** New York, 1989.

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Table 24.7 International Reserves by Selected Countries: 1985-1991
(Million U.S. dollars)

Country	1985	1986	1987	1988	1989	1990	1991
Philippines	615	1,728	968	1,003	1,417	924	3,246
Algeria	2,819	1,660	1,641	900	847	725	1,486
Argentina	3,273	2,718	1,617	3,363	1,463	4,592	6,615
Australia	5,768	7,246	8,744	13,598	13,780	16,264	16,534
Austria	4,767	6,162	7,532	7,368	8,598	9,376	10,332
Belgium	4,849	5,538	9,620	9,333	10,766	12,151	12,180
Brazil	10,605	5,803	6,299	6,284	7,535	7,441	8,033
Canada	2,503	3,251	7,277	15,391	16,055	17,845	16,252
China, People's Republic of	12,728	11,453	16,305	18,541	17,960	29,586	43,674
Denmark	5,429	4,965	10,066	10,765	6,397	10,591	7,404
Egypt	792	829	1,378	1,263	1,520	2,684	5,325
Finland	3,750	1,787	6,418	6,369	5,111	9,644	7,609
France	26,589	31,454	33,049	25,364	24,611	36,778	31,284
Germany (United)[2]	-	-	-	-	60,709	67,902	63,001
Germany, Federal Republic of	44,380	51,734	78,756	58,528	-	-	-
Greece	868	1,519	2,681	3,619	3,223	3,412	5,189
India	6,420	6,396	6,454	4,899	3,859	1,521	3,627
Indonesia	4,974	4,051	5,592	5,048	5,454	7,459	9,258
Ireland	2,940	3,236	4,796	5,087	4,057	5,223	5,740
Israel	3,680	4,660	5,876	4,016	5,276	6,275	6,279
Italy	15,595	19,987	30,214	34,715	46,720	62,927	48,679
Japan	26,719	42,257	80,973	96,728	83,957	78,501	72,059
Korea, Republic of	2,869	3,320	3,584	12,347	15,214	14,793	13,701
Kuwait	5,471	5,501	4,142	1,924	3,102	1,952	3,409
Malaysia	4,912	6,027	7,435	6,527	7,783	9,754	-
Mexico	4,906	5,670	12,464	5,279	6,329	9,863	17,726
Netherlands	10,782	1,191	16,003	16,075	16,508	17,484	17,798
New Zealand	1,596	3,771	3,260	2,836	3,027	4,129	3,203
Nigeria	1,667	1,081	1,165	651	1,766	3,846	4,435

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Table 24.7 International Reserves by Selected Countries: 1985-1991 (concluded)
(Million U.S. dollars)

Country	1985	1986	1987	1988	1989	1990	1991
Norway	13,917	12,525	14,277	13,268	13,785	15,332	13,232
Peru	1,842	1,407	646	511	808	1,040	2,443
Saudi Arabia	25,004	18,324	22,684	20,553	16,748	11,668	11,673
Singapore	12,847	12,939	15,227	17,073	20,345	27,748	34,128
South Africa	315	370	641	780	960	1,008	899
Spain	11,175	14,755	30,669	37,074	41,467	51,228	65,822
Sweden	5,793	6,551	8,174	8,492	9,559	17,988	18,331
Switzerland	18,016	21,786	27,476	24,203	25,276	29,223	29,004
Thailand	2,190	2,804	4,007	6,097	9,515	13,305	17,517
United Kingdom[1]	13	18	42	44	34	35	41
United States[1]	32	37	35	37	63	72	66
Venezuela	10,251	6,437	5,963	3,092	4,106	8,321	10,665
Yugoslavia	1,095	1,460	698	2,298	4,136	5,474	2,682

Notes: **International reserves** refer to gold holdings and special drawing rights (SDR) and reserve position in IMF and foreign exchange holdings.
Special drawing rights (SDR) are unconditional reserve assets created under the Fund.
Reserve positions in the International Monetary Fund (IMF) are unconditional assets that arise from the countries' gold subscription to the Fund, from the Fund's use of member currencies to finance drawings of others and from Fund Borrowings.
Foreign exchange is defined as holdings by monetary authorities (Central banks, currency boards, exchange stabilization funds and treasures to the extent that they perform similar functions) of claims or foreigners in the form of bank deposits.

[1] In billion U.S. dollars. [2] Data which pertain to Germany prior to 3 October 1990.

Source: **United Nations Statistical Yearbook 1990.** New York, 1993.

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Table 24.8 Exchange Rates by Selected Countries: 1985-1991
(National currency per U.S. dollar)

Country	Unit	1985	1986	1987	1988	1989	1990	1991
Philippines	Peso	19.03	20.53	20.80	21.34	22.4	28.00	26.65
Australia	Australian Dollar	1.40	1.50	1.38	1.17	1.26	1.29	1.32
Austria	Schilling	17.28	13.71	11.25	12.56	11.82	10.68	10.69
Belgium	Franc	50.36	40.41	33.15	37.35	35.76	30.98	31.27
Brazil	Cruzeiro	0.0010	0.015	0.072	0.765	11.36	177.06	1,068.80
Canada	Canadian Dollar	1.39	1.38	1.30	1.19	1.16	1.16	1.16
Chile	Peso	183.86	204.73	238.14	247.2	297.37	337.09	374.51
China	Yuan	3.20	3.72	3.72	3.72	4.72	5.22	5.43
Denmark	Krone	8.97	7.34	6.10	6.87	6.61	5.78	5.91
Egypt	Pound	0.70	0.70	0.70	0.70	1.10	2.00	3.33
Finland	Markka	5.42	4.79	3.95	4.17	4.06	3.63	4.13
France	Franc	7.56	6.45	5.34	6.06	5.79	5.13	5.18
Germany (United)	Deutsche Mark	-	-	-	-	1.70	1.50	1.51
Germany, Fed. Rep. of	Deutsche Mark	2.46	1.94	1.58	1.78	-	-	-
Greece	Drachma	147.76	138.76	125.92	148.10	157.79	157.63	175.28
India	Rupee	12.16	13.12	12.88	14.95	17.04	18.07	25.83
Indonesia	Rupiah	1,125.00	1,641.00	1,650.00	1,731.00	1,797.00	1,901.00	1,992.00
Iran	Rial	84.23	75.64	65.62	68.59	70.23	65.31	64.59
Iraq	Dinar	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Ireland	Pound	0.80	0.71	0.60	0.66	0.64	0.56	0.57
Israel	New Shekel	1.49	1.48	1.54	1.68	1.96	2.05	2.28
Italy	Lire	1,678.50	1,358.13	1,169.25	1,305.77	1,270.50	1,130.15	1,151.06
Japan	Yen	200.50	159.10	123.50	125.85	143.45	134.40	125.20
Korea, Republic of	Won	890.20	861.40	792.30	684.10	679.60	716.40	760.80
Kuwait	Dinar	0.29	0.29	0.27	0.20	0.29	-	0.28
Malaysia	Ringgit	2.42	2.60	2.49	2.72	2.70	2.70	2.72
Mexico	Peso	371.70	923.50	2,209.70	2,281.00	2,041.00	2,945.40	3,071.00
Netherlands	Guilder	2.77	2.19	1.77	1.99	1.91	1.69	1.71
New Zealand	New Zealand Dollar	2.00	1.91	1.52	1.59	1.67	1.70	1.85

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Table 24.8 Exchange Rates by Selected Countries: 1985-1991 (concluded)
(National currency per U.S. dollar)

Country	Unit	1985	1986	1987	1988	1989	1990	1991
Nigeria	Naira	1.00	3.31	4.14	5.35	7.65	9.00	9.86
Norway	Krone	7.58	7.40	6.23	6.57	6.61	5.91	5.97
Papua New Guinea	Kina	1.01	0.96	0.88	0.83	0.86	0.95	0.95
Peru	New Sol	13.95	13.95	33.00	500.00	5,261.00	[a]516.9	960.00
Portugal	Escudo	157.48	146.11	129.86	146.37	149.84	133.60	134.18
Saudi Arabia	Riyal	3.64	3.74	3.74	3.74	3.74	3.74	3.74
Singapore	Singapore Dollar	2.10	2.17	1.99	1.95	1.89	1.84	1.63
South Africa	Rand	2.55	2.18	1.93	2.38	2.54	2.56	2.74
Spain	Peseta	154.15	132.39	109.00	113.45	109.72	96.91	96.69
Sweden	Krona	7.61	6.81	5.85	6.16	6.23	5.70	5.53
Switzerland	Franc	2.08	1.62	1.28	1.50	1.55	1.33	1.35
Thailand	Baht	26.65	26.13	25.07	25.24	25.69	25.29	25.28
United Kingdom	Pound	0.69	0.67	0.53	0.55	0.62	0.52	0.53
Venezuela	Bolivar	7.50	14.50	14.50	14.50	43.08	50.38	61.55
Yugoslavia	New Dinar	0.03	0.05	0.12	0.52	11.82	10.66	19.73

Note: Data refer to last working day of the year.

[a] Marked break in series.

Source: *United Nations Statistical Yearbook 1990*. New York, 1993.

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Table 24.9 Money Supply by Selected Countries: 1985-1991

Country	1985	1986	1987	1988	1989	1990	1991
Philippines (Billion Pesos)	35,782	42,659	52,382	59,548	81,276	92,936	107,693
Algeria (Million Dinars)	202,230	204,752	223,869	252,207	250,013	270,082	-
Argentina (Billion Pesos)	3,030	5,600	12,580	55,082	231	2,706	-
Australia (Million Aust. Dollar)	23,298	25,947	31,218	40,470	43,514	46,669	49,983
Austria (Billion Schillings)	182	194	213	232	235	247	266
Belgium (Billion Francs)	963	1,038	1,086	1,146	1,207	1,217	-
Brazil (Billion Cruzeiros)	106,149	96,476	-	-	-	-	-
Canada (Billion Can. Dollar)	70	80	85	91	95	96	-
China, People's Rep. (Billion Yuan)	281	421	457	549	583	701	-
Denmark (Billion Kroner)	196	215	235	215	226	244	[a]258
Egypt (Million Pounds)	14,696	15,973	18,241	20,579	22,471	26,205	28,338
Finland (Million Markka)	27,694	27,838	30,342	35,921	41,444	44,428	-
France (Billion Francs)	1,072	1,014	1,471	1,532	1,633	1,702	-
Germany [1] (Billion Deutsche Mark)	315	340	366	408	432	551	557
Greece (Billion Drachmas)	744	897	1,000	906	1,486	1,848	-

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Table 24.9 Money Supply by Selected Countries: 1985-1991 (continued)

Country	1985	1986	1987	1988	1989	1990	1991
India (Billion Rupees)	412	477	543	633	747	836	1,022
Indonesia (Billion Rupiahs)	10,124	11,631	12,705	14,392	20,599	23,819	26,693
Ireland (Million Pounds)	2,288	2,382	2,640	2,826	3,112	3,346	3,390
Israel (Billion Shekels)	1,051	2,238	3,346	3,723	5,374	7,023	7,981
Italy (Billion Lire)	308,648	342,535	360,819	388,224	433	467	514
Japan (Billion Yen)	89	98	103	112	114	120	139
Korea (Billion Won)	7,558	8,809	10,107	12,152	14,328	15,905	21,752
Kuwait (Million Dinars)	944	979	1,036	958	939	-	1,230
Malaysia (Million Ringgit)	14,132	14,523	16,375	18,730	21,978	25,405	-
Mexico (Billion Pesos)	3,462	5,790	12,627	21,191	29,087	47,439	-
Netherlands (Billion Guilders)	91	97	104	111	119	124[a]	130
New Zealand (Million New Zealand Dollar)	4,104	4,668	6,667	[a]14,468	21,408	23,694	-
Nigeria (Million Naira)	13,227	12,663	14,906	21,446	25,831	34,540	-
Norway (Billion Kroner)	99	102	153	187	218	238	256
Peru (Billion Soles)	23,002	42,713	95,177	94,250	[a]10,403	-	-

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Table 24.9 Money Supply by Selected Countries: 1985-1991 (concluded)

Country	1985	1986	1987	1988	1989	1990	1991
Saudi Arabia (Billion Riyals)	82	86	92	93	91	102	-
Singapore (Million Singapore Dollar)	8,785	9,822	11,031	11,958	-	-	-
South Africa (Million Rand)	21,332	23,207	32,026	39,934	43,343	49,858	-
Spain (Billion Pesetas)	6,589	7,580	8,899	10,573	12,177	14,674	16,573
Sweden (Billion Kronor)	103	112	115	117	-	-	-
Switzerland (Billion Francs)	74	76	86	88	86	84	83
Thailand (Billion Baht)	90	106	132	148	175	195	-
United Kingdom (Billion Pounds)	56,674	69,265	153,491	169,881	195,310	214,943	229,231
United States (Billion U.S. Dollar)	641	747	766	805	824	854	924
Venezuela (Million Bolivares)	93,707	98,479	133,779	166,076	169,952	269,263	347,573
Yugoslavia (Billion Dinars)	1,820	3,830	764	2,407	51,030	126,283	-

[a] Marked break in series.
[1] Data which pertain to Germany prior to 3 October 1990.

Source: United Nations Statistical Yearbook 1990. New York, 1993.

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Table 24.10 Total Energy Balance by Selected Countries: 1989-1990 (Terajoules)

Country	Total energy 1989	Total energy 1990	Final consumption 1989	Final consumption 1990
Philippines	934,942	965,065	773,686	800,575
Argentina	1,976,822	1,974,836	1,302,636	1,332,008
Bangladesh	516,115	540,570	386,948	398,232
Barbados	14,544	15,096	9,154	9,840
Bolivia	97,699	99,244	69,423	71,111
Brazil	6,196,703	5,906,089	4,801,443	4,604,244
Chile	534,041	566,146	428,434	448,921
Colombia	1,029,957	1,074,849	765,455	798,370
Costa Rica	86,003	89,052	77,317	78,874
Cyprus	54,392	58,278	36,162	38,552
Ecuador	277,172	296,848	246,529	276,107
Egypt	1,137,120	1,187,395	789,598	808,399
El Salvador	78,204	81,338	80,335	83,075
Fiji	22,987	21,525	21,631	19,807
Gabon	68,728	68,701	49,010	48,147
Honduras	83,299	84,713	78,131	79,739
Hongkong	358,231	327,831	169,707	176,851
India	10,567,381	10,969,044	7,781,360	7,859,453
Indonesia	3,196,346	3,258,372	2,620,178	2,678,430
Israel	442,898	448,902	235,613	255,417
Jamaica	71,156	67,171	44,039	43,835
Jordan	117,234	131,820	84,703	90,050
Kenya	390,791	397,855	417,227	416,791
Korea, Republic of	3,011,520	3,399,335	2,504,617	2,887,852
Kuwait (including part of Neutral Zone)	569,790	433,679	324,307	274,229
Malawi	140,958	142,065	139,849	140,956
Morocco	282,230	297,262	179,543	188,995
Nepal	221,855	218,606	220,832	217,768
Nicaragua	67,268	67,770	57,247	58,690
Niger	57,211	58,825	54,736	56,265
Nigeria	1,584,357	1,598,281	1,519,815	1,515,034
Pakistan	1,213,731	1,296,645	911,729	969,857
Papua New Guinea	92,247	92,803	45,894	46,582
Qatar	231,681	257,687	153,857	160,456
Saudi Arabia (including part of Neutral Zone)	n.a.	n.a.	n.a.	n.a.
Singapore	518,636	553,058	310,891	346,519
Sri Lanka	145,241	151,859	133,127	140,992
Thailand	1,521,653	1,686,862	1,111,169	1,207,299
Trinidad and Tobago	235,223	279,775	169,724	196,631
Tunisia	212,960	227,573	164,139	166,391
Uruguay	103,793	100,415	81,340	81,877
Venezuela	1,808,722	1,910,072	996,598	1,038,865
Zambia	166,734	168,298	163,329	166,185
Zimbabwe	270,263	259,737	200,192	180,731

Source: **United Nations Energy Balance and Electricity Profiles, 1988.** New York, 1990.

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Table 24.11 Energy Production and Consumption by Selected Countries: 1989-1991
(Quantity in thousand metric tons of coal equivalent; consumption per capita in kilograms)

Country	Production			Consumption			Consumption per capita		
	1989	1990	1991	1989	1990	1991	1989	1990	1991
World	11,301.2	11,429.5	11,426.7	10,883.0	10,859.4	10,965.9	2,049	2,010	2,029
Philippines	8.5	8.6	8.8	18.0	24.8	25.8	295	398	405
Argentina	66.0	69.3	73.2	61.8	60.8	64.7	1,937	1,881	1,977
Australia	192.9	211.3	218.5	120.6	127.1	127.0	7,241	7,442	7,321
Austria	8.5	8.2	8.3	30.5	31.8	32.5	4,018	4,129	4,195
Belgium	17.1	16.9	16.6	57.2	66.6	69.0	5,811	6,686	6,900
Brazil	79.1	82.2	83.0	117.6	115.8	121.2	798	777	799
Canada	385.2	386.6	404.3	287.1	296.8	299.5	10,913	11,412	11,095
China	983.3	1,004.0	1,014.0	892.5	893.4	933.0	810	788	811
Czechoslovakia	71.0	64.9	60.7	93.1	96.3	88.9	5,958	6,149	5,666
Denmark	12.0	12.8	15.4	22.6	23.8	26.2	4,413	4,642	5,084
Egypt	73.1	75.5	79.1	38.3	36.5	38.3	741	696	713
Finland	10.6	10.4	10.8	28.7	34.2	34.2	5,778	6,877	6,845
France (including Monaco)	140.0	142.3	148.9	292.7	294.6	311.0	5,184	5,192	5,457
Germany (United)[1]	-	-	273.0	-	-	509.2	-	-	6,375
German Democratic Republic	90.8	90.8	-	124.5	118.5	-	7,295	7,295	-
Germany, Federal Republic of	187.6	184.2	-	329.4	382.7	-	6,241	6,241	-
Greece	11.9	11.8	11.6	31.3	31.2	32.2	3,121	3,085	3,169
India	236.7	241.7	250.0	256.8	266.4	273.3	307	315	317
Indonesia	154.8	164.7	180.5	49.6	57.6	65.3	274	312	348
Ireland	4.7	4.7	4.7	13.4	13.8	14.5	3,632	3,923	4,143
Japan	94.2	100.0	104.8	495.8	571.5	589.6	4,032	4,626	4,754
Korea, Republic of	31.5	31.5	31.2	93.1	119.0	130.4	2,195	2,744	2,977
Kuwait	118.4	96.7	14.8	16.4	14.8	4.1	8,276	6,895	1,963
Malaysia	60.4	61.2	66.5	24.1	26.7	28.1	1,379	1,490	1,534
Mexico	258.6	264.2	274.7	146.5	160.0	164.9	1,689	1,895	1,911
Netherlands	93.1	93.7	103.8	98.6	108.9	109.1	6,639	7,286	7,248

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Table 24.11 Energy Production and Consumption by Selected Countries: 1989-1991 (concluded)
(Quantity in thousand metric tons of coal equivalent; consumption per capita in kilograms)

Country	Production			Consumption			Consumption per capita		
	1989	1990	1991	1989	1990	1991	1989	1990	1991
New Zealand	13.9	15.7	15.7	17.0	18.3	18.1	5,061	5,411	5,304
Nigeria	128.2	128.6	141.4	20.2	22.9	23.6	192	211	210
Poland	162.0	136.5	132.1	173.1	137.0	121.3	4,531	3,590	3,167
Portugal	0.9	1.3	1.2	18.5	19.2	19.3	1,811	1,947	1,960
Singapore	-	-	-	13.4	15.1	15.9	4,979	5,556	5,821
Spain	44.9	44.5	44.8	97.1	115.3	119.6	2,485	2,961	3,065
Sweden	33.3	34.3	36.5	42.7	57.4	59.3	5,070	6,707	6,892
Thailand	14.2	16.3	17.8	35.0	41.1	43.7	637	751	789
United Kingdom	300.5	300.7	299.2	288.1	307.4	309.2	5,028	5,355	5,353
United States	2,258.3	2,318.0	2,317.5	2,504.6	2,727.7	2,757.8	10,127	10,912	10,921
Venezuela	183.3	204.2	226.3	54.3	64.7	68.9	2,823	3,347	3,490
Yugoslavia	37.2	36.5	21.3	60.4	56.0	41.3	2,552	2,352	1,731
Russia (Former)	2,478.2	2,352.0	2,217.7	1,875.2	1,918.8	1,867.3	6,546	6,631	6,415

[1] German Democratic Republic and Federal Republic of Germany united in 1991.

Source: United Nations Energy Statistics Yearbook, 1991. New York, 1993.

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Table 24.12 Net Installed Capacity of Electric Generating Plants by Selected Countries[1]: 1985-1991
(Thousand kilowatts)

Country	1985	1986	1987	1988	1989	1990	1991
World	2,436,827	2,509,626	2,600,391	2,677,487	2,743,712	2,805,280	2,846,731
Philippines	6,222	6,456	6,499	6,750	7,192	9,437	10,097
Argentina	16,058	16,255	16,593	16,600	17,128	17,206	17,469
Australia	32,945	33,478	33,971	36,646	36,782	36,012	35,461
Austria	15,241	15,784	16,559	16,731	16,807	16,839	16,779
Belgium	14,152	14,168	14,057	14,029	14,082	14,140	14,097
Brazil	44,035	44,508	47,614	49,575	52,125	52,984	54,135
Canada	97,356	98,400	101,273	97,771	98,890	104,140	104,631
Czechoslovakia	19,547	20,371	21,017	21,101	21,058	21,555	21,329
Denmark	8,573	8,625	8,572	8,443	8,817	9,137	9,578
Finland	11,313	11,641	11,661	11,893	12,706	13,220	13,347
France (including Monaco)	86,551	92,482	97,611	100,617	100,140	103,410	106,879
Germany(United)[2]	-	-	-	-	-	-	123,160
German Democratic Republic	21,944	22,059	22,925	22,917	23,410	23,410	-
Germany, Federal Republic of	92,704	95,317	95,531	96,491	98,458	99,750	-
Greece	7,116	7,525	8,061	8,121	8,346	8,508	8,912
India	52,278	55,406	60,500	66,564	70,501	75,955	79,540
Indonesia	8,634	9,734	10,784	10,830	11,030	11,480	11,800
Italy (inlcuding San Marino)	55,626	56,205	56,403	56,744	57,448	56,548	57,871
Japan	169,399	173,809	179,107	181,708	185,133	194,763	199,973
Korea, Republic of	17,670	19,607	20,982	22,294	23,522	24,056	24,571
Malaysia	4,168	4,390	4,490	4,902	4,967	5,037	6,060
Mexico	24,085	24,826	26,788	27,338	28,504	29,274	29,274
Netherlands	17,048	17,381	17,386	17,431	17,291	17,441	17,545
New Zealand	7,435	7,388	7,437	7,437	7,389	7,504	7,504
Norway	23,658	24,793	25,595	25,701	26,715	27,134	27,134
Poland	29,038	29,773	30,110	30,922	30,750	30,703	30,984
Singapore	2,691	2,741	3,371	3,371	3,380	3,400	3,500

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Table 24.12 Net Installed Capacity of Electric Generating Plants by Selected Countries[1]: 1985-1991 (concluded)
(Thousand kilowatts)

Country	1985	1986	1987	1988	1989	1990	1991
Spain	34,015	35,079	42,258	42,788	43,791	43,413	43,622
Sweden	33,170	33,100	33,023	33,090	32,783	34,190	34,089
Switzerland	15,150	15,210	15,250	15,260	16,200	16,300	16,296
Thailand	7,395	7,550	7,801	7,872	8,314	9,722	10,771
United Kingdom	67,607	66,512	67,601	69,421	74,084	73,013	70,022
United States	711,653	733,005	748,071	757,593	771,151	780,179	788,312
Venezuela	15,511	17,092	17,624	16,525	18,647	17,726	17,726
Yugoslavia	15,362	16,132	16,150	16,360	16,470	21,517	21,159
Russia(Former)	314,888	321,671	332,266	330,500	333,100	343,681	343,700

[1] Combined self-producers and public.
[2] German Democratic Republic and Federal Republic of Germany united in 1991.

Source: United Nations Energy Statistics Yearbook, 1991 New York, 1993.

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Table 24.13 Production of Natural Gas by Selected Countries: 1985-1991
(Terajoules)

Country	1985	1986	1987	1988	1989	1990	1991
World	61,497,473	62,724,947	66,119,415	69,989,415	72,710,307	74,805,817	76,275,482
Argentina	508,791	552,639	656,968	775,456	784,300	793,194	885,664
Australia	522,843	571,726	588,928	603,435	616,871	797,340	840,708
Austria	46,901	40,351	42,024	45,524	45,936	46,376	47,894
Belgium	1,591	940	996	599	472	450	383
Brazil	96,742	110,152	114,234	138,770	148,503	150,611	149,183
Canada	3,188,504	2,987,809	3,254,483	3,763,098	3,983,077	4,113,914	4,374,079
China	504,542	536,929	546,879	555,156	585,912	595,644	625,621
Czechoslovakia	23,137	23,833	25,848	30,853	29,489	22,831	18,830
Egypt	139,852	163,492	169,449	234,230	250,250	264,590	302,999
France (including Monaco)	216,805	164,560	152,642	81,250	81,284	77,403	83,476
Germany(United)[1]	-	-	-	-	-	-	629,515
German Dem. Republic.	100,268	95,550	91,760	83,550	66,502	55,000	-
Germany, Fed. Rep. of	584,040	465,056	537,462	501,987	492,966	545,985	-
India	146,357	209,599	235,045	260,184	315,820	388,002	397,250
Indonesia	937,377	1,119,657	1,079,657	1,219,657	1,462,449	1,578,536	1,819,419
Iran	556,800	580,200	622,100	780,500	865,800	942,900	999,100
Iraq	31,290	61,710	146,250	179,730	190,790	110,040	45,630
Ireland	90,394	63,268	62,605	75,676	83,365	88,097	89,152
Israel	1,900	1,544	1,600	1,365	1,365	1,183	1,001
Italy (including San Marino)	539,470	541,257	553,595	564,111	594,335	651,564	695,269
Japan	95,097	83,348	85,842	83,042	87,584	83,851	87,584
Kuwait	211,317	211,400	199,900	169,650	212,340	203,970	18,500
Malaysia	305,557	369,490	477,101	473,461	494,255	502,372	625,834
Mexico	1,068,027	1,004,518	1,011,234	950,002	901,619	955,130	948,000
Netherlands	2,838,958	2,343,317	2,349,922	2,076,609	2,522,206	2,540,607	2,847,184
New Zealand	139,412	159,718	156,872	176,655	180,887	179,730	179,800
Nigeria	109,259	128,731	144,378	147,108	168,649	156,474	185,350

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Table 24.13 Production of Natural Gas by Selected Countries: 1985-1991 (concluded)
(Terajoules)

Country	1985	1986	1987	1988	1989	1990	1991
Norway	1,087,606	1,129,393	1,191,689	1,202,853	1,242,770	1,123,348	1,104,970
Poland	162,382	157,086	157,813	154,718	143,222	97,859	109,594
Saudi Arabia	637,020	902,600	906,600	1,017,800	1,042,200	1,288,500	1,452,300
Spain	10,686	12,389	26,808	34,794	60,708	59,228	55,393
Thailand	115,453	109,931	1,633,582	193,582	201,548	204,855	208,873
United Kingdom	1,664,693	1,747,306	1,837,415	1,763,127	1,724,496	1,903,750	1,779,194
United States	16,365,079	15,974,483	16,487,548	18,568,280	18,830,660	19,373,170	19,509,141
Venezuela	726,889	805,395	799,280	825,585	838,529	956,195	1,054,000
Yugoslavia	76,625	75,979	90,355	92,013	96,879	85,963	59,979
Russia(Former)	22,149,441	23,508,118	25,294,763	26,212,278	27,026,798	27,530,010	27,412,083

[1] German Democratic Republic and Federal Republic of Germany united in 1991.

Source: United Nations Energy Statistics Yearbook, 1991. New York, 1993.

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Table 24.14 Petroleum Refinery Capacity by Selected Countries: 1984-1991
(Million metric tons)

Country	1984	1985	1986	1987	1988	1989	1990	1991
World	3,830.5	3,786.7	3,732.3	3,708.7	3,696.6	3,715.3	3,822.4	3,852.3
Philippines	14.2	14.0	14.2	14.9	15.1	15.0	14.8	14.5
Argentina	34.6	34.6	34.6	34.4	34.4	34.4	32.3	32.3
Australia	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
Austria	9.7	9.7	9.7	9.7	9.7	10.2	10.2	10.2
Belgium	35.8	35.8	35.8	35.2	35.3	30.1	30.6	30.6
Brazil	76.8	75.0	66.5	74.5	74.5	74.5	70.8	70.5
Canada	97.6	98.9	86.5	85.0	85.0	91.0	92.5	93.6
China	102.5	107.0	110.0	111.0	115.7	130.3	145.2	145.2
Czechoslovakia	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.8
Denmark	8.7	8.7	8.7	8.8	8.5	9.3	9.3	9.3
Egypt	22.7	22.7	22.7	22.7	22.7	24.5	24.8	27.5
France (including Monaco)	109.6	108.8	95.6	95.9	96.1	96.1	96.1	96.1
Finland	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Germany (United)[1]	-	-	-	-	-	-	-	113.9
German Democratic Republic	26.6	26.6	26.6	26.6	26.7	26.7	26.7	-
Germany, Federal Republic of	105.3	96.0	95.0	80.4	87.2	87.2	87.2	-
Greece	18.0	19.5	18.2	18.2	18.2	19.2	19.2	19.2
India	45.5	45.5	45.5	48.0	48.7	51.8	51.8	53.5
Indonesia	41.8	41.8	41.8	45.0	45.0	45.0	46.0	48.0
Iran	54.4	59.9	59.9	28.5	30.6	38.2	38.2	47.2
Iraq	17.9	17.9	17.9	17.9	17.9	27.0	27.0	27.0
Ireland	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Israel	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Italy (including San Mariano)	145.3	123.4	122.0	122.7	117.0	139.8	139.8	139.8
Japan	245.3	245.3	241.2	239.0	230.0	220.0	215.0	218.0
Korea, Republic of	39.5	39.5	39.5	39.5	42.0	42.0	42.0	59.0
Kuwait	30.7	30.7	30.7	36.4	36.4	41.3	41.3	41.3

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Table 24.14 Petroleum Refinery Capacity by Selected Countries: 1984-1991 (concluded)
(Million metric tons)

Country	1984	1985	1986	1987	1988	1989	1990	1991
Malaysia	*10.3	10.3	*10.3	10.2	10.2	10.2	*10.2	*10.2
Mexico	*72.5	*72.5	70.1	72.4	72.4	75.7	*84.0	*78.7
Netherlands	78.7	76.2	71.0	69.1	69.1	69.1	*69.1	*69.1
New Zealand	3.5	*3.5	*3.5	4.5	4.6	4.5	*4.7	*4.7
Norway	12.1	12.1	12.1	12.0	12.0	14.7	*14.7	*14.7
Poland	19.5	19.5	19.5	19.5	19.5	19.5	19.5	*19.5
Portugal	14.0	14.4	14.4	14.4	14.4	15.6	15.6	*15.6
Singapore	*54.6	*54.6	*54.6	43.0	43.0	43.0	*43.8	*44.8
Spain	68.9	64.4	64.4	62.0	62.0	62.0	62.0	*62.0
Sweden	22.6	21.8	20.6	20.6	22.0	22.0	22.0	*22.0
Thailand	8.8	*8.8	*8.8	9.7	10.1	12.4	13.0	13.3
United Kingdom	96.1	92.8	90.0	89.9	90.5	90.5	90.5	92.8
United States	770.6	760.7	767.8	797.9	786.5	781.4	787.9	790.0
Venezuela	64.4	64.5	*64.5	66.0	63.2	61.1	64.2	64.2
Yugoslavia	*15.5	*14.9	*15.0	15.0	16.5	16.5	16.5	*12.4
Russia (Former)	610.0	612.0	613.0	613.0	613.0	613.0	613.0	613.0

* UN Statistical Office estimates.
[1] German Democratic Republic and Federal Republic of Germany united in 1991.

Source: United Nations Energy Statistics Yearbook, 1991. New York, 1993.

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Table 24.15 Production and Consumption of Electricity by Selected Countries: 1988-1991
(Billion kilowatthours)

Country	Production 1988	1989	1990	1991	Consumption 1988	1989	1990	1991
World	11,035.5	11,426.7	11,802.3	12,034.1	11,051.1	11,442.8	11,796.7	12,036.9
Philippines	24.5	25.9	26.3	22.5	24.5	25.9	26.3	22.5
Argentina	53.1	50.1	50.9	54.0	53.4	51.2	51.7	54.9
Australia	139.1	147.9	155.1	156.8	139.1	147.9	155.1	156.8
Austria	48.3	50.2	50.4	51.4	45.6	47.8	49.9	52.2
Belgium	64.6	66.8	70.8	71.9	62.5	64.3	67.1	70.1
Brazil	214.0	230.0	222.8	234.4	232.0	252.0	247.6	261.2
Canada	505.9	499.5	482.0	507.9	478.1	490.2	481.6	489.5
China	545.2	582.0	621.2	677.5	546.7	583.5	623.0	680.4
Czechoslovakia	87.4	89.2	86.6	83.2	90.4	91.8	91.2	85.0
Denmark	27.9	11.6	25.8	36.3	32.2	32.2	32.0	34.3
Egypt	35.4	36.9	39.4	40.4	35.4	36.9	39.4	40.4
Finland	53.8	53.7	54.4	58.1	61.3	62.6	65.0	65.4
France (including Monaco)	391.9	406.9	420.1	454.7	355.2	364.7	374.4	401.5
Germany (United)[1]	-	-	-	573.7	-	-	-	575.0
Germany Dem. Republic	118.3	118.9	117.3	-	120.0	119.8	118.3	-
Germany, Fed. Republic of	428.8	437.0	452.4	-	429.2	436.4	452.7	-
Greece	33.2	34.4	35.0	35.8	33.4	34.8	35.7	36.4
Hongkong	25.5	27.4	-	-	24.1	25.6	-	-
India	236.2	260.6	286.0	309.4	237.3	261.8	286.9	310.3
Indonesia	39.8	41.8	44.2	44.7	39.8	41.8	44.2	44.7
Iran	38.8	40.3	56.0	56.0	36.8	40.3	56.0	56.9
Iraq	23.4	23.9	29.2	20.8	23.4	23.9	29.2	20.8
Ireland	13.2	13.8	14.5	14.5	13.2	13.8	15.1	15.1
Israel	19.2	20.3	20.7	21.3	18.8	19.9	20.3	21.0
Italy (including San Marino)	200.7	207.4	216.9	222.0	231.9	241.2	251.5	257.1
Japan	753.7	799.7	857.3	888.1	753.7	799.7	857.3	888.1

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Table 24.15 Production and Consumption of Electricity by Selected Countries: 1988-1991
(Billion kilowatthours)

Country	Production				Consumption			
	1988	1989	1990	1991	1988	1989	1990	1991
Korea, Republic of	85.5	102.3	118.7	132.2	85.5	102.3	118.7	132.2
Kuwait	19.9	20.5	20.6	9.1	19.9	20.5	20.6	9.1
Malaysia	19.3	21.7	23.0	28.4	19.3	21.5	22.9	28.3
Mexico	109.8	119.6	122.4	126.4	108.0	117.7	121.1	124.2
Netherlands	69.6	73.0	71.9	74.2	75.4	77.9	81.1	83.4
New Zealand	27.5	28.1	30.1	29.5	27.5	28.1	30.1	29.5
Norway	109.3	118.7	121.8	110.9	103.7	103.8	105.9	108.1
Poland	144.4	145.5	136.3	134.7	148.8	147.2	135.3	132.0
Portugal	22.4	25.5	28.5	29.9	24.8	26.7	28.5	30.0
Saudi Arabia	42.2	46.3	46.7	47.7	42.2	46.3	46.7	47.7
Singapore	13.0	14.0	15.6	16.6	13.0	14.0	15.6	16.6
Spain	123.6	146.6	151.8	155.7	122.2	144.7	151.3	155.0
Sweden	146.2	143.9	146.4	147.7	143.6	143.4	144.7	146.4
Thailand	33.9	39.1	46.2	52.4	34.4	39.7	46.8	53.0
United Kingdom	308.2	312.1	319.0	322.1	321.1	324.8	330.9	338.5
United States	2,875.9	2,980.7	3,040.9	3,079.1	2,907.6	2,992.7	3,042.9	3,101.3
Venezuela	57.8	60.0	55.7	57.1	57.8	60.0	55.7	57.1
Yugoslavia	83.6	86.3	82.9	78.9	82.2	85.9	82.3	80.2
Russia (Former)	1,698.4	1,722.0	1,764.6	1,712.9	1,659.8	1,683.1	1,729.3	1,693.4

1 German Democratic Republic and Federal Republic of Germany united in 1991.

Source: United Nations Energy Statistics Yearbook, 1991. New York, 1993.

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Table 24.16 Crude Petroleum Production by Region and Selected Countries: 1988-1991 (Thousand metric tons)

Region/country	1988	1989	1990	1991
World	2,912,336	2,952,427	3,004,925	2,980,980
Africa	243,872	272,003	294,319	314,248
Algeria	30,551	34,064	37,021	37,698
Angola	22,320	22,642	23,553	24,731
Cameroon	8,482	8,015	8,480	7,710
Congo	7,038	7,369	8,016	7,856
Egypt	42,845	42,971	44,032	45,581
Gabon	7,790	10,721	13,493	17,355
Ghana	0	0	0	0
Ivory Coast	575	190	315	320
Libya	49,538	54,320	67,120	71,815
Morocco	20	13	15	12
Nigeria	67,735	85,175	86,029	94,314
Tunisia	4,908	4,931	4,502	5,189
Zaire	1,795	1,297	1,410	1,372
North America	628,891	597,609	588,677	596,842
Barbados	60	53	62	62
Canada	79,324	76,419	76,226	75,939
Cuba	717	718	850	800
Guatemala	178	180	175	170
Mexico	130,675	130,649	132,469	139,115
Trinidad and Tobago	7,858	7,714	7,863	7,442
United States	410,079	381,876	371,032	373,314
South America	195,488	197,356	215,547	227,618
Argentina	23,119	23,521	24,784	25,329
Bolivia	842	868	971	1,029
Brazil	27,853	29,845	32,736	32,389
Chile	1,057	946	842	755
Colombia	18,939	20,382	22,155	21,450
Ecuador	15,806	14,556	14,936	15,639
Peru	7,579	6,975	6,895	6,109
Suriname	189	223	219	234
Venezuela	100,104	100,040	112,009	124,684
Asia	991,000	1,050,630	1,120,754	1,103,444
Bahrain	2,143	1,947	2,101	1,896
Bangladesh	27	27	19*	16
Brunei Darussalam	6,352	6,450	6,695	7,245
China	136,705	137,450	138,306	140,992
India	31,580	33,685	33,311	31,300
Indonesia	66,212	64,125	71,517	72,387
Iran	115,042	140,426	158,814	171,285
Myanmar (formerly Burma)	762	889	*875	920
Iraq	130,140	136,603	100,638	13,365

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Table 24.16 Crude Petroleum Production by Region and Selected Countries: 1988-1991 (concluded)
(Thousand metric tons)

Region/country	1988	1989	1990	1991
Israel	18	16	13	11
Japan	592	545	540	208
Kuwait	70,626	74,051	59,550	9,766
Malaysia	25,155	27,950	30,028	30,769
Oman	30,803	31,781	34,018	35,128
Pakistan	2,189	2,290	2,619	3,151
Philippines	309	267	245	165
Qatar	16,337	19,064	19,062	18,831
Saudi Arabia	258,106	252,433	320,375	404,506
Syria	14,164	18,329	22,941	27,659
Thailand	1,088	1,141	1,280	1,308
Turkey	2,564	2,876	3,712	4,364
United Arab Emirates	72,530	89,265	101,959	114,769
Europe	209,118	203,592	205,837	213,747
Albania	3,000	2,900	*805	600
Austria	1,175	1,170	1,149	1,280
Bulgaria	77	73	60	58
Czechoslovakia	143	143	123	140
Denmark	4,735	5,531	5,944	7,092
France (including Monaco)	3,355	3,244	3,024	2,952
Germany (United)[1]	-	-	-	3,405
German Dem. Republic	40	47	*39	-
Germany, Fed. Republic of	5,647	5,406	3,954	-
Greece	1,050	851	773	789
Hungary	1,947	1,966	1,974	1,841
Italy (including San Marino)	4,811	4,681	4,641	4,307
Netherlands	3,909	3,391	3,533	3,258
Norway	54,002	72,609	79,663	91,221
Poland	159	157	160	167
Romania	9,389	9,173	7,929	6,791
Spain	1,480	1,038	795	1,067
Sweden	3	3	3	3
United Kingdom	109,455	87,404	88,010	86,827
Yugoslavia	4,741	3,808	3,568	1,959
Oceania	26,567	24,237	27,232	27,281
Australia	25,056	22,540	25,465	25,432
New Zealand	1,511	1,697	1,767	1,849
USSR	617,400	607,000	552,559	497,800

*United Nations estimate.
[1] German Democratic Republic and Federal Republic of Germany united in 1991.

Source: United Nations Energy Statistics Yearbook, 1990. New York, 1993.

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Table 24.17 Rice Production by Selected Countries: 1990-1992
(Thousand metric tons)

Country	1990	1991	1992
World	521,140	517,875	525,475
Philippines	9,319	9,673	9,185
Australia	846	740	1,128
Bangladesh	26,778	27,241	*27,400
Brazil	7,421	9,496	9,961
Burma	13,969	13,197	13,771
China	191,589	186,083	F188,150
Colombia	2,117	1,739	1,735
Ecuador	840	848	981
Egypt	3,167	3,448	3,908
France	121	110	124
India	111,953	*110,501	*109,511
Indonesia	45,179	44,688	*47,770
Italy	1,291	1,236	1,216
Japan	*13,124	12,005	*13,255
Korea, Democratic People's Republic of	F5,300	F5,200	F5,000
Korea, Republic of	7,722	7,293	*7,361
Mexico	394	347	361
Nepal	3,502	3,223	2,509
Pakistan	4,891	4,865	*4,600
Peru	966	814	827
Portugal	156	170	155
Spain	571	582	558
USSR	2,166	1,986	F2,006
United States	7,080	7,144	8,123
Venezuela	401	660	595
Vietnam	19,225	19,900	*21,500

* Unofficial figure.
F FAO estimate.

Source: *United Nations FAO Production Yearbook, 1990.* Volume 44. Rome, 1991.

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Table 24.16 Crude Petroleum Production by Selected Countries: 1988-1991 (concl
(Thousand metric tons)

Region/country	1988	1989	1990	1991
Israel	18			
Japan	592			
Kuwait	70,626	7	5	
Malaysia	25,155		68	10,69
Oman	30,803		,571	F1,350
Pakistan	2,189		3,739	30,619
Philippines	309		2,775	*2,300
Qatar	16,337		7,413	4,531
Saudi Arabia	258,106		99,091	F95,340
Syria	14,164		5,122	*5,226
Thailand	1,088		F1,530	F1,650
Turkey	2,56		12,797	14,613
United Arab Emirates	72,5		7,745	*4,910
Europe	20		8,700	*9,740
Albania			6,256	*7,987
Austria			6,238	7,170
Bulgaria	4		2,340	*2,561
Czechoslovakia	,864			
Denmark	2,290		F4,500	F4,400
France (including Monac			14,253	14,997
Germany (United)[1]	F4,400		F1,900	F1,700
German Dem. Repub	14,640		10,497	6,829
Germany, Fed. Rep	1,832		8,342	*3,125
Greece	6,810		3,233	2,609
Hungary	8,799		3,793	*3,610
Italy (including	3,042		9,759	*7,362
Netherlands	3,722		189,885	240,774
Norway	9,886		11,557	*7,025
Poland	201,532			
Romania	6,724			
Spain				
Swede				
Unit				
Yu				

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* Unofficial figure.
F FAO estimate.

Source: *United Nations FAO Production Yearbook, 1990*. Volume 44. Rome, 1991.

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k Population by Selected Countries: 1990-1992
(continued)
(Thousands)

		00	1991	1992
			634	616
			•9,759	•9,694
	63		1,143	•1,150
	2,500		F45	F60
	794		F120	F165
	2,234		F55	F80
	2,860		2,[illegible]	F11,000
	•32,031		2,[illegible]	F5,900
	2,534		F31,036	F7,000
	5,013		2,713	F760
ublic	6,806		5,452	
epublic of	7,233		n.a.	•5,025
	1,266		n.a.	F31
	14,771		1,219	•0,951
	2,309		15,254	F25
	3,552		2,219	F1,280
	7,036		3,609	F15,500
therlands	36,313		6,949	2,498
Poland	3,146		29,038	F3,650
Romania	1,269		1,873	7,595
South Africa	5,331		1,383	23,388
Spain	1,186		5,182	•2,600
Sweden	F12		1,029	F1,200
Thailand	4,300		F12	5,271
Turkey	63,632		4,600	1,144
USSR	6,488		64,861	F12
United Kingdom	18,239		6,279	4,500
United States	2,172		18,943	F73,024
Yugoslavia			2,463	7,882
				18,671
				•1,920

• Unofficial figure.
F FAO estimate.

Source: *United Nations FAO Production Yearbook, 1990*. Volume 44. Rome, 1991.

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Table 24.18 Corn Production by Selected Countries: 1990-1992
(Thousand metric tons)

Country	1990	1991	1992
World	479,140	491,001	526,410
Philippines	4,854	4,655	*4,570
Argentina	5,047	7,768	10,699
Austria	1,620	1,571	F1,350
Brazil	21,340	23,739	30,619
Bulgaria	1,221	2,775	*2,300
Canada	7,066	7,413	4,531
China	97,158	99,091	F95,340
Egypt	4,799	5,122	*5,226
Ethiopia	F1,636	F1,530	F1,650
France	9,291	12,797	14,613
Hungary	4,500	7,745	*4,910
India	9,073	8,700	*9,740
Indonesia	6,734	6,256	*7,987
Italy	5,864	6,238	7,170
Kenya	2,290	2,340	*2,561
Korea, Dem. People's Republic of	F4,400	F4,500	F4,400
Mexico	14,640	14,253	14,997
Nigeria	1,832	F1,900	F1,700
Romania	6,810	10,497	6,829
South Africa	8,799	8,342	*3,125
Spain	3,042	3,233	2,609
Thailand	3,722	3,793	*3,610
USSR	9,886	9,759	*7,362
United States	201,532	189,885	240,774
Yugoslavia	6,724	11,557	*7,025

* Unofficial figure.
F FAO estimate.

Source: *United Nations FAO Production Yearbook, 1990*. Volume 44. Rome, 1991.

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Table 24.19 Potato Production by Selected Countries: 1990-1992
(Thousand metric tons)

Country	1990	1991	1992
World	267,586	257,929	268,492
Philippines	63	F65	F67
Argentina	F2,500	F2,600	F2,650
Austria	794	790	F780
Brazil	2,234	2,265	2,434
Canada	2,860	2,860	3,529
China	*32,031	F31,036	F33,937
Chezchoslovakia	2,534	2,713	2,686
France	5,013	5,452	6,495
German Dem. Republic	6,806	n.a.	n.a.
Germany, Fed. Republic of	7,233	n.a.	n.a.
Hungary	1,266	1,219	F1,200
India	14,771	15,254	F15,500
Italy	2,309	2,219	2,498
Japan	3,552	3,609	F3,650
Netherlands	7,036	6,949	7,595
Poland	36,313	29,038	23,388
Romania	3,146	1,873	*2,600
South Africa	1,269	1,383	F1,200
Spain	5,331	5,182	5,271
Sweden	1,186	1,029	1,144
Thailand	F12	F12	F12
Turkey	4,300	4,600	4,500
USSR	63,632	64,861	F73,024
United Kingdom	6,488	6,279	7,882
United States	18,239	18,943	18,671
Yugoslavia	2,172	2,463	*1,920

* Unofficial figure.
F FAO estimate.

Source: *United Nations FAO Production Yearbook, 1990.* Volume 44. Rome, 1991.

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Table 24.20 Sugar Production by Selected Countries: 1990-1992
(Thousand metric tons)

Country	1990	1991	1992
World	1,051,057	1,080,276	1,104,580
Philippines	F25,411	F25,514	F27,300
Argentina	F17,600	F19,000	18,500
Australia	24,370	20,384	*29,300
Brazil	262,674	260,839	270,672
China	63,451	72,695	77,548
Colombia	27,791	27,790	28,930
Cuba	*76,230	F71,000	F58,000
Dominican Republic	6,385	6,845	6,780
Egypt	11,144	11,095	11,624
India	225,569	240,287	249,300
Indonesia	27,980	28,133	23,121
Iran	1,659	1,374	F1,600
Japan	1,979	1,843	1,863
Malaysia	F1,013	F1,024	F1,125
Mexico	39,908	38,387	39,955
Pakistan	35,494	35,989	38,865
South Africa	18,026	19,692	F18,500
Spain	171	165	*170
Thailand	33,561	40,661	46,805
United States	25,524	27,444	26,703
Venezuela	6,902	*6,519	*6,700
Yugoslavia	6,902	*6,519	*6,700

Note: This table covers the production of centrifugal sugar from both cane and beet sugar and are shown, as far as possible, in terms of raw value as reported by the countries.

* Unofficial figure.
F FAO estimate.

Source: *United Nations FAO Production Yearbook, 1990.* Volume 44. Rome, 1991.

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Table 24.21 Tobacco Production by Selected Countries: 1990-1992
(Thousand metric tons)

Country	1990	1991	1992
World	7,041	7,454	7,965
Philippines	82	85	115
Australia	12	13	13
Brazil	445	413	583
Bulgaria	77	72	F90
Canada	63	79	64
China	2,646	3,066	3,178
France	28	29	26
Greece	136	160	•182
India	552	558	538
Indonesia	81	82	84
Italy	194	•165	•143
Japan	•81	•70	•77
Korea, Republic of	70	•70	•75
Malaysia	11	11	12
Mexico	34	29	•30
Pakistan	68	75	•94
Poland	59	57	45
South Africa	32	34	•37
Spain	43	49	•45
Thailand	69	70	•95
Turkey	296	241	320
USSR	•290	•223	•233
United States	738	755	764
Venezuela	15	•14	•15

Note: Production figures refer to farm sales weight as far as this could be determined. Data available on a dry weight basis have, therefore, been converted into farm sales weight at about 90 parts to 100.

• Unofficial figure.
F FAO estimate.

Source: *United Nations FAO Production Yearbook, 1990.* Volume 44. Rome, 1991.

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Table 24.22 Livestock Population by Selected Countries: 1990-1992 (Thousands)

Country	Kind	1990	1991	1992
World	Cattle	1,284,979	1,284,870	1,284,188
	Sheep	1,187,189	1,168,503	1,138,363
	Pigs	856,775	863,917	864,096
	Horses	60,683	61,109	60,843
	Asses	43,383	43,596	44,270
	Mules	147,778	14,911	14,973
Philippines	Cattle	1,629	1,677	1,656
	Sheep	F30	F30	F30
	Pigs	7,990	8,007	8,032
	Horses	F200	F200	F200
Argentina	Cattle	50,582	50,080	50,020
	Sheep	28,571	26,500	23,711
	Pigs	F4,400	F4,600	F4,770
	Horses	3,400	3,400	3,300
	Asses	F90	F90	F90
	Mules	F172	F172	F172
Brazil	Cattle	147,102	150,000	153,000
	Sheep	20,015	20,300	19,500
	Pigs	33,623	32,500	33,050
	Horses	6,000	F6,200	F6,200
	Asses	1,330	F1,340	F1,350
	Mules	F2,030	F2,050	F2,060
Canada	Cattle	12,249	12,843	13,002
	Sheep	759	780	914
	Pigs	10,370	10,405	10,395
	Horses	F415	F415	F420
	Mules	F4	F4	F4
China	Cattle	76,969	78,635	82,760
	Sheep	113,508	112,816	111,143
	Pigs	360,594	370,975	379,739
	Horses	10,295	10,175	F10,201
	Asses	11,136	11,198	F11,200
	Mules	5,319	5,494	F5,500
France	Cattle	21,414	20,970	20,928
	Sheep	11,071	10,643	10,579
	Pigs	12,366	12,239	12,384
	Horses	319	322	340
	Asses	F25	F25	F25
	Mules	F12	F12	F12

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Table 24.22 Livestock Population by Selected Countries: 1990-1992 (continued)
(Thousands)

Country	Kind	1990	1991	1992
Greece	Cattle	624	634	616
	Sheep	8,660	[•]9,759	[•]9,694
	Pigs	996	1,143	[•]1,150
	Horses	45	[F]45	[F]60
	Asses	127	[F]120	[F]165
	Mules	60	[F]55	[F]80
Indonesia	Cattle	10,704	10,972	[F]11,000
	Sheep	5,900	[F]5,750	[F]5,900
	Pigs	7,650	[F]6,800	[F]7,000
	Horses	[F]740	[F]750	[F]760
Japan	Cattle	4,760	4,863	[•]5,025
	Sheep	31	30	[F]31
	Pigs	11,816	11,335	[•]10,951
	Horses	23	24	[F]25
Malaysia	Cattle	667	709	[F]720
	Sheep	206	272	[F]275
	Pigs	2,678	2,742	[F]2,800
	Horses	[F]5	[F]5	[F]5
Mexico	Cattle	32,054	31,460	30,157
	Sheep	5,846	5,877	6,184
	Pigs	15,203	15,786	16,502
	Horses	[F]6,170	[F]6,175	[F]6,180
	Asses	[F]3,187	[F]3,188	[F]3,189
	Mules	[F]3,180	[F]3,186	[F]3,194
Singapore	Pigs	[F]300	[F]250	[F]280
South Africa	Cattle	[•]13,398	[•]13,512	[•]13,585
	Sheep	[•]32,665	[•]32,580	[•]32,110
	Pigs	[F]1,480	[F]1,490	[F]1,490
	Horses	[F]230	[F]230	[F]230
	Asses	[F]210	[F]210	[F]210
	Mules	[F]14	[F]14	[F]14
Spain	Cattle	5,127	5,063	4,924
	Sheep	24,037	24,625	[•]24,625
	Pigs	16,002	17,246	[•]17,240
	Horses	[F]241	[F]240	[F]240
	Asses	[F]130	[F]130	[F]130
	Mules	[F]100	[F]100	[F]100

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Table 24.22 Livestock Population by Selected Countries: 1990-1992 (concluded) (Thousands)

Country	Kind	1990	1991	1992
Thailand	Cattle	5,669	6,627	6,820
	Sheep	162	166	153
	Pigs	4,728	*5,000	F5,100
	Horses	20	20	F18
USSR	Cattle	118,287	115,758	111,936
	Sheep	138,400	133,223	129,617
	Pigs	78,997	75,542	69,063
	Horses	5,921	5,919	F5,800
	Asses	F300	F300	F300
	Mules	F1	F1	F1
United Kingdom	Cattle	11,922	11,843	11,623
	Sheep	29,678	30,147	28,932
	Pigs	7,383	7,380	7,519
	Horses	F160	F170	F172
	Asses	F10	F10	F10
United States	Cattle	98,162	98,896	99,559
	Sheep	11,364	11,200	10,750
	Pigs	53,852	54,477	57,684
	Horses	F5,400	F5,650	F5,450
	Asses	F53	F52	F51
	Mules	F28	F28	F28
Venezuela	Cattle	13,272	*13,368	*14,192
	Sheep	F525	F525	F525
	Pigs	2,904	*1,971	*1,727
	Horses	F495	F495	F499
	Asses	F440	F440	F440
	Mules	F72	F72	F72

Note: Livestock population covers all domestic animals irrespective of their age and place or purpose of their breeding. Estimates have been made for nonreporting countries as well as for countries reporting partial coverage.

* Unofficial figure.
F FAO estimate.

Source: United Nations FAO Production Yearbook, 1990. Volume 44. Rome, 1991.

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Table 24.23 Fish Catches by Selected Countries: 1987-1989 (Thousand Metric tons)

Country	1987	1988	1989
World	94,273,500	98,762,400	99,534,600
Philippines	1,988,718	2,010,363	2,098,787
Argentina	559,777	493,414	486,631
Australia[1]	204,200	213,310	175,900
Belgium	40,373	41,767	39,854
Brazil	933,811	829,491	850,000
Canada	1,562,266	1,597,053	1,554,233
Chile	4,814,641	5,209,883	6,454,142
China	9,346,222	10,358,678	11,219,994
Denmark	1,706,383	1,971,834	1,927,493
Finland	106,306	120,900	110,871
France	846,008	F883,473	F875,839
German Democratic Republic	196,467	179,234	174,268
Germany, Federal Republic of	210,837	209,458	233,952
Greece	133,201	128,385	F128,867
Iceland	1,632,666	1,759,484	1,504,771
India	2,907,775	3,126,365	3,618,919
Indonesia	2,584,970	2,703,260	F2,700,000
Ireland	250,682	255,725	245,000
Italy	560,472	576,727	550,964
Japan	11,848,582	11,967,051	11,174,464
Korea, Republic of	2,876,367	2,726,732	2,832,431
Mexico	1,419,187	1,372,145	1,416,784
Netherlands	446,138	398,834	F421,613
New Zealand	430,705	503,265	514,000
Norway	1,949,453	1,839,884	1,899,941
Peru	4,584,261	6,637,956	6,832,465
Poland	670,906	654,860	564,886
Portugal	389,603	346,677	331,795
Singapore	16,655	15,240	12,615
South Africa[2]	1,424,203	1,298,143	878,580
Spain	1,393,362	1,430,000	1,370,000
Sweden	214,538	250,993	257,819
Switzerland	4,489	4,191	4,418
Thailand	2,779,091	2,822,482	F2,822,530
USSR	11,159,617	11,332,101	11,310,091
United Kingdom	254,032	243,561	208,849
United States	5,986,120	5,936,618	5,744,318

F FAO estimates.
[1] Data refer to a split-year period.
[2] Excluding most of the catches of South African flag vessels landed in Luderitz and Walvis Bay.

Source: Food and Agriculture Organization Yearbook of Fishery Statistics, 1988. Volume 66. Rome, 1990.

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Table 24.24 Gold Mine Production in the Non-Communist World: 1982-1990
(Tonnes)

Continent/country	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total	1,027.7	1,114.8	1,152.0	1,217.2	1,205.0	1,298.6	1,376.1	1,682.8	1,733.9
Africa	709.9	726.6	734.4	725.0	651.5	643.7	670.4	676.1	676.7
Ghana	13.0	11.8	11.6	12.0	9.0	10.2	11.7	15.3	17.3
South Africa	664.3	679.7	683.3	673.3	610.0	600.2	607.0	607.5	605.4
Zaire	4.2	6.0	10.0	8.0	2.7	3.6	12.0	12.1	12.0
Zimbabwe	13.4	14.1	14.5	14.7	14.8	14.7	14.7	16.0	17.0
Others	15.0	15.0	15.0	17.0	15.0	15.0	25.0	25.2	25.0
North America	109.7	134.4	151.9	165.0	219.0	270.0	275.2	425.0	460.0
Canada	64.7	73.5	83.4	86.0	102.9	115.6	120.3	159.5	165.0
United States	45.0	60.9	68.5	79.0	116.1	154.4	154.9	265.5	295.0
Latin America	104.7	141.7	142.5	162.7	140.5	153.9	191.1	237.0	211.9
Brazil	34.8	58.7	55.1	63.3	24.1	35.8	83.8	101.2	78.0
Chile	18.9	19.0	18.0	18.2	17.9	17.0	19.2	27.1	31.6
Colombia	15.5	17.7	21.2	26.4	39.8	26.5	26.3	31.7	32.5
Dominican Republic	11.8	10.8	10.6	10.4	8.9	7.7	7.9	5.5	4.0
Mexico	5.2	7.4	7.5	7.7	7.8	8.0	8.3	11.5	9.6
Nicaragua	1.6	1.7	1.5	1.5	8.9	9.8	-	-	-
Peru	6.9	9.9	10.5	10.2	8.8	5.6	10.8	12.6	14.6
Others	10.0	16.5	18.1	25.0	24.3	28.5	34.8	47.4	41.6
Europe	15.4	17.1	18.1	19.5	18.3	19.9	21.2	24.0	26.2
Asia	42.0	44.2	45.5	52.3	59.9	60.7	71.8	73.9	74.1
India	2.2	2.2	2.0	1.7	1,9	1.9	1.6	-	-
Japan	3.6	3.4	3.5	4.9	10.3	8.6	13.6	11.0	11.9

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Table 24.24 Gold Mine Production in the Non-Communist World: 1982-1990 (concluded)
(Tonnes)

Continent/country	1982	1983	1984	1985	1986	1987	1988	1989	1990
Philippines	31.0	33.3	34.1	38.5	35.4	34.1	39.5	38.0	37.2
Others	5.2	5.3	5.9	7.2	12.3	16.1	18.7	24.9	25.0
Oceania	46.0	50.8	59.6	92.7	115.8	150.4	146.4	246.8	285.0
Australia	27.0	30.6	39.1	57.0	75.1	110.6	108.0	203.6	241.3
Papua New Guinea	17.8	18.4	18.7	33.2	36.7	35.9	33.9	3.8	33.6
Others	1.2	1.8	1.8	2.5	4.0	3.9	4.5	9.4	10.7

Source: Gold Fields.Mineral Services,Ltd. Gold, London, May,1991.
Bureau of Mines (Source Agency).

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Table 24.25 Copper Ore Production by Selected Countries: 1984-1988
(Thousand metric tons)

Country	1984	1985	1986	1987	1988
World	8,261.9	8,393.9	8,513.1	8,776.5	8,791.8
Philippines	233.4	222.2	211.3	216.1	218.3
Argentina	0.2	0.4	0.3	0.4	0.5
Australia	235.7	259.8	249.1	232.7	238.3
Brazil	35.2	41.0	35.0	39.2	44.4
Bulgaria	73.0	78.0	80.0	80.0	80.0
Canada	721.8	738.6	768.2	794.1	756.5
China	180.0	190.0	200.0	350.0	370.0
Finland	29.5	28.0	25.9	19.8	20.2
Germany, Fed. Rep. of	1.0	0.9	0.8	1.5	0.7
Greece	0.3	0.3	0.3	1.0	-
India	47.0	48.0	49.2	54.1	51.5
Indonesia	82.5	88.7	95.8	105.3	125.9
Ireland	n.a.	n.a.	n.a.	-	-
Italy	0.9	0.1	n.a.	1.1	5.0
Japan	43.3	43.2	35.0	23.8	16.7
Malaysia	29.2	30.5	28.3	29.9	22.0
Mexico	189.1	178.9	181.9	247.6	273.5
Norway	25.0	19.0	21.9	22.0	15.9
Peru	364.1	391.4	397.4	406.4	298.3
Poland	431.0	432.0	435.0	438.0	441.0
Romania	30.0	30.0	28.0	28.0	26.0
Spain	63.6	61.4	53.5	0.8	0.7
Sweden	86.9	90.5	87.4	85.0	74.5
USSR	1,020.0	1,030.0	1,030.0	1,010.0	990.0
United Kingdom	0.7	0.6	0.6	126.8	110.6
United States	1,102.6	1,105.8	1,147.3	1,243.6	1,419.7
Yugoslavia	116.2	116.7	116.7	110.9	103.5

Source: *United Nations UNCTAD Commodity Yearbook, 1990*. New York, 1990.

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Table 24.26 External Trade by Selected Countries: 1985-1988
(Value in million U.S. dollars)

Country	System	Imports (C.I.F.) 1985	1986	1987	1988	Exports (F.O.B.) 1985	1986	1987	1988
World		2,025,177	2,207,458	2,577,422	2,924,732	1,926,536	2,128,081	2,498,031	2,832,894
Philippines	G	5,261	5,394	6,811	8,731	4,544	4,842	5,565	7,035
Australia[1]	G	23,450	24,109	26,980	33,245	22,883	22,496	26,455	32,734
Austria	S	20,937	26,843	32,679	36,608	17,226	22,522	27,171	31,088
Belgium-Luxembourg	S	56,210	68,667	83,250	92,579	53,760	68,876	83,109	92,787
Brazil	S	14,332	14,044	15,052	14,605	25,639	22,349	26,224	33,789
Canada[1]	G	76,413	81,099	87,578	107,736	87,479	86,725	94,402	112,863
Czechoslovakia[1]	G	17,627	21,055	23,284	24,251	17,541	20,456	23,016	24,946
Denmark[2]	G	17,708	22,811	25,434	25,942	16,454	21,201	25,615	27,140
Egypt[3]	S	9,962	11,502	11,941	8,659	3,714	2,934	4,352	2,174
Finland	G	13,233	15,333	18,922	21,843	13,617	16,336	19,560	22,151
France	S	107,809	128,217	157,920	178,026	97,726	119,340	143,391	167,792
German Dem. Republic[1]	G	23,433	27,414	28,786	31,129	25,268	27,729	29,870	32,206
Germany, Fed. Rep. of[4]	S	157,645	190,852	228,202	250,443	183,406	243,303	294,045	323,277
Greece	S	10,139	11,314	13,056	12,015	4,542	5,650	6,535	5,307
Hongkong	G	29,567	35,365	48,462	63,896	30,039	35,439	48,473	63,163
India	G	15,585	15,093	16,754	18,958	8,750	9,187	11,596	13,182
Indonesia	S	10,262	10,718	12,370	13,249	21,235	14,805	17,136	19,218
Iran[5]	S	n.a.	n.a.	n.a.	n.a.	12,378	n.a.	n.a.	n.a.
Iraq	S	n.a.	6,360	3,854	n.a.	n.a.	n.a.	n.a.	n.a.
Ireland	G	10,024	12,610	13,622	15,568	10,362	13,158	15,973	18,738
Israel[6]	S	8,021	9,285	11,451	12,506	6,080	6,933	8,222	9,145
Italy	S	90,994	99,937	132,417	138,665	78,957	97,835	124,005	127,114
Japan[7]	G	129,480	126,408	149,515	187,348	175,683	209,153	229,224	264,915
Korea, Republic of[8]	S	31,136	31,584	41,020	51,811	30,283	34,714	47,281	60,696
Kuwait	S	n.a.	5,729	5,496	5,565	10,126	7,221	8,468	7,161

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Table 24.26 External Trade by Selected Countries: 1985-1988 (continued)
(Value in million U.S. dollars)

Country	System	Imports (C.I.F.) 1985	1986	1987	1988	Exports (F.O.B.) 1985	1986	1987	1988
Mexico[9]	G	14,015	11,918	12,761	18,954	21,822	16,031	20,656	20,658
Netherlands	S	65,218	75,583	91,314	99,800	68,282	80,565	92,876	103,561
New Zealand	G	6,080	6,135	7,209	7,305	5,736	5,944	7,189	8,806
Nigeria	G	6,205	4,029	3,917	n.a.	13,113	5,899	7,383	n.a.
Norway	G	15,560	20,306	22,640	23,221	19,991	18,097	21,491	22,437
Peru[1]	S	2,977	2,163	2,825	2,556	2,705	2,467	2,626	2,672
Saudi Arabia	S	23,623	19,109	20,110	21,784	27,480	27,174	22,590	23,737
Singapore	G	26,285	25,512	32,559	43,862	22,813	22,495	28,686	39,305
Spain	S	30,995	34,949	48,945	60,576	25,112	27,158	34,160	40,067
Sweden	G	28,583	32,678	41,060	45,734	30,490	37,230	44,834	49,888
Switzerland	S	30,722	41,278	50,915	56,640	27,451	37,674	45,742	50,861
Thailand	G	9,244	9,138	12,849	19,078	7,122	8,753	11,546	15,579
USSR[1]	G	83,140	88,871	96,061	107,229	87,281	97,247	107,874	110,559
United Kingdom[10]	G	109,269	126,208	154,409	189,753	101,332	106,981	131,206	145,469
United States[11]	G	361,626	382,295	424,442	459,565	213,146	227,158	254,122	321,813
Venezuela[1]	G	7,418	8,600	8,701	11,476	15,502	10,052	8,909	8,475

Systems: General trade, G, includes goods imported into customs bond and re-exported without being cleared for domestic consumption, whereas special trade, S, excludes them. Data referring to general imports less all re-exports or to exports of domestic produce are said to be according to the semi-special system, Si. In all systems, goods passing through the country for purposes of transport only are excluded from the statistics.

[1] Imports F.O.B.
[2] Beginning 1983, special trade.
[3] Beginning 1973, import figures exclude petroleum imported without stated value.

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Table 24.26 External Trade by Selected Countries: 1985-1988 (concluded)
(Value in million U.S. dollars)

[4] Excluding trade conducted in accordance with the supplementary protocol to the treaty on the basis of relations between the Federal Republic of Germany and the German Democratic Republic. The value of this trade amounted to, in million U.S. dollars, imports: 1983-2,694; 1984-2,228; 1985-2,648; and 1986-3,156.
[5] Year ending December 20 of the year stated.
[6] Net trade, excluding returned goods.
[7] Beginning May 15, 1972, excluding data for Okinawa prefecture.
[8] Including imports of foreign aid.
[9] Exports include revaluation, but exclude goods from customs bonded warehouses and free zones. Also beginning 1979 the data exclude trade in silver.
[10] Including monetary gold (United Kingdom: from 1977)
[11] Including the trade of U.S. Virgin Islands and Puerto Rico but excluding trade between the U.S. and its possession (Guam, America, Samoa and others.)

Source: *United Nations International Trade Statistics Yearbook, 1988*. New York, 1990.

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Table 24.27 Number of Tourist Arrivals and Tourist Receipts by Selected Countries: 1984-1988
(Arrivals in thousands; receipts in million U.S. dollars)

Country	Number of tourist arrivals				
	1984	1985	1986	1987	1988
Philippines	817	773	781	781	1,023
Argentina[1]	1,608	1,503	1,600	1,950	2,119
Australia[1]	1,015	1,143	1,429	1,784	2,249
Austria[2]	15,110	15,168	15,092	15,761	571
Belgium	7,388	7,078	n.a.	2,516	2,700
Brazil	1,596	1,736	1,934	1,929	1,743
Canada	34,865	35,925	40,459	14,975	15,493
Czechoslovakia[3]	17,510	16,506	19,030	6,126	14,028
Denmark[2]	3,646	n.a.	n.a.	1,171	1,150
Egypt[1]	1,560	1,518	1,311	1,671	1,833
Finland[1]	462	452	n.a.	823	877
France	35,429	36,748	36,080	36,974	38,288
German Dem. Republic[2]	n.a.	n.a.	n.a.	1,122	1,209
Germany, Fed. Rep. of[2]	11,942	12,686	12,217	12,780	13,113
Greece	6,027	7,039	7,339	7,564	7,778
Hongkong	3,108	3,370	3,733	4,502	5,589
Hungary	13,429	15,126	16,646	11,826	10,563
India	1,210	1,271	1,462	1,484	1,591
Indonesia[1]	701	749	825	1,060	1,120
Iran	573	342	210	69	67
Iraq	1,811	2,153	1,004	739	685
Ireland	9,914	9,942	9,898	2,664	3,007
Israel	1,258	1,436	1,195	1,379	1,170
Italy	49,151	53,634	53,315	25,749	26,155
Japan	2,110	2,327	2,062	1,939	2,146
Korea, Republic of[1]	1,297	1,426	1,659	1,875	2,340
Kuwait[4]	910	1,532	n.a.	78	80
Malaysia[5]	5,120	n.a.	n.a.	3,146	3,374
Mexico	70,140	65,114	67,389	5,407	5,692
Nepal	177	181	223	248	265
Netherlands	3,218	3,329	3,142	3,353	3,322
New Zealand	568	670	733	844	865
Norway[6]	1,745	193	1,637	1,782	1,704
Poland	2,997	3,436	n.a.	2,484	2,495
Portugal	9,811	11,692	13,057	6,102	6,624
Puerto Rico	1,496	1,545	1,573	1,872	2,077
Singapore[5]	3,001	3,043	3,201	3,373	3,833
Spain	42,932	43,235	47,389	32,900	35,000
Sweden[2]	839	853	824	814	830
Switzerland	11,900	11,400	3,147	11,600	11,700
Thailand	2,347	2,438	2,818	3,483	4,231
Turkey	2,117	2,615	2,391	2,468	3,715
USSR[1]	7,249	1,970	2,036	5,246	6,007
United Kingdom	13,644	14,449	13,772	15,566	15,798
United States	52,713	25,829	25,829	30,238	34,474

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Table 24.27 Number of Tourist Arrivals and Tourist Receipts by Selected Countries: 1984-1988 (continued)
(Arrivals in thousands; receipts in million U.S. dollars)

Country	Number of tourist arrivals 1984	1985	1986	1987	1988
Venezuela	354	385	429	615	675
Yugoslavia	19,717	23,357	24,747	8,907	9,018

Country	Tourist receipts 1984	1985	1986	1987	1988
Philippines	366	507	647	459	405
Argentina[1]	602	523	545	614	634
Australia[1]	1,211	1,089	1,371	1,789	2,801
Austria[2]	5,049	5,084	6,076	8,863	8,520
Belgium	1,664	1,663	2,271	2,980	3,438
Brazil	1,512	1,739	1,527	1,502	1,643
Canada	2,844	3,103	3,860	3,961	4,655
Czechoslovakia[3]	328	307	336	386	436
Denmark[2]	1,292	1,326	1,759	2,219	2,423
Egypt[1]	860	990	785	1,586	1,784
Finland[1]	489	501	596	823	877
France	7,598	7,942	9,704	11,870	13,783
German Dem. Republic[2]	n.a.	n.a.	n.a.	n.a.	n.a.
Germany, Fed. Rep. of[2]	5,506	5,899	7,826	7,678	8,449
Greece	1,313	1,428	1,834	2,268	2,396
Hongkong	1,711	1,788	2,211	3,184	4,166
Hungary	452	512	611	827	759
India	1,189	1,200	1,390	1,455	1,500
Indonesia[1]	520	525	590	803	850
Iran	42	27	28	26	25
Iraq	152	181	84	62	61
Ireland	461	531	634	839	999
Israel	1,056	1,109	969	1,347	1,343
Italy	8,595	8,353	9,855	12,174	12,399
Japan	970	1,137	1,463	2,097	2,893
Korea, Republic of[1]	673	784	1,550	2,299	3,265
Kuwait[4]	54	103	86	83	118
Malaysia[5]	535	543	612	714	766
Mexico	3,282	2,900	2,984	3,497	3,994
Nepal	33	40	43	56	63
Netherlands	1,531	1,504	1,900	2,695	2,857
New Zealand	309	276	n.a.	934	1,073
Norway[6]	660	755	991	1,261	1,443
Poland	101	118	136	184	193
Portugal	960	1,137	1,574	2,145	2,404

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Table 24.27 Number of Tourist Arrivals and Tourist Receipts by Selected Countries: 1984-1988 (concluded)
(Arrivals in thousands; receipts in million U.S. dollars)

Country	1984	1985	Tourist receipts 1986	1987	1988
Puerto Rico	659	702	720	863	996
Singapore[5]	1,859	1,659	1,842	2,088	2,399
Spain	7,717	8,151	12,058	14,760	16,686
Sweden[2]	1,129	1,332	1,540	2,033	2,347
Switzerland	3,163	3,145	4,227	5,345	5,615
Thailand	1,156	1,171	1,421	1,947	3,120
Turkey	840	1,482	1,215	1,721	2,355
USSR[1]	n.a.	n.a.	n.a.	n.a.	n.a.
United Kingdom	6,152	6,985	7,921	10,225	11,023
United States	1,386	11,663	20,964	24,128	29,878
Venezuela	142	164	190	409	425
Yugoslavia	1,054	1,050	1,105	1,668	2,024

* Provisional.
1 Visitor arrivals.
2 Tourist arrivals at all accomodation establishments.
3 Excluding nationals residing abroad.
4 Arrivals of tourists at hotels.
5 Tourist rights in approved hotels only.

Source: *United Nations Statistical Yearbook, 1987.* New York, 1990.

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Table 24.28 Number of Scientists and Engineers Engaged in Research and Experimental Development by Their Field of Study and by Selected Countries: Latest Year Available

Country	Year	Total	Field of study: Natural science	Engineering and technology	Medical sciences	Agricultural sciences	Social sciences and Humanities	Other fields
Philippines	1984	7,149	898	1,899	765	1,743	1,641	203
Argentina	1988	39,274	14,634	5,438	5,088	5,183	8,180	751
Australia	1986	33,768	7,625	4,498	3,049	3,720	6,683	8,193
Austria	1985	4,591	1,500	739	590	282	1,480	-
Brazil	1985	52,863	11,768	7,765	6,107	7,607	11,007	8,609
Bulgaria	1987	72,853	7,347	15,324	6,816	3,271	8,825	31,270
Columbia	1982	5,852	1,867	743	1,408	790	1,044	-
Chile	1984	5,897	1,596	1,530	1,376	331	1,002	62
Finland	1983	10,951	2,291	5,211	890	572	1,947	40
German Dem. Rep.	1989	127,449	15,480	88,542	9,232	8,376	5,819	-
Hungary	1987	49,354	5,190	21,653	5,161	3,714	13,185	451
Indonesia	1983	18,533	5,317	3,285	1,615	4,083	4,233	-
Japan	1981	401,880	82,719	143,091	72,258	27,502	45,424	30,886
Jordan	1982	1,241	310	340	118	92	381	-
Korea, Republic of	1983	32,117	4,877	17,744	4,065	3,719	-	1,712
Mexico	1984	20,998	4,766	3,387	4,867	3,003	4,975	-
New Caledonia	1985	156	98	16	6	28	6	2
Norway	1985	9,692	1,833	4,421	945	456	1,797	240
Pakistan	1982	5,815	1,769	2,945	1,722	5,326	-	1,228
Poland	1989	98,800	25,900	31,000	15,100	9,700	14,600	2,500
Portugal	1980	6,476	1,898	1,072	678	852	1,023	953
Qatar	1986	287	217	53	3	5	-	9
Singapore	1987	3,361	863	2,007	436	55	-	-
Sri Lanka	1985	6,777	3,648	740	517	-	1,872	-
Spain	1986	23,329	4,038	8,434	3,460	2,505	4,897	-

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Table 24.28 Number of Scientists and Engineers Engaged in Research and Experimental Development by Their Field of Study and by Selected Countries: Latest Year Available (concluded)

Country	Year	Total	Field of study					
			Natural science	Engineering and technology	Medical sciences	Agricultural sciences	Social sciences and Humanities	Other fields
Thailand	1987	8,498	1,669	1,176	1,570	1,849	2,229	-
Turkey	1983	7,309	891	1,040	1,350	1,590	531	1,907
Uruguay	1987	4,906	588	858	1,231	1,123	823	283
Venezuela	1983	8,222	2,681	1,161	1,064	1,482	1,565	269
Yugoslavia	1980	27,135	4,988	8,357	2,982	3,098	15,014	2,696

Scientists and engineers - persons with scientific or technical training usually completions of third level education in any field of science.
Research and experimental development - any creative systematic activity undertaken in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this knowledge to device new applications.

Source: United Nations Educational, Scientific and Cultural Organizations Statistical Yearbook, 1991. France, 1991.

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Table 24.29 Number of Teaching Staff and School Enrolment by Level of Educatiou and by Selected Countries: Latest Year Available

Country	Year	Pre-primary		First level		Second level		Third level	
		Teaching staff	School enrolment	Teaching staff	School enrolment	Teaching staff	School enrolment	Teaching staff	School enrolment
Philippines[1]	1989	10,988	321,459	314,838	10,284,861	-	3,961,639	70,012	[e]1,579,938
Australia	1989	-	179,344	92,820	1,555,230	101,321	1,276,969	25,032	441,076
Austria	1989	9,044	192,946	33,796	367,006	71,129	601,140	13,013	199,845
Belgium	1987	-	371,509	71,064	728,718	114,628	805,647	-	254,329
Brazil	1989	149,150	3,530,000	•1,201,100	•27,640,000	•238,700	•3,441,000	128,029	1,518,904
Canada	1989	14,950	475,000	149,500	2,345,000	158,618	2,254,654	59,741	1,322,917
China	1989	709,100	18,476,600	5,543,800	123,731,000	3,422,900	50,541,400	397,365	2,173,112
Czechoslovakia	1989	50,519	636,622	98,038	1,961,742	86,885	856,971	25,350	186,142
Denmark	1988	-	51,814	30,000	355,311	-	483,502	-	126,662
Egypt	1989	5,094	177,740	241,119	6,155,100	-	4,998,615	-	[e]764,539
Finland	1989	-	49,772	-	389,067	-	410,582	-	155,313
France	1989	74,504	2,535,955	265,600	4,163,161	434,018	5,398,599	-	1,587,202
German Dem. Republic	1989	73,383	747,140	57,458	956,170	158,331	1,418,272	42,702	[e]438,930
Germany, Fed. Republic of	1988	84,764	1,645,959	-	2,473,700	-	-	198,241	1,686,725
Greece	1987	7,942	155,246	39,125	868,335	54,173	840,020	12,760	189,173
Hongkong	1988	-	214,700	19,625	534,309	[d]20,183	458,444	[b]5,928	76,844
India	1989	-	1,353,023	1,601,717	97,318,114	22,311,837	52,157,886	[c]302,843	4,470,844
Indonesia	1988	81,426	1,568,450	1,278,889	30,130,564	788,929	11,693,361	[b]75,589	980,162
Iran, Islamic Rep. of	1989	8,405	217,496	361,878	8,817,145	263,399	4,668,442	20,515	315,657
Iraq	1988	4,654	85,096	130,777	3,023,132	53,937	1,166,859	11,072	209,818
Ireland	1988	4,597	135,923	15,393	423,662	-	341,800	5,086	81,133
Israel	1989	-	318,160	37,627	702,472	43,235	291,754	-	[e]117,454
taly	1989	109,565	1,566,364	257,961	3,140,113	571,607	5,245,132	54,473	1,358,254
Japan	1989	109,226	2,037,614	454,109	9,606,627	651,728	11,143,930	271,109	2,683,035
Korea, Republic of	1990	18,511	414,532	136,800	4,868,520	180,724	4,559,557	42,911	1,691,429
Kuwait	1988	2,935	52,105	10,288	185,464	21,112	265,001	-	26,080

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Table 24.29 Number of Teaching Staff and School Enrolment by Level of Education and by Selected Countries: Latest Year Available (concluded)

Country	Year	Pre-primary		First level		Second level		Third level	
		Teaching staff	School enrolment	Teaching staff	School enrolment	Teaching staff	School enrolment	Teaching staff	School enrolment
Mexico	1990	104,967	2,734,065	471,623	14,508,116	402,473	6,704,647	133,068	[f]1,314,027
Norway	1989	33,075	128,237	50,904	310,600	-	375,095	9,572	114,855
New Zealand	1989	1,672	73,390	16,154	312,773	-	341,249	10,337	120,821
Portugal	1989	-	128,877	-	1,003,569	-	544,943	13,248	156,701
Romania	1989	31,293	835,890	138,981	2,891,810	44,417	1,652,441	11,696	164,507
Saudi Arabia	1988	4,375	68,426	105,937	1,694,394	-	-	11,231	123,848
Singapore	1989	776	17,858	9,998	257,833	-	-	3,141	[a]35,192
Spain	1987	39,513	1,054,241	[•]131,389	[•]3,246,655	229,145	4,798,337	52,206	1,036,439
Sweden	1989	-	307,816	92,885	578,540	-	597,971	-	49,292
Switzerland	1989	-	136,845	-	394,061	-	371,097	-	132,753
Thailand	1989	3,283	84,763	[g]338,020	[g]6,676,562	[•,e]123,152	[e]2,071,107	52,317	[f]952,012
USSR	1989	1,579,000	12,718,000	3,004,000	25,040,000	-	21,124,000	404,000	5,273,000
United Kingdom	1988	27,000	716,000	225,000	4,414,966	-	4,365,912	84,666	1,113,341
United States	1986	-	6,515,000	-	27,117,000	-	13,913,000	-	13,824,592
Venezuela	1988	24,174	555,933	-	2,967,110	-	1,138,916	37,564	500,295

[•] Provisional data.

[a] For 1983.
[b] For 1984.
[c] For 1985.
[d] For 1987.
[e] For 1988.
[f] For 1989.
[g] For 1990.

Source: United Nations Educational, Scientific and Cultural Organization Statistics Yearbook, 1991. France, 1991.

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Table 24.30 Book Production and Number of Titles by Language of Publication and by Selected Countries: Latest Year Available

Country	Year	Total	National language	English	Foreign language French	German	Spanish	Russian	Others	Two or more languages
Philippines	1984	542	217	325	-	-	-	-	-	-
Australia	1987	10,963	10,723	-	3	4	10	3	86	134
Austria	1989	9,462	9,108	274	31	-	12	4	32	1
Belgium	1989	6,822	6,330	149	-	-	34	2	145	162
Bulgaria	1989	4,543	3,900	139	60	75	54	188	62	65
Colombia	1989	1,486	1,471	10	-	-	-	-	5	-
Czechoslovakia	1989	9,294	8,533	168	29	73	32	101	273	85
Denmark	1989	10,762	9,221	1,016	37	85	-	-	135	268
Egypt	1988	1,451	1,344	82	23	-	-	-	1	-
France	1989	40,115	31,819	567	-	123	62	28	188	-
Israel	1985	2,214	1,433	170	8	10	-	8	32	4
Indonesia	1988	1,687	1,627	20	-	-	-	-	-	40
Italy	1989	22,647	21,257	464	146	109	41	-	115	515
Japan	1983	44,253	44,253	-	-	-	-	-	-	-
Korea, Republic of	1989	39,267	38,845	262	35	20	-	-	90	15
Malaysia	1989	3,348	1,908	893	-	2	-	-	351	194
Netherlands	1989	15,392	13,740	1,335	65	179	-	-	73	-
Nigeria	1989	1,466	1,444	-	-	-	-	-	11	5
Norway	1989	5,331	4,555	612	7	7	-	-	150	-
Poland	1989	10,286	9,762	310	34	63	7	70	25	15
Sri Lanka	1989	2,188	1,339	582	-	-	-	-	4	263
Spain	1989	38,353	34,840	1,329	698	350	-	-	564	572
Sweden	1989	11,197	9,254	1,408	19	42	16	-	132	326
Switzerland	1989	13,270	11,318	1,633	-	-	-	-	319	-
Thailand	1989	11,217	10,058	1,159	-	-	-	-	-	-
USSR	1989	76,711	72,981	1,021	349	371	380	-	1,356	253
Yugoslavia	1989	11,339	9,299	197	31	65	-	22	759	966

Source: United Nations Educational, Scientific and Cultural Organization Statistics Yearbook, 1991. France, 1991.

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Table 24.31 Daily Newspaper, Number and Circulation per 1,000 Inhabitants by Selected Countries: 1986 and 1988

Country	Number		Estimated circulation		Per 1,000 inhabitants	
	1986	1988	1986	1988	1986	1988
Philippines	23	38	1,968	3,298	n.a.	56
Algeria	6	5	812	510	36	21
Argentina	218	194	2,633	2,652	n.a.	n.a.
Afghanistan	13	14	71	151	n.a.	n.a.
Australia	62	68	4,213	4,121	264	252
Austria	33	34	2,685	2,712	358	362
Belgium	24	23	2,186	2,174	221	219
Brazil	322	366	6,534	7,944	48	n.a.
Bulgaria	17	20	2,834	2,396	316	267
Canada	116	107	5,747	5,993	225	231
China	73*	78	37,860	391	n.a.	n.a.
Cuba	17	17	1,075	1,315	107	129
Czechoslovakia	30	30	5,139	5,364	332	345
Denmark	47	46	1,880	1,842	367	359
Egypt	8	13	2,638	1,953	54	38
Greece	142	117	n.a.	609	n.a.	n.a.
India	1,978	n.a.	21,857	n.a.	28	n.a.
Ireland	7	8	648	724	181	205
Italy	72	73	5,636	6,005	99	105
Japan	124	158	68,653	71,228	566	n.a.
Korea, Republic of	35	39	8,654	10,429	n.a.	n.a.
Malaysia	40	47	1,546	2,462	n.a.	n.a.
Mexico	308	286	10,356	10,539	127	127
Netherlands	90	86	4,527	4,592	311	311
Nigeria	19	31	898	1,108	n.a.	n.a.
Norway	84	83	2,209	2,309	530	551
Poland	45	45	7,480	6,939	200	184
Portugal	27	28	418	859	47	n.a.
Romania	36	34	3,637	3,648	159	159
Singapore	10	8	924	763	357	289
Spain	105	102	2,910	3,200	75	82
Sweden	114	107	4,462	4,387	534	526
Switzerland	118	98	3,241	3,280	500	504
Thailand	32	40	4,350	4,750	84	87
United Kingdom	104	104	22,519	22,494	397	394
United States	1,657	n.a.	62,502	n.a.	259	n.a.
USSR	723	723	122,982	133,979	442	474
Venezuela	55	56	1,982	2,225	n.a.	n.a.
Vietnam	4	5	545	545	n.a.	n.a.
Yugoslavia	28	28	2,508	2,354	108	100

* Provisional or estimated data.

Source: United Nations Educational, Scientific and Cultural Organization Statistics Yearbook, 1991. France, 1991.

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Table 24.32 Radio and Television Broadcasting and Number of Receivers per 1,000 Inhabitants by Selected Countries: 1987-1989

Country	Code	Radio receivers					
		Number			Per 1,000 inhabitants		
		1987	1988	1989	1987	1988	1989
Philippines	R	7,800	8,000	8,300	135	135	136
Algeria	R	5,250	5,456	5,645	227	229	232
Australia	L	20,500	20,800	21,000	1,270	1,273	1,260
Austria	L	2,681	-	2,862	358	-	378
Belgium	L	4,608	4,620	4,627	465	466	470
Canada	R	24,624	25,000	26,878	953	960	1,023
Denmark	L	2,313	2,314	2,205	451	452	429
Egypt	R	15,500	16,000	16,450	310	312	322
Ethiopia	R	8,500	8,700	9,000	193	193	188
France	R	49,500	49,800	50,000	893	895	895
German Dem. Republic	L	11,000	n.a.	6,762	663	n.a.	415
Germany, Fed. Republic of	L	23,378	n.a.	28,000	385	n.a.	457
Greece	R	4,100	4,150	4,200	411	415	419
Hongkong	R	3,550	3,600	3,700	633	634	642
India	R	62,000	63,500	65,000	77	78	78
Indonesia	R	25,000	25,500	26,000	145	146	144
Iran	R	12,000	12,500	13,000	236	237	245
Iraq	R	3,400	3,530	3,700	199	200	202
Israel	R	2,050	2,074	2,115	470	468	468
Italy	R	45,000	45,250	45,350	786	790	794
Japan	R	105,000	105,500	110,000	863	863	895
Korea, Republic of	R	41,575	42,070	42,570	986	986	1,003
Kuwait	R	600	630	660	327	329	337
Malaysia	R	7,050	7,250	7,460	436	438	428
	L	-	-	1,815	-	-	104

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Table 24.32 Radio and Television Broadcasting and Number of Receivers per 1,000 Inhabitants by Selected Countries: 1987-1989 (continued)

Country	Code	Radio receivers					
		Number			Per 1,000 inhabitants		
		1987	1988	1989	1987	1988	1989
Mexico	R	20,000	20,500	21,000	241	241	242
Netherlands	R	13,250	13,350	13,400	908	912	902
Nigeria	R	16,600	17,250	18,000	163	164	171
Poland	R	10,845	11,100	16,300	289	294	428
Portugal	R	2,165	2,200	2,220	212	215	216
Singapore	L	800	810	822	306	307	306
South Africa	R	10,550	10,900	11,200	319	323	324
Spain	R	11,473	11,820	11,900	295	302	304
Sweden	R	7,300	7,300	7,450	875	875	885
Switzerland	R	n.a.	n.a.	5,600	n.a.	n.a.	851
	L	2,598	2,605	2,675	400	401	407
Thailand	R	9,250	9,567	10,000	174	177	182
USSR	R	192,100	193,850	195,800	685	686	685
United Kingdom	R	65,000	65,100	65,400	1,145	1,146	1,145
United States	R	515,000	519,450	524,200	2,119	2,120	2,122
Venezuela	R	7,200	8,026	8,300	395	428	432
Yugoslavia	L	4,536	4,573	4,513	194	195	191
	R	n.a.	n.a.	5,800	n.a.	n.a.	245

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Table 24.32 Radio and Television Broadcasting and Number of Receivers per 1,000 Inhabitants by Selected Countries: 1987-1989 (continued)

Country	Code	Television receivers: Number 1987	Number 1988	Number 1989	Per 1,000 inhabitants 1987	Per 1,000 inhabitants 1988	Per 1,000 inhabitants 1989
Philippines	R	2,100	2,200	2,500	36	37	41.1
Algeria	R	1,607	1,700	1,770	70	71	72.8
Australia	L	7,880	7,900	8,050	483	484	483.9
Austria	L	3,600	2,688	2,485	480	359	328.0
Belgium	L	3,173	3,175	3,274	320	320	332.7
Canada	R	14,895	15,250	16,459	577	586	626.3
Denmark	L	1,979	1,932	1,962	386	377	381.7
Egypt	R	4,150	4,300	5,050	83	84	97.7
Ethiopia	R	70	75	100	1.6	1.7	2.1
France	R	18,459	22,200	22,350	333	399	400.2
German Dem. Rep.	L	6,199	6,225	6,250	374	375	383.4
Germany, Fed. Rep. of	L	23,378	23,011	31,000	385	379	506.4
Greece	R	1,750	1,720	1,950	175	175	194.5
Hongkong	R	1,350	1,400	1,580	241	247	260.3
India	R	n.a.	n.a.	22,539	n.a.	n.a.	27.0
	L	5,500	6,000	7,000	6.9	7.3	8.4
Indonesia	R	6,800	7,112	10,000	40	41	55.3
Iran	R	2,700	2,800	3,500	53	53	65.8
Iraq	R	1,100	1,200	1,250	64	68	68.4
Israel	R	1,150	1,175	1,200	264	265	265.5
Italy	R	14,687	24,000	24,150	257	419	422.9
Japan	R	71,500	72,000	75,000	587	589	610.4
Korea, Rep. of	R	8,200	8,643	8,800	194	203	207.3
Kuwait	R	480	502	550	261	262	280.6
Malaysia	R	2,270	2,350	2,500	140	142	143.6
	L	n.a.	1,565	1,653	n.a.	95	94.9

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Table 24.32 Radio and Television Broadcasting and Number of Receivers per 1,000 Inhabitants by Selected Countries: 1987-1989 (concluded)

Country	Code	Television receivers					
		Number			Per 1,000 inhabitants		
		1987	1988	1989	1987	1988	1989
Mexico	R	10,000	10,500	11,000	120	124	126.8
Netherlands	R	4,750	7,000	7,200	325	478	484.8
Nigeria	R	600	650	3,000	5.9	6.2	28.6
Poland	R	9,868	9,950	11,100	263	263	291.5
Portugal	R	1,626	1,640	10,055	159	160	214.1
Singapore	L	560	570	580	214	216	216.0
South Africa	R	3,200	3,300	3,500	97	98	101.4
Spain	R	14,314	14,871	15,200	368	380	388.7
Sweden	R	3,293	3,292	3,961	395	395	470.5
Switzerland	R	2,630	2,650	2,670	405	408	405.8
	L	2,330	2,316	2,426	359	356	368.8
Thailand	R	5,500	5,600	6,000	103	104	109.3
USSR	R	88,000	90,000	92,354	314	319	323.3
United Kingdom	R	24,650	24,700	24,800	434	435	434.3
United States	R	197,000	199,000	201,000	811	812	813.6
Venezuela	R	2,600	2,760	3,000	142	147	156.0
Yugoslavia	L	4,089	4,200	4,650	175	179	196.6
	R	n.a.	n.a.	4,074	n.a.	n.a.	172.4

Code: L - Number of licenses issued or sets declared.
R - Estimated number of receivers in use.

Source: *United Nations Educational, Scientific and Cultural Organization Statistics Yearbook, 1991. France, 1991.*

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993

Region/Province	City/Municipality	Classification	City/Municipality	Classification
National Capital Region (Metropolitan Manila)				
	Manila**	Special		
	Quezon City	Special		
	Pasay City	First		
	Kalookan City	First		
	1. Las Piñas	1st	8. Parañaque	1st
	2. Makati	1st	9. Pasig	1st
	3. Malabon	1st	10. Pateros	4th
	4. Mandaluyong	1st	11. San Juan	1st
	5. Marikina	1st	12. Taguig	1st
	6. Muntinlupa	1st	13. Valenzuela	1st
	7. Navotas	1st		
Cordillera Administrative Region (CAR)				
Abra		Fourth		
	1. Bangued*	4th	12. La Paz	6th
	2. Boliney	6th	13. Licuan	6th
	3. Bucay	6th	14. Luba	6th
	4. Bucloc	6th	15. Malibcong	6th
	5. Daguioman	6th	16. Manabo	6th
	6. Danglas	6th	17. Penarrubia	6th
	7. Dolores	6th	18. Pidigan	6th
	8. Lacub	6th	19. Pilar	6th
	9. Lagangilang	6th	20. Sallapadan	6th
	10. Lagayan	6th	21. San Isidro	6th
	11. Langiden	6th	22. San Juan	6th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	23. San Quintin	6th	26. Tubo	5th
	24. Tayum	6th	27. Villaviciosa	6th
	25. Tineg	5th		
Benguet		Second		
	Baguio City	First		
	1. Atok	5th	8. Kibungan	5th
	2. Bakun	5th	9. La Trinidad	4th
	3. Bokod	5th	10. Mangkayan	5th
	4. Buguias	5th	11. Sablan	6th
	5. Itogon	3rd	12. Tuba	4th
	6. Kabayan	5th	13. Tublay	5th
	7. Kapangan	5th		
Ifugao		Fifth		
	1. Aguinaldo	6th	6. Lagawe	5th
	2. Banaue	5th	7. Lamut	5th
	3. Hingyon	6th	8. Mayoyao	5th
	4. Hungduan	6th	9. Potia	5th
	5. Kiangan	5th	10. Tinoc	6th
Mt. Province		Fifth		
	1. Barlig	6th	6. Paracelis	5th
	2. Bauko	5th	7. Sabangan	6th
	3. Besao	6th	8. Sadanga	6th
	4. Bontoc	5th	9. Sagada	6th
	5. Natonin	5th	10. Tadian	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
Kalinga-Apayao		Third		
	1. Balbalan	5th	9. Pinukpok	5th
	2. Calanasan	5th	10. Pudtol	6th
	3. Conner	5th	11. Rizal-Liwan	6th
	4. Flora	5th	12. Sta. Marcela	6th
	5. Kabugao	5th	13. Tabuk*	4th
	6. Lubuagan	6th	14. Tanudan	6th
	7. Luna	5th	15. Tinglayan	6th
	8. Pasil	6th		
I. Ilocos				
Ilocos Norte		Second		
	Laoag City*	Second		
	1. Adams	6th	12. Marcos	5th
	2. Bacarra	5th	13. Nueva Era	5th
	3. Badoc	5th	14. Pagudpud	5th
	4. Bangui	5th	15. Paoay	5th
	5. Batac	4th	16. Pasuquin	5th
	6. Burgos	5th	17. Piddig	5th
	7. Carassi	6th	18. Pinili	5th
	8. Currimao	5th	19. San Nicolas	5th
	9. Dingras	5th	20. Sarrat	5th
	10. Dumalneg	6th	21. Solsona	5th
	11. Espiritu	5th	22. Vintar	5th
Ilocos Sur		Third		
	1. Alilem	6th	3. Bantay	5th
	2. Banayoyo	6th	4. Burgos	6th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	5. Cabugao	5th	21. San Vicente	6th
	6. Candon	4th	22. Santa	5th
	7. Caoayan	6th	23. Sta. Catalina	6th
	8. Cervantes	5th	24. Sta. Cruz	5th
	9. Calimuyod	6th	25. Sta. Lucia	5th
	10. Gregorio del Pilar	6th	26. Sta. Maria	5th
	11. Lidlidda	6th	27. Santiago	5th
	12. Magsingal	5th	28. Sto. Domingo	5th
	13. Nagbukel	6th	29. Sigay	6th
	14. Narvacan	5th	30. Sinait	5th
	15. Quirino	6th	31. Sugpon	6th
	16. Salcedo	6th	32. Suyo	6th
	17. San Emilio	6th	33. Tagudin	5th
	18. San Esteban	6th	34. Vigan	3rd
	19. San Idelfonso	6th		
	20. San Juan	5th		
La Union		Second		
	1. Agoo	4th	11. Naguilian	5th
	2. Aringay	5th	12. Pugo	5th
	3. Bacnotan	5th	13. Rosario	3rd
	4. Bagulin	6th	14. San Fernando	2nd
	5. Balaoan	5th	15. San Gabriel	5th
	6. Bangar	5th	16. San Juan	5th
	7. Bauang	4th	17. Santo Tomas	5th
	8. Burgos	6th	18. Santol	6th
	9. Caba	5th	19. Sudipen	6th
	10. Luna	5th	20. Tubao	6th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
Pangasinan		First		
	Dagupan City	First		
	San Carlos City	Second		
	1. Agno	5th	25. Manaoag	5th
	2. Aguilar	5th	26. Mangaldan	4th
	3. Alaminos	3rd	27. Mangatarem	5th
	4. Alcala	5th	28. Mapandan	5th
	5. Anda	5th	29. Natividad	5th
	6. Asingan	5th	30. Pozzorubio	4th
	7. Balungao	5th	31. Rosales	4th
	8. Bani	5th	32. San Fabian	4th
	9. Basista	5th	33. San Jacinto	5th
	10. Bautista	5th	34. San Manuel	5th
	11. Bayambang	4th	35. San Nicolas	5th
	12. Binalonan	4th	36. San Quintin	5th
	13. Binmaley	4th	37. Sta. Barbara	5th
	14. Bolinao	4th	38. Sta. Maria	5th
	15. Bugallon	5th	39. Sto. Tomas	6th
	16. Burgos	5th	40. Sison	5th
	17. Calasiao	4th	41. Sual	5th
	18. Dasol	5th	42. Tayug	4th
	19. Infanta	5th	43. Umingan	4th
	20. Labrador	5th	44. Urbiztondo	5th
	21. Laoac	5th	45. Urdaneta	2nd
	22. Lingayen	4th	46. Villasis	4th
	23. Mabini	5th		
	24. Malasiqui	4th		

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
II. Cagayan Valley				
Batanes		Sixth		
	1. Basco	6th	4. Mahatao	6th
	2. Itbayat	6th	5. Sabtang	6th
	3. Ivana	6th	6. Uyugan	6th
Cagayan		First		
	1. Abulog	5th	16. Lal-lo	5th
	2. Alcala	5th	17. Lasam	5th
	3. Allacapan	5th	18. Pamplona	5th
	4. Amulung	5th	19. Peñablanca	5th
	5. Aparri	3rd	20. Piat	5th
	6. Baggao	4th	21. Rizal	6th
	7. Ballesteros	5th	22. Sanchez-Mira	5th
	8. Buguey	5th	23. Sta. Ana	5th
	9. Calayan	5th	24. Sta. Praxedes	6th
	10. Camalaniugan	5th	25. Sta. Teresita	5th
	11. Claveria	5th	26. Sto. Niño	5th
	12. Enrile	5th	27. Solana	5th
	13. Gattaran	4th	28. Tuao	5th
	14. Gonzaga	5th	29. Tuguegarao	2nd
	15. Iguig	5th		
Isabela		First		
	1. Alicia	4th	5. Burgos	5th
	2. Angadanan	5th	6. Cabagan	5th
	3. Aurora	5th	7. Cabatuan	3rd
	4. Benito Soliven	5th	8. Cauayan	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	9. Cordon	5th	24. Ramon	5th
	10. Dinapiqui	6th	25. Reina Mercedes	6th
	11. Divilican	6th	26. Roxas	4th
	12. Echague	4th	27. San Agustin	5th
	13. Gamu	5th	28. San Guillermo	6th
	14. Ilagan	3rd	29. San Isidro	6th
	15. Jones	5th	30. San Manuel	5th
	16. Luna	6th	31. San Mariano	4th
	17. Delfin Albano	6th	32. San Mateo	4th
	18. Maconacon	5th	33. San Pablo	5th
	19. Mallig	5th	34. Sta. Maria	5th
	20. Nagulian	5th	35. Santiago	2nd
	21. Palanan	5th	36. Sto. Tomas	6th
	22. Quezon	5th	37. Tumauini	5th
	23. Quirino	5th		
Nueva Vizcaya		Fourth		
	1. Alfonso Castañeda	6th	9. Dupax del Sur	5th
	2. Ambaguio	6th	10. Kasibu	5th
	3. Aritao	5th	11. Kayapa	5th
	4. Bagabag	5th	12. Quezon	6th
	5. Bambang	5th	13. Sta. Fe	6th
	6. Bayombong	5th	14. Solano	4th
	7. Diadi	6th	15. Villa Verde	6th
	8. Dupax del Norte	5th		

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
Quirino		Fifth		
	1. Aglipay	5th	4. Maddela	4th
	2. Cabarroguis	5th	5. Nagtipunan	5th
	3. Diffun	5th	6. Saguday	6th
III. Central Luzon				
Bataan		Second		
	1. Abucay	5th	7. Mariveles	3rd
	2. Bagac	5th	8. Morong	5th
	3. Balanga	3rd	9. Orani	4th
	4. Dinalupihan	4th	10. Orion	5th
	5. Hermosa	5th	11. Pilar	5th
	6. Limay	3rd	12. Samal	5th
Bulacan		First		
	1. Angat	5th	13. Meycauayan	2nd
	2. Balagtas	4th	14. Norzagaray	4th
	3. Baliuag	3rd	15. Obando	4th
	4. Bocaue	3rd	16. Pandi	5th
	5. Bulacan	4th	17. Paombong	4th
	6. Bustos	5th	18. Plaridel	4th
	7. Calumpit	4th	19. Pulilan	5th
	8. Doña Remedios Trinidad	6th	20. San Ildelfonso	4th
	9. Guiguinto	4th	21. San Jose del Monte	3rd
	10. Hagonoy	3rd	22. San Miguel	3rd
	11. Malolos	3rd	23. San Rafael	4th
	12. Marilao	3rd	24. Sta. Maria	3rd

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
Nueva Ecija		First		
	Cabanatuan City	First		
	Palayan City	Sixth		
	San Jose City	Third		
	1. Aliaga	5th	16. Muñoz	4th
	2. Bongabon	5th	17. Nampicuan	6th
	3. Cabiao	5th	18. Pantabangan	5th
	4. Carranglan	5th	19. Peñaranda	5th
	5. Cuyapo	4th	20. Quezon	5th
	6. Gabaldon	5th	21. Rizal	5th
	7. Gapan	3rd	22. San Antonio	5th
	8. Gen. Mamerto Natividad	5th	23. San Isidro	5th
	9. General Tinio	5th	24. San Leonardo	5th
	10. Guimba	4th	25. Sta. Rosa	5th
	11. Jaen	5th	26. Sto. Domingo	5th
	12. Laur	5th	27. Talavera	4th
	13. Licab	6th	28. Talugtug	6th
	14. Llanera	5th	29. Zaragosa	5th
	15. Lupao	5th		
Pampanga		First		
	Angeles City	First		
	1. Apalit	4th	7. Lubao	4th
	2. Arayat	5th	8. Mabalacat	3rd
	3. Bacolor	4th	9. Macabebe	4th
	4. Candaba	5th	10. Magalang	5th
	5. Floridablanca	4th	11. Masantol	4th
	6. Guagua	3rd	12. Mexico	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	13. Minalin	5th	18. Sta. Ana	5th
	14. Porac	3rd	19. Sta. Rita	5th
	15. San Fernando	1st	20. Sto. Tomas	5th
	16. San Luis	5th	21. Sexmoan	5th
	17. San Simon	5th	22. Sasmuan	6th
Tarlac		First		
	1. Anao	6th	10. Paniqui	3rd
	2. Bamban	5th	11. Pura	5th
	3. Camiling	3rd	12. Ramos	6th
	4. Capas	4th	13. San Clemente	6th
	5. Concepcion	3rd	14. San Manuel	5th
	6. Gerona	4th	15. Sta. Ignacia	5th
	7. La Paz	5th	16. Tarlac	1st
	8. Mayantoc	5th	17. Victoria	5th
	9. Moncada	4th	18. San Jose	6th
Zambales		Third		
	Olongapo City	First		
	1. Botolan	5th	8. San Antonio	5th
	2. Cabangan	5th	9. San Felipe	5th
	3. Candelaria	5th	10. San Marcelino	4th
	4. Castillejos	5th	11. San Narciso	5th
	5. Iba	5th	12. Sta. Cruz	3rd
	6. Masinloc	4th	13. Subic	4th
	7. Palauig	5th		

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
IV. Southern Tagalog				
Aurora		Fifth		
	1. Baler	5th	5. Dingalan	6th
	2. Casiguran	5th	6. Dipaculao	5th
	3. Dilasag	5th	7. Maria Aurora	5th
	4. Dinalongan	6th	8. San Luis	5th
Batangas		First		
	Batangas City	First		
	Lipa City	Second		
	1. Agoncillo	5th	17. Nasugbu	3rd
	2. Alitagtag	5th	18. Padre Garcia	5th
	3. Balayan	3rd	19. Rosario	4th
	4. Balete	6th	20. San Jose	5th
	5. Bauan	1st	21. San Juan	4th
	6. Calaca	5th	22. San Luis	5th
	7. Calatagan	5th	23. San Nicolas	6th
	8. Cuenca	5th	24. San Pascual	2nd
	9. Ibaan	5th	25. Sta. Teresita	6th
	10. Laurel	5th	26. Sto. Tomas	4th
	11. Lemery	4th	27. Taal	5th
	12. Lian	5th	28. Talisay	5th
	13. Lobo	5th	29. Tanauan	3rd
	14. Mabini	5th	30. Taysan	5th
	15. Malvar	5th	31. Tingloy	6th
	16. Mataas na Kahoy	5th	32. Tuy	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
Cavite		First		
	Cavite City	Second		
	Tagaytay City	Fourth		
	Trece Martirez City	Fifth		
	1. Alfonso	5th	11. Kawit	3rd
	2. Amadeo	5th	12. Magallanes	5th
	3. Bacoor	2nd	13. Maragondon	5th
	4. Carmona	5th	14. Mendez-Nuñez	5th
	5. Dasmariñas	3rd	15. Naic	4th
	6. Gen. Emilio Aguinaldo	6th	16. Noveleta	5th
	7. Gen. Mariano Alvarez	4th	17. Rosario	4th
	8. Gen. Trias	4th	18. Silang	4th
	9. Imus	2nd	19. Tanza	4th
	10. Indang	5th	20. Ternate	5th
Laguna		First		
	San Pablo City	First		
	1. Alaminos	5th		
	2. Bay	5th		
	3. Biñan	3rd	12. Luisiana	5th
	4. Cabuyao	2nd	13. Lumban	5th
	5. Calamba	1st	14. Mabitac	6th
	6. Calauan	5th	15. Magdalenal	5th
	7. Cavinti	5th	16. Majayjay	5th
	8. Famy	6th	17. Nagcarlan	5th
	9. Kalayaan	6th	18. Paete	5th
	10. Liliw	5th	19. Pagsanjan	5th
	11. Los Baños	4th	20. Pakil	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	21. Pangil	5th	26. Sta. Maria	5th
	22. Pila	5th	27. Sta. Rosa	3rd
	23. Rizal	6th	28. Siniloan	5th
	24. San Pedro	3rd	29. Victoria	5th
	25. Sta. Cruz	2nd		
Marinduque		Fourth		
	1. Boac	4th	4. Mogpog	5th
	2. Buenavista	5th	5. Sta. Cruz	3rd
	3. Gasan	5th	6. Torrijos	5th
Occidental Mindoro		Third		
	1. Abra de Ilog	5th	7. Paluan	5th
	2. Calintaan	5th	8. Rizal	5th
	3. Looc	6th	9. Sablayan	4th
	4. Lubang	5th	10. San Jose	3rd
	5. Magsaysay	5th	11. Sta. Cruz	5th
	6. Mamburao	5th		
Oriental Mindoro		First		
	1. Baco	5th	9. Pinamalayan	4th
	2. Bansud	5th	10. Pola	5th
	3. Bongabong	4th	11. Puerto Galera	5th
	4. Bulalakao	5th	12. Roxas	5th
	5. Calapan	3rd	13. San Teodoro	5th
	6. Gloria	5th	14. Socorro	5th
	7. Mansalay	5th	15. Victoria	5th
	8. Naujan	4th		

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
Palawan		First		
	Puerto Princesa City*	First		
	1. Aborlan	5th	12. El Nido	5th
	2. Agutaya	6th	13. Kalayaan Island	6th
	3. Araceli	6th	14. Linapacan	6th
	4. Balabac	5th	15. Magsaysay	6th
	5. Batarasa	5th	16. Marcos	4th
	6. Brooke's Point	3rd	17. Narra	4th
	7. Busuanga	5th	18. Quezon	4th
	8. Cagayancillo	6th	19. Roxas	5th
	9. Coron	5th	21. Taytay	5th
	10. Cuyo	5th	20. San Vicente	4th
	11. Dumaran	5th		
Quezon		First		
	Lucena City*	Second		
	1. Agdangan	6th	13. Gumaca	4th
	2. Alabat	5th	14. Infanta	5th
	3. Atimonan	4th	15. Jumalig	6th
	4. Buenavista	5th	16. Lopez	4th
	5. Burdeos	5th	17. Lucban	4th
	6. Calauag	4th	18. Macalelon	5th
	7. Candelaria	4th	19. Mauban	4th
	8. Catanauan	5th	20. Malunay	5th
	9. Dolores	5th	21. Padre Burgos	5th
	10. General Luna	5th	22. Pagbilao	5th
	11. General Nakar	5th	23. Panukulan	6th
	12. Guinayangan	5th	24. PAtnanungan	6th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	25. Perez	6th	33. San Antonio	5th
	26. Pitogo	5th	34. San Francisco	5th
	27. Plaridel	6th	35. San Narciso	5th
	28. Polilo	5th	36. Sariaya	4th
	29. Quezon	6th	37. Tagkawayan	5th
	30. Real	5th	38. Tayabas	4th
	31. Sampaloc	5th	39. Tiaong	4th
	32. San Andres	5th	40. Unisan	5th
Rizal		First		
	1. Angono	4th	8. Morong	5th
	2. Antipolo	1st	9. Pililla	4th
	3. Baras	5th	10. Rodriguez	3rd
	4. Binangonan	3rd	11. San Mateo	4th
	5. Cainta	1st	12. Tanay	3rd
	6. Cardona	5th	13. Taytay	2nd
	7. Jalajala	5th	14. Teresa	4th
Romblon		Fifth		
	1. Alcantara	6th	10. Magdiwang	6th
	2. Banton	6th	11. Odiongan	5th
	3. Cajidiocan	5th	12. Romblon*	5th
	4. Calatrava	6th	13. San Agustin	5th
	5. Concepcion	6th	14. San Andres	6th
	6. Corcuera	6th	15. San Fernando	5th
	7. Ferrol	6th	16. San Jose	6th
	8. Imelda	6th	17. Sta. Fe	6th
	9. Looc	5th		

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
V. Bicol Region				
Albay		Second		
	Legazpi City*	Second		
	1. Bacacay	5th	10. Manito	5th
	2. Camalig	5th	11. Oas	5th
	3. Daraga	3rd	12. Pio Duran	5th
	4. Guinobatan	4th	13. Polangui	4th
	5. Jovellar	6th	14. Rapu-Rapu	5th
	6. Libon	5th	15. Sto. Domingo	5th
	7. Ligao	4th	16. Tabaco	3rd
	8. Malilipot	5th	17. Tiwi	4th
	9. Malinao	5th		
Camarines Norte		Third		
	1. Basud	5th	7. Mercedes	5th
	2. Capalonga	6th	8. Paracale	5th
	3. Daet*	4th	9. San Vicente	6th
	4. Imelda	6th	10. Sta. Elena	5th
	5. Jose Panganiban	4th	11. Talisay	5th
	6. Labo	4th	12. Vinzons	5th
Camarines Sur		First		
	Iriga City	Fourth		
	Naga City	Second		
	1. Baao	5th	5. Buhi	5th
	2. Balatan	5th	6. Bula	5th
	3. Bato	5th	7. Cabusao	6th
	4. Bombon	6th	8. Calabanga	4th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	9. Camaligan	6th	23. Ocampo	5th
	10. Canaman	5th	24. Pamplona	5th
	11. Caramoan	5th	25. Pasacao	5th
	12. Del Gallego	5th	26. Pili	4th
	13. Gainza	6th	27. Presentacion	6th
	14. Garchitorena	5th	28. Ragay	5th
	15. Goa	5th	29. Sagnay	5th
	16. Lagonoy	5th	30. San Fernando	5th
	17. Libmanan	4th	31. San Jose	5th
	18. Lupi	5th	32. Sipocot	4th
	19. Magarao	6th	33. Siruma	5th
	20. Milaor	6th	34. Tigaon	5th
	21. Minalabac	5th	35. Tinambac	5th
	22. Nabua	4th		
Catanduanes		Fifth		
	1. Bagamanoc	6th	7. Panganiban	6th
	2. Baras	6th	8. San Andres	5th
	3. Bato	5th	9. San Miguel	6th
	4. Caramoran	5th	10. Viga	5th
	5. Gigmoto	6th	11. Virac	4th
	6. Pandan	5th		
Masbate		Second		
	1. Aroroy	4th	5. Cataingan	6th
	2. Baleno	5th	6. Cawayan	5th
	3. Balud	5th	7. Claveria	5th
	4. Batuan	6th	8. Dimasalang	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	9. Esperanza	6th	16. Pio V. Corpuz	6th
	10. Mandaon	5th	17. Placer	6th
	11. Masbate	4th	18. San Fernando	5th
	12. Milagros	5th	19. San Jacinto	5th
	13. Mobo	5th	20. San Pascual	5th
	14. Monreal	5th	21. Uson	5th
	15. Palanas	5th		
Sorsogon		Second		
	1. Bacon	5th	9. Irosin	5th
	2. Barcelona	5th	10. Juban	5th
	3. Bulan	4th	11. Magallanes	5th
	4. Bulusan	5th	12. Matnog	5th
	5. Casiguran	5th	13. Pilar	5th
	6. Castilla	5th	14. Prieto Diaz	5th
	7. Donsol	5th	15. Sta. Magdalena	6th
	8. Gubat	5th	16. Sorsogon	3rd
VI. Western Visayas				
Aklan		Third		
	1. Altavas	5th	9. Libaca	5th
	2. Balete	6th	10. Madalag	5th
	3. Banga	5th	11. Makata	5th
	4. Batan	6th	12. Malay	5th
	5. Buruanga	6th	13. Malinao	5th
	6. Ibajay	5th	14. Nabas	5th
	7. Kalibo*	3rd	15. New Washingtom	5th
	8. Lezo	6th	16. Numancia	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	17. Tangalan	6th		
Antique		Third		
	1. Anini-y	5th	10. Libertad	6th
	2. Barbaza	5th	11. Pandan	5th
	3. Belison	6th	12. Patnongon	5th
	4. Bugasong	5th	13. San Jose*	4th
	5. Caluya	5th	14. San Remigio	5th
	6. Culasi	5th	15. Sebaste	6th
	7. Tobias Fornier (Dao)	5th	16. Sibalom	5th
	8. Hamtic	5th	17. Tibiao	5th
	9. Lawa-an	5th	18. Valderama	5th
Capiz		Second		
	Roxas City*	Second		
	1. Cuartero	5th	9. Panay	5th
	2. Dao	5th	10. Panitan	5th
	3. Dumalag	5th	11. Pilar	5th
	4. Dumarao	5th	12. Pontevedra	5th
	5. Ivisan	5th	13. President Roxas	5th
	6. Jamindan	6th	14. Sapian	6th
	7. Ma-ayon	6th	15. Sigma	5th
	8. Mambusao	5th	16. Tapaz	5th
Guimaras		Fifth		
	1. Buenavista	5th	3. Nueva Valencia	5th
	2. Jordan	4th		

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
Iloilo		First		
	Iloilo City*	First		
	1. Ajuy	5th	23. Leganes	5th
	2. Alimodian	5th	24. Lemery	5th
	3. Anilao	5th	25. Leon	5th
	4. Badiangan	5th	26. Maasin	5th
	5. Balasan	5th	27. Miagao	4th
	6. Banate	5th	28. Mina	6th
	7. Barotac Nuevo	4th	29. New Lucena	5th
	8. Barotac Viejo	5th	30. Oton	5th
	9. Batad	6th	31. Passi	4th
	10. Bingawan	6th	32. Pavia	5th
	11. Cabatuan	5th	33. Pototan	4th
	12. Calinog	4th	34. San Dionisio	5th
	13. Carles	5th	35. San Enrique	5th
	14. Concepcion	5th	36. San Joaquin	5th
	15. Dingle	5th	37. San Miguel	6th
	16. Duenas	5th	38. San Rafael	5th
	17. Dumangas	5th	39. Sta. Barbara	5th
	18. Estancia	5th	40. Sara	5th
	19. Guimbal	5th	41. Tigbauan	5th
	20. Igbaras	5th	42. Tubungan	5th
	21. Janiuay	4th	43. Zarraga	5th
	22. Lambunao	4th		

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Region/Province	City/Municipality	Classification	City/Municipality	Classification
Negros Occidental		First		
	Bacolod City*	First		
	Bago City	Second		
	Cadiz City	First		
	La Carlota City	Third		
	San Carlos City	Second		
	Silay City	Second		
	1. Binalbagan	4th	14. Manapla	5th
	2. Calatrava	4th	15. Moises Padilla	5th
	3. Candoni	5th	16. Murcia	5th
	4. Cauayan	4th	17. Pontevedra	5th
	5. Enrique B. Magalona	4th	18. Pulupandan	4th
	6. Escalante	5th	19. Sagay	4th
	7. Himamaylan	4th	20. Salvador Benedicto	5th
	8. Hinigaran	4th	21. San Enrique	6th
	9. Hinoba-an	4th	22. Sipalay	3rd
	10. Ilog	5th	23. Talisay	3rd
	11. Isabela	5th	24. Toboso	4th
	12. Kabankalan	3rd	25. Valladolid	5th
	13. La Castellana	5th	26. Victorias	3rd
VII. Central Visayas				
Bohol		First		
	Tagbilaran City*	Third		
	1. Alburquerque	6th	5. Baclayon	5th
	2. Alicia	5th	6. Balilihan	5th
	3. Anda	5th	7. Butuan	5th
	4. Antequera	5th	8. Bien Unido	6th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	9. Bilar	5th	29. Loay	6th
	10. Buenavista	5th	30. Lobo	5th
	11. Calape	5th	31. Loon	5th
	12. Candijay	5th	32. Mabini	5th
	13. Carmen	5th	33. Maribojoc	5th
	14. Catigbian	5th	34. Panglao	5th
	15. Clarin	5th	35. Pilar	6th
	16. Corella	6th	36. Pres. C. P. Garcia	5th
	17. Cortes	6th	37. Sagbayan (Borja)	6th
	18. Dagohoy	6th	38. San Isidro	6th
	19. Danao	6th	39. San Miguel	6th
	20. Dauis	5th	40. Sevilla	6th
	21. Dimiao	6th	41 Sierra-Bullones	6th
	22. Duer	6th	42. Sikatuna	6th
	23. Garcia Hernandez	5th	43. Talibon	5th
	24. Guindulman	5th	44. Trinidad	5th
	25. Inabanga	5th	45. Tubigon	4th
	26. Jagna	5th	46. Ubay	4th
	27. Jetafe	5th	47. Valencia	5th
	28. Lila	6th		
Cebu		**First**		
	Cebu City	**First**		
	Danao City	**Fourth**		
	Lapu-Lapu City	**Second**		
	Mandaue City	**First**		
	Toledo City	**Second**		
	1. Alcantara	6th	2. Alcoy	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	3. Alegria	5th	26. Malabuyok	6th
	4. Aloguinsan	6th	27. Medellin	4th
	5. Argao	4th	28. Minglanilla	5th
	6. Asturias	5th	29. Moalboal	5th
	7. Badian	5th	30. Naga	5th
	8. Balamban	5th	31. Oslob	5th
	9. Bantayan	4th	32. Pilar	6th
	10. Barili	5th	33. Pinamungajan	5th
	11. Bogo	4th	34. Poro	5th
	12. Boljoon	6th	35. Ronda	6th
	13. Borbon	5th	36. Samboan	5th
	14. Carcar	4th	37. San Fernando	5th
	15. Carmen	5th	38. San Franscisco	5th
	16. Catmon	5th	39. San Remigio	5th
	17. Compostela	5th	40. Sta. Fe	5th
	18. Consolacion	5th	41. Santander	6th
	19. Cordoba	5th	42. Sibonga	5th
	20. Daanbantayan	5th	43. Sogod	5th
	21. Dalaguete	5th	44. Tabogon	5th
	22. Dumanjug	5th	45. Tabuelan	5th
	23. Ginatilan	6th	46. Talisay	3rd
	25. Madridejos	5th		
	47. Tuburan	5th		
	48. Tudela	6th		
Negros Oriental		First		
	Bais City	Third		
	Canlaon	Fifth		

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	Dumaguete City	Second		
	1. Amlan	5th	13. Pamplona	5th
	2. Ayungon	5th	14. San Jose	6th
	3. Bacong	5th	15. Sta. Catalina	4th
	4. Basay	5th	16. Siaton	5th
	5. Bayawan	4th	17. Sibulan	5th
	6. Bindoy	5th	18. Tanjay	4th
	7. Dauin	5th	19. Tayasan	5th
	8. Guihulngan	4th	20. Valencia	5th
	9. Jimalalud	5th	21. Vallehermoso	5th
	10. La Libertad	5th	22. Zamboanguita	5th
	11. Mabinay	5th		
	12. Manjuyod	5th		
Siquijor		Sixth		
	1. Enrique Villanueva	6th	4. Maria	6th
	2. Larena	5th	5. San Juan	6th
	3. Lazi	5th	6. Siquijor	5th
VIII. Eastern Visayas				
Eastern Samar		Third		
	1. Arteche	6th	7. Gen. MacArthur	6th
	2. Balangiga	6th	8. Giporlos	6th
	3. Balangkayan	6th	9. Guiuan	5th
	4. Borongan	4th	10. Hernani	6th
	5. Can-Avid	5th	11. Jipapad	6th
	6. Dolores	5th	12. Lawa-an	6th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	13. Llorente	5th	19. Salcedo	5th
	14. Maslog	6th	20. San Julian	6th
	15. Maydolong	5th	21. San Policarpio	6th
	16. Mercedes	6th	22. Sulat	5th
	17. Oras	5th	23. Taft	5th
	18. Quinapundan	6th		
Leyte		First		
	Ormoc City	First		
	Tacloban City	First		
	1. Abuyog	4th	19. Javier	5th
	2. Alangalang	5th	20. Julita	6th
	3. Albuera	5th	21. Kananga	5th
	4. Babatngon	5th	22. La Paz	5th
	5. Barugo	5th	23. Leyte	5th
	6. Bato	5th	24. MacArthur	5th
	7. Baybay	3rd	25. Mahaplag	5th
	8. Burauen	4th	26. Matag-ob	5th
	9. Calubian	5th	27. Matalom	5th
	10. Capoocan	5th	28. Mayorga	6th
	11. Carigara	5th	29. Merida	5th
	12. Dagami	5th	30. Palo	5th
	13. Dulag	5th	31. Palompon	5th
	14. Hilongos	4th	32. Pastrana	6th
	15. Hindang	5th	33. San Isidro	5th
	16. Inopacan	5th	34. San Miguel	6th
	17. Isabel	1st	35. Sta. Fe	6th
	18. Jaro	5th	36. Tabango	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	37. Tabontabon	6th	40. Tunga	6th
	38. Tanauan	5th	41. Villaba	5th
	39. Tolosa	6th		
Biliran		Fifth		
	1. Almeria	6th	5. Cawayan	6th
	2. Cabucgayan	6th	6. Biliran	6th
	3. Caibiran	5th	7. Maripipi	6th
	4. Culaba	6th	8. Naval	5th
Northern Samar		Third		
	1. Allen	5th	13. Mapanas	6th
	2. Biri	6th	14. Mondragon	5th
	3. Bobon	5th	15. Palapag	5th
	4. Capul	6th	16. Pambujan	5th
	5. Catarman*	4th	17. Rosario	6th
	6. Catubig	5th	18. San Antonio	6th
	7. Gamay	5th	19. San Isidro	5th
	8. Laoang	5th	20. San Jose	6th
	9. Lapinig	6th	21. San Roque	6th
	10. Las Navas	5th	22. San Vicente	6th
	11. Lavezares	5th	23. Silvino Lobos	6th
	12. Lope de Vega	6th	24. Victoria	6th
Western Samar		Second		
	Calbayog City	First		
	1. Almagro	6th	3. Calbiga	5th
	2. Basey	5th	4. Catbalogan*	4th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	5. Daram	5th	16. San Sebastian	6th
	6. Gandara	5th	17. Sta. Margarita	5th
	7. Hinabangan	5th	18. Sta. Rita	5th
	8. Jiabong	6th	19. Sto. Nino	6th
	9. Marabut	6th	20. Tagapul-an	6th
	10. Matuguinao	6th	21. Talalora	6th
	11. Motiong	6th	22. Tarangnan	6th
	12. Pagsanghan	6th	23. Villareal	5th
	13. Pinabacdao	6th	24. Wright (Paranas)	5th
	14. San Jose	6th	25. Zumarraga	6th
	15. San Jose de Buan	6th		
Southern Leyte		Fourth		
	1. Anahawan	6th	11. Pintuyan	6th
	2. Bontoc	5th	12. St. Bernard	5th
	3. Hinunangan	5th	13. San Francisco	6th
	4. Hinundayan	6th	14. San Juan	5th
	5. Libagon	6th	15. San Ricardo	6th
	6. Liloan	5th	16. Silago	6th
	7. Maasin*	4th	17. Sogod	5th
	8. Macrohon	5th	18. Tomas Oppus	6th
	9. Malitbog	5th	19. Limasawa	6th
	10. Padre Burgos	6th		
IX. Western Mindanao				
Basilan		Fifth		
	1. Isabela*	4th	3. Lantawan	5th
	2. Lamitan	5th	4. Maluso	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	5. Sumisip	5th	7. Tuburan	6th
	6. Tipo-Tipo	5th		
Sulu		Fourth		
	1. Indanan	6th	10. Panglima Estino	6th
	2. Jolo	4th	11. Pangutaran	6th
	3. Kalingalan-Caluang	6th	12. Parang	6th
	4. Lugus	6th	13. Pata	6th
	5. Luuk	6th	14. Patikul	6th
	6. Maimbung	6th	15. Siasi	5th
	7. Marunggas	6th	16. Talipaw	6th
	8. Pananaw	6th	17. Tapul	6th
	9. Pandami	6th	18. Tungkil	6th
Tawi-Tawi		Sixth		
	1. Balimbing	6th	6. Simunul	6th
	2. Bonggao	5th	7. Sitangkay	6th
	3. Cagayan de Sulu	6th	8. South Ubian	6th
	4. Languyan	6th	9. Tandu Bas	6th
	5. Sapa-Sapa	6th	10. Turtle Islands	6th
Zamboanga del Norte		Second		
	Dapitan City	Fourth		
	Dipolog City	Third		
	1. Baliguian	5th	5. Jose Dalman	5th
	2. Bacungan	5th	6. Katipunan	5th
	3. Godod	5th	7. La Libertad	5th
	4. Gutalac	5th	8. Labason	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	9. Liloy	5th	18. Siayan	5th
	10. Manukan	5th	19. Sibuco	5th
	11. Mutia	6th	20. Sibutad	5th
	12. Pinan	5th	21. Sindangan	4th
	13. Polanco	5th	22. Siocon	5th
	14. Pres. M. A. Roxas	5th	23. Siraway	5th
	15. Rizal	5th	24. Tampilisan	6th
	16. Salug	5th	25. Kalawit (RA 6851)	6th
	17. Sergio Osmena	5th		
Zamboanga del Sur		Second		
	Pagadian City	Second		
	Zamboanga City	First		
	1. Alicia	5th	15. Kumalarng	5th
	2. Aurora	5th	16. Labangan	5th
	3. Bayog	5th	17. Lakewood	5th
	4. Buug	5th	18. Lapuyan	5th
	5. Dimataling	5th	19. Mabuhay	6th
	6. Dinas	5th	20 Mahayag	5th
	7. Diplahan	5th	21. Malangas	5th
	8. Don Mariano Marcos	6th	22. Margosatubig	5th
	9. Dumalinao	5th	23. Midsalip	5th
	10. Dumingag	5th	24. Molave	5th
	11. Imelda	6th	25. Naga	5th
	12. Ipil	4th	26. Olutanga	5th
	13. Josefina	6th	27. Payao	5th
	14. Kabasalan	5th	28. Pitogo	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	29. R. Magsaysay	5th	36. Tambulig	5th
	30. Roseller Lim	5th	37. Titay	5th
	31. San Miguel	5th	38. Tukuran	5th
	32. San Pablo	5th	39. Tungaan	5th
	33. Siay	5th	40. Vicenzo Sagun	6th
	34. Tabina	5th	41. Guipos (RA 7159)	6th
	35. Talusan	6th	42. Tighao (RA 7162)	6th
X. Northern Mindanao				
Agusan del Norte		Fourth		
	Butuan City*	First		
	1. Buenavista	5th	7. Magallanes	5th
	2. Cabadbaran	4th	8. Nasipit	4th
	3. Carmen	5th	9. Santiago	6th
	4. Jabonga	5th	10. Tubay	5th
	5. Kitcharao	5th	11. Remedios T. Romualdez	6th
	6. Las Nievas	5th		
Agusan del Sur		Second		
	1. Bayugan	4th	8. San Francisco	4th
	2. Bunawan	5th	9. San Luis	5th
	3. Esperanza	4th	10. Sta. Josefa	6th
	4. La Paz	5th	11. Sibagat	5th
	5. Loreto	5th	12. Talacogon	5th
	6. Prosperidad*	5th	13. Trento	5th
	7. Rosario	5th	14. Veruela	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
Bukidnon		First		
	1. Baungon	5th	12. Libona	5th
	2. Cabanglasan	5th	13. Malaybalay*	3rd
	3. Dumulog	5th	14. Malitbog	5th
	4. Dangcagan	5th	15. Manolo Fortich	4th
	5. Don Carlos	5th	16. Maramag	5th
	6. Impasugong	5th	17. Pangantocan	5th
	7. Kadingilan	5th	18. Quezon	3rd
	8. Kalilangan	5th	19. San Fernando	5th
	9. Kibawe	5th	20. Sumilao	5th
	10. Kitaotao	5th	21. Talakag	5th
	11. Lantapan	5th	22. Valencia	3rd
Camiguin		Fifth		
	1. Catarman	5th	4. Mambajao*	5th
	2. Guisiliban	6th	5. Sagay	6th
	3. Mahinog	5th		
Misamis Occidental		Third		
	Oroquieta City*	Fourth		
	Ozamis City	Second		
	Tangub City	Fourth		
	1. Aloran	5th	7. Don Mariano Marcos	6th
	2. Baliangao	5th	8. Jimenez	6th
	3. Bonifacio	5th	9. Lopez-Jaena	5th
	4. Calamba	5th	10. Panaon	6th
	5. Clarin	5th	11. Plaridel	5th
	6. Concepcion	6th	13. Sapang-Dalaga	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	13. Sinacaban	5th	14. Tudela	5th
Misamis Oriental		First		
	Cagayan de Oro*	First		
	Gingoog City	Second		
	1. Alubijid	5th	13. Libertad	6th
	2. Balingasag	5th	14. Lugait	5th
	3. Balingoan	6th	15. Magsaysay	5th
	4. Binuangan	6th	16. Manticao	5th
	5. Claveria	5th	17. Medina	5th
	6. El Salvador	5th	18. Naawan	5th
	7. Gitagum	6th	19. Opol	5th
	8. Initao	5th	20. Salay	5th
	9. Jasaan	5th	21. Sugbongcogon	6th
	10. Kinogitan	6th	22. Tagoloan	4th
	11. Lagonglong	5th	23. Talisayan	5th
	12. Laguindingan	5th	24. Villanueva	5th
Surigao del Norte		Third		
	Surigao City*	Second		
	1. Alegria	6th	9. Dinagat	5th
	2. Bacuag	6th	10. General Luna	6th
	3. Basilisa	5th	11. Gigaquit	5th
	4. Burgos	6th	12. Libjo	5th
	5. Cagdianao	6th	13. Loreto	5th
	6. Claver	5th	14. Mainit	5th
	7. Dapa	5th	15. Malimono	5th
	8. Del Carmen	6th	16. Pilar	6th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	17. Placer	5th	23. Socorro	6th
	18. San Benito	6th	24. Tagana-an	6th
	19. San Francisco	6th	25. Tubajon	6th
	20. San Isidro	6th	26. Tubod	5th
	21. Sta. Monica	6th	27. San Jose	6th
	22. Sison	6th		
XI. Southern Mindanao				
Davao del Norte		First		
	1. Asuncion	5th	12. Nabunturan	4th
	2. Babak	5th	13. New Bataan	5th
	3. Carmen	5th	14. New Corella	5th
	4. Compostela	5th	15. Panabo	3rd
	5. Kapalong	3rd	16. Pantukan	4th
	6. Kaputian	5th	17. Samal	5th
	7. Mabini	5th	18. San Mariano	5th
	8. Maco	4th	19. Sto. Tomas	4th
	9. Mawab	5th	20. San Vicente	5th
	10. Monkayo	4th	21. Tagum	2nd
	11. Montevista	5th	22. Talaingod (RA 7081)	6th
Davao del Sur		First		
	Davao City	First		
	1. Bansalan	4th	6. Kiblawan	5th
	2. Digos	3rd	7. Magsaysay	5th
	3. Don Marcelino	5th	8. Malalag	5th
	4. Hagonoy	4th	9. Malita	3rd
	5. Jose Abad Santos	5th	10. Matanaw	5th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	11. Padada	5th	14. Sarangani	6th
	12. Santa Cruz	4th	15. Sulop	5th
	13. Santa Maria	6th		
Davao Oriental		Third		
	1. Baganga	4th	7. Lupon	4th
	2. Banay-Banay	5th	8. Manay	5th
	3. Boston	5th	9. Mati	3rd
	4. Caraga	5th	10. San Isidro	5th
	5. Cateel	5th	11. Tarragona	5th
	6. Gov. Generoso	5th		
South Cotabato		First		
	Gen. Santos City	First		
	1. Alabel	5th	10. Malungon	4th
	2. Banga	4th	11. Norala	5th
	3. Glan	4th	12. Polomolok	3rd
	4. Kiamba	4th	13. Sto. Niño	5th
	5. Koronadal	3rd	14. Surallah	3rd
	6. Lake Sebu	5th	15. Tampakan	5th
	7. Maasim	5th	16. Tantangan	5th
	8. Maitum	5th	17. T'boli	5th
	9. Malapatan	5th	18. Tupi	4th
Surigao del Sur		Second		
	1. Barobo	5th	4. Cagwait	5th
	2. Bayabas	6th	5. Cantilan	5th
	3. Bislig	3rd	6. Carmen	6th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	7. Carrascal	5th	14. Marihatag	5th
	8. Cortes	6th	15. San Agustin	5th
	9. Hinatuan	5th	16. San Miguel	5th
	10. Lanuza	5th	17. Tagbina	5th
	11. Lianga	5th	18. Tago	5th
	12. Lingig	5th	19. Tandag*	5th
	13. Madrid	5th		
XII. Central Mindanao				
Lanao del Norte		Fourth		
	Iligan City*	First		
	1. Bacolod	6th	12. Munai	6th
	2. Balo-i	5th	13. Nunungan	6th
	3. Baroy	5th	14. Poona-Piagapo	6th
	4. Kapatagan	5th	15. Pantao Ragaot	6th
	5. Karomatan	5th	16. Pantar	6th
	6. Kauswagan	5th	17. Salvador	6th
	7. Kolambugan	5th	18. Sapad	6th
	8. Lala	5th	19. Tagoloan	6th
	9. Magsaysay	6th	20. Linamon	6th
	10. Maigo	5th	21. Tangoal	6th
	11. Matungao	6th	22. Tubod*	5th
Lanao del Sur		Third		
	Marawi City*	Fourth		
	1. Bacolod Grande	6th	4. Bayang	5th
	2. Balabagan	6th	5. Binidayan	6th
	3. Balindong	6th	6. Buadiposo-Bunting	6th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
	7. Bubong	6th	23. Masiu	6th
	8. Bumbaran	6th	24. Molundo	6th
	9. Butig	6th	25. Pagayawan	6th
	10. Calanogas	6th	26. Piagapo	6th
	11. Ganassi	6th	27. Poon-A Bayabao	6th
	12. Kapai	6th	28. Pualas	6th
	13. Kapatagan	6th	29. Ditsaan Ramain	6th
	14. Lumba-A Bayabao	6th	30. Saguiaran	6th
	15. Lumbatan	6th	31. Sultan Gumander	6th
	16. Lumbayanaque	6th	32. Tagoloan	6th
	17. Madalum	6th	33. Tamparan	6th
	18. Madamba	6th	34. Taraka	6th
	19. Maguing	6th	35. Tubaran	6th
	20. Malabang	5th	36. Tugaya	6th
	21. Marantao	6th	37. Wao	5th
	22. Marogong	6th		
Maguindanao		Second		
	Cotobato City	Second		
	1. Ampatuan	5th	10. Matanog	6th
	2. Barira	6th	11. Pagalungan	5th
	3. Buldon	5th	12. Parang	4th
	4. Buluan	5th	13. South Upi	5th
	5. Datu Paglas	6th	14. Sultan Kudarat	4th
	6. Datu Piang	5th	15. Sultan sa Barongis	5th
	7. Dinaig	5th	16. Talayan	5th
	8. Kabuntalan	5th	17. Upi	5th
	9. Maganoy	5th	18. Gen. S. P. Pendatum	6th

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (continued)

Region/Province	City/Municipality	Classification	City/Municipality	Classification
North Cotabato		First		
	1. Alamada	5th	10. Makilala	4th
	2. Aleosan	5th	11. Matalam	5th
	3. Antipas	6th	12. Midsayap	3rd
	4. Banisilan	5th	13. M'lang	4th
	5. Carmen	5th	14. Pigkawayan	5th
	6. Kabacan	4th	15. Pikit	4th
	7. Kidapawan	3rd	16. Pres. Roxas	5th
	8. Libungan	5th	17. Tulunan	5th
	9. Magpet	4th	18. Arakan (RA 7152)	6th
Sultan Kudarat		Second		
	1. Bagumbayan	5th	7. Lutayan	5th
	2. Columbio	5th	8. Mariano Marcos	5th
	3. Esperanza	5th	9. Palimbang	4th
	4. Isulan	4th	10. President Quirino	5th
	5. Kalamansig	5th	11. Tacurong	3rd
	6. Lebak	4th		

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Appendix A. List and Classification of Provinces, Cities and Municipalities by Region: As of December 31, 1993 (concluded)

* Capital of the Province.

Classification of provinces and cities:

First Class:	Average annual income of P30,000,000 or more;
Second Class:	Average annual income of P20,000,000 or more but less than P30,000,000;
Third Class:	Average annual income of P15,000,000 or more but less than P20,000,000;
Fourth Class:	Average annual income of P10,000,000 or more but less than P15,000,000;
Fifth Class:	Average annual income of P 5,000,000 or more but less than P10,000,000;
Sixth Class:	Average annual income of less than P5,000,000.

Classification of municipalities:

First Class:	Average annual income of P15,000,000 or more;
Second Class:	Average annual income of P10,000,000 or more but less than P15,000,000;
Third Class:	Average annual income of P 5,000,000 or more but less than P10,000,000;
Fourth Class:	Average annual income of P 3,000,000 or more but less than P 5,000,000;
Fifth Class:	Average annual income of P 1,000,000 or more but less than P 3,000,000;
Sixth Class:	Average annual income of less than P1,000,000.

Source: Department of Finance, Bureau of Local Government Finance.

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Appendix B. Directory of Government Agencies: As of June 17, 1993

Department/Bureau	Head of office	Address
I. Offices Directly Under the President		
National Intelligence Coordinating Agency	B. Gen. Ramon Q. Gavino (Ret.)	V. Luna Rd. cor. East Ave. Diliman , Quezon City 921-49-90; 921-49-67; 95-23-14
Housing and Urban Development Coordinating Council	Dionisio Dela Serna	8/F, Allied Bank Bldg. Ayala Ave., Makati, Metro Manila 815-82-51 loc. 205; 816-25-28 to 31
National Electrification Administration	Emmanuel Pelaez	1050 Quezon Ave., Quezon City 97-59-11; 99-87-81; 98-10-41
National Housing Authority	Robert Anthony Balao	Elliptical Rd., Diliman, Quezon City 99-45-61 to 66; 96-52-14; 921-78-28
National Security Council	B. Gen. Jose T. Almonte (Ret.)	NSC Compound/NICA Compound V. Luna Road cor. East Avenue Quezon City 922-73-20; 922-73-85
Pag-ibig Home Development Mutual Fund	Zorayda Amelia Alonzo	6756 Bankmer Bldg. Ayala Avenue, Makati, Metro Manila 816-44-04; 816-06-70; 816-44-02
Philippine Sports Commission	Dr. Aparecio Mequi	Rizal Memorial Sports Complex Vito Cruz, Manila 522-05-36
II. Offices Under the Supervision and Control of the President		
Office on Muslim Affairs	Dimasangkay Pundato	117 Ableza Building E. Rodriguez Ave., Quezon City 742-27-11 to 16
Office for Northern Cultural Communities	Ronald M. Cosolan	2/F, D & E Bldg., Quezon Blvd. cor. Roces Ave., Quezon City 98-38-50; 98-38-71

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Office for Southern Cultural Communities	Atty. Marciano Cerna, Jr.	2/F, M. dela Merced Bldg. West Ave., Quezon City 99-98-82; 99-90-16
National Livelihood Support Fund	Diego C. Cochuico	4/F,Hanston Bldg., Emerald Ave. Pasig, Metro Manila 673-23-71; 673-72-06
III. Offices Under the Office of the President		
Philippine Retirement Authority	Atty. Davidica E. Salaya	2/F, Producer's Bank Bldg. Sen. Gil J. Puyat Avenue Makati, Metro Manila 817-06-07; 817-42-13
Board of Liquidators	Rolando O. Ambrosio	236 J. Nepomuceno Street San Miguel, Manila 741-87-08, 742-40-01
Presidential Commission for the Urban Poor	Diogenes Osabel	133 A and J Building Quezon Ave., Quezon City 742-70-76; 732-70-98
Public Estates Authority	Luis Lagdameo	7/F, Legaspi Towers 200, Paseo de Roxas Makati, Metro Manila 817-47-11 to 13
Livelihood Corporation	Jose Ma. Rufino	7/F, Hanston Building, Emerald Ave. Pasig, Metro Manila 631-30-36, 631-16-21 to 31 loc. 220, 267
Philippine Amusement and Gaming Corporation	Alicia Ll. Reyes	1330 PAGCOR House Roxas Blvd., Manila 50-15-10; 521-15-42

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Economic Support Fund Secretariat	Dr. Lino P. Aldorino	SEDCO Bldg. cor. Legaspi and Rada St. Legaspi Village, Makati, Metro Manila 817-80-61; 817-42-13
National Statistics Office (NSO)	Tomas P. Africa	Solicarel Building I Ramon Magsaysay Blvd. Sta. Mesa, Manila 61-07-94; 61-08-09
Movie and Television Review and Classificaton Board	Henrietta Silos Mendez	Merryland Building E. Rodriguez Sr.Ave., Quezon City 721-08-81; 722-41-73
Presidential Legislative Liaison Office	Romulo B. Lumauig	Room 410, Senate Bldg. Manila 49-47-18; 49-46-71
Coordinating Council of the Philippine Assistance Program	Roberto De Ocampo	Rm. 1400 14th/4, Multi-Storey Bldg. Central Bank, Manila
National Statistical Coordination Board	Dr. Romulo A. Virola	7/F, Marvin Plaza Bldg. 2153 P. Tamo Street Makati, Metro Manila 87-53-88; 87-53-90
Cooperative Development Authority	Edna E. Aberilla	1184 Benlor Building Quezon Ave., Quezon City 99-26-41 loc. 2208, 2220
National Commission for Culture and Arts	Leandro Locsin	House No. 8 Casa Blanca Plaza San Luis Complex Gen. Luna St. Intramuros, Manila 40-57-61 to 44

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
IV. Offices Under the Administrative Supervision of the Office of the President		
Energy Regulation Board	Rex U. Tantiongco	8/F Philcomcen Bldg. Ortigas Ave., Pasig, Metro Manila 531-58-06; 631-58-71
Games and Amusement Board	Francisco "King" Sumulong	Legaspi Towers 200 Paseo De Roxas, Makati 817-80-41 to 45
Videogram Regulatory Board	Brig. Gen. Javier Carbonel	9/F, Agustin I Bldg., Emerald Ave. Pasig, Metro Manila 631-74-66; 631-71-58
Commission on Filipino Overseas	Alfredo Perdon	FEMS Tower I, 1289 Zobel Roxas cor. South Superhighway Makati, Metro Manila 522-16-74; 522-19-12
Philippine Gamefowl Commission	Reynesto G. Panlilio	9/F, Aurora Towers, Araneta Center Cubao, Quezon City 921-54-30; 922-40-97
Philippine Racing Commission	Nicanor C. Jacinto III	4/F Electra House Bldg. Herrera St., Legaspi Village Makati, Metro Manila 819-16-73; 815-64-53
Presidential Council for Youth Affairs	Ma. Remedios O. Mapa	Administration Bldg. Malacañang, Manila 40-85-49; 49-49-68; 712-46-78
V. Agencies Attached to the Office of the President		
Central Bank of the Philippines	Jose L. Cuisia, Jr.	CB Building, Vito Cruz, Manila 59-33-80 to 81

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
National Computer Center	William T. Torres	Camp Aguinaldo, Quezon City 79-76-31; 78-13-55
VI. National Economic Development Authority	Cielito F. Habito Director General	NEDA sa Pasig, Amber Ave., Pasig 631-37-44; 631-37-16 Fax. No. 631-37-47
Bureaus/Attached Agencies		
Tariff Commission	Gilda O. Vasquez	5/F Phil. Heart Center East Ave., Quezon City 99-81-06
Commission on Population	Dr. Carmen P. Garcia	Acacia Lane Welfareville Cmpd. Mandaluyong, Metro Manila 78-14-91; 78-14-43
Philippine National Volunteer Service Coordinating Agency	Virginia P. Davide	Room 301 Cabrera Bldg. 130 Timog Ave., Quezon City 921-50-94; 922-86-35
VII. Office of the Press Secretary	Jesus O. Sison	Kalayaan Hall, Malacañang Palace Cmpd. J. P. Laurel St., San Miguel, Manila 40-19-44; 40-82-65
Bureaus/Attached Agencies		
Bureau of Communications Services	Eduardo M. Varona	San Rafael St., San Miguel, Manila 742-18-87
Bureau of Broadcast Services	Ramon S. Diez	Bohol Avenue, Quezon City 96-96-72; 99-51-54
People's Television 4	Conrado A. Limcaoco, Jr.	Visayas Avenue, Quezon City 98-81-89; 98-81-98

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
News and Information Bureau	German C. Galian	National Press Club Bldg. Magallanes Drive, Port Area, Manila 47-71-47; 47-68-44
Philippine Information Agency	Honesto M. Isleta	PIA Bldg., Visayas Ave., Quezon City 922-74-77; 922-65-45
Presidential Broadcast Staff (RTVM)	Ramon S. Diez	Malacañang Palace Cmpd. J. P. Laurel St., San Rafael, Manila 742-19-64; 742-23-71
National Printing Office	Lucita C. Sanchez	Port Area, Manila 40-15-58
VIII. Department of Agrarian Reform (DAR)	Ernesto D. Garilao Secretary	Rm. 209 PTA Bldg., Diliman, Quezon City 99-39-79; 99-35-73; 99-30-88 Fax No. 97-39-68
Bureaus/Attached Agencies		
Bureau of Agrarian Legal Assistance	Ruben Joel Puertollano	Elliptical Rd., Diliman, Quezon City 99-57-47
Bureau of Land Development	Renato G. Pelayo	Elliptical Rd., Diliman, Quezon City 99-70-31 to 39 loc. 237; 97-39-32
Public Affairs Staff	Abrino Aydinan	Elliptical Rd., Diliman, Quezon City 96-54-62
Special Concerns Staff	Jose Mejia	Elliptical Rd., Diliman, Quezon City 99-68-21
Bureau of Land Acquisition and Distribution	Gloria Fabia	Elliptical Rd., Diliman, Quezon City 96-89-63
Bureau of Agrarian Reform Beneficiaries Development	Engracia M. Valencia	Elliptical Rd., Diliman, Quezon City 922-89-80

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Bureau of Agrarian Reform Information and Education	Engracia M. Valencia	Elliptical Rd., Diliman, Quezon City 921-75-11; 921-37-77
Management Information System	Esmael Bausas	Elliptical Rd., Diliman, Quezon City 97-39-32
IX. Department of Agriculture (DA)	Roberto S. Sebastian Secretary	Elliptical Rd., Diliman, Quezon City 97-85-86 to 95; Fax No. 97-81-83
Bureaus/Attached Agencies		
Bureau of Animal Industry	Romeo N. Alcasid, DVM	Visayas Avenue, Diliman, Quezon City 96-68-83
Bureau of Fisheries and Aquatic Resources	Guillermo Morales	Arcadia Bldg., Quezon Ave., Quezon City 96-54-44; 96-54-98; 92-21-95; 98-85-17
Bureau of Plant Industry	Nerius I. Roperos	San Andres, Malate, Manila 59-11-32; 57-17-26; 59-23-82
Bureau of Soil and Water Management	Godofredo N. Alcasid	Visayas Ave., Quezon City 97-30-01
Bureau of Agricultural Research	Dr. William D. Dar	ATI Building, Diliman, Quezon City 99-85-05; 99-49-07
Bureau of Agricultural Training Institute	Segundo C. Serrano	BAEX Building., Diliman, Quezon City 99-73-97; 97-85-41
Bureau of Agricultural Statistics	Romeo S. Recide	Ben-lor Bldg., Quezon Ave. Quezon City 99-84-50
Philippine Technical and Administrative Committee	Dr. Flor J. Lacanilao	State Financing Bldg., Ortigas Ave. Greenhills, San Juan, Metro Manila 721-57-70; 721-04-29 ; Fax No. 721-13-42
National Nutrition Council	Elsa M. Bayani	NCP Bldg., South Superhighway Makati, Metro Manila 818-73-98; 818-99-86

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Livestock Development Council	Pedro Ocampo	DA Compound, Diliman, Quezon City 99-87-41 loc. 277
Fertilizer and Pesticide Authority	Francisco C. Cornejo	6/F, Raha Sulayman Bldg., Benavides St., Legaspi Village Makati, Metro Manila 818-13-63; 818-11-09
Fiber Industry Development Authority	Joaquin M. Teotico	Philfinance Bldg., Benavidez St., Legaspi Village, Makati, Metro Manila 818-73-44; 818-43-47
National Food Authority	Romeo G. David	Matimyas Bldg., E. Rodriguez, Sr. Ave. Quezon City 712-33-41; 712-17-40; 712-33-41
National Tobacco Administration	Edilberto V. Cariaso	NTA Bldg., Panay Ave., cor. Scout Reyes Quezon City 99-94-88; 98-76-49
Sugar Regulatory Administration	Atty. Rodolfo A. Gamboa	Philsucom Bldg., North Ave., Quezon City 96-19-33; 99-06-61
Philippine Rice Research Institute	Dr. Santiago R. Obien	Maligaya, Muñoz, Nueva Ecija 3515
Philippine Coconut Authority	B. Gen. Virgilio N. David	PCA Bldg., Diliman, Quezon City 96-76-75; 99-45-01
Philippine Cotton Corporation	Patricio L. Lim	4/F, JACIS Bldg., 31 Shaw Blvd. Pasig, Metro Manila 673-51-76; 673-14-76
Philippine Dairy Corporation	Naomi K. Torreta	SRA Bldg., North Ave. Diliman, Quezon City 99-06-61

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Quedan Guarantee Fund Board	Galo B. Garchitorena	102 Manalili Bldg., E. Rodriguez Sr., Ave., Quezon City 732-23-51
Agricultural Credit Policy Council	Dr. Gilberto M. LLanto	Triumph Bldg., Quezon Avenue Quezon City 98-01-36; 96-85-52
National Irrigation Administration	Apolonio V. Bautista	NIA Building, EDSA, Quezon City 97-60-71; 922-27-95
Philippine Fisheries Development Authority	Atty. Malcolm I. Sarmiento	Bookman Bldg., Quezon Avenue Quezon City 711-43-69; 711-43-78
X. Department of Budget and Management (DBM)	Salvador M. Bariquez, Jr. Secretary	Admin. Bldg., Malacañang Palace Compd. J.P. Laurel St., San Miguel, Manila 521-23-01 to 10; 48-84-29; 48-43-62 Fax No. 40-75-85
Bureaus/Attached Agencies		
Bureau of Budget Planning	Laura B. Pascua	Administration Bldg., Malacañang, Manila 48-84-67; 62-17-14
Bureau of Compensation and Position Classification	Miguel B. Doctor	2/F, DBM Bldg. III Gen. Solano St., Manila 742-41-49, 742-41-71
Bureau of Organization and Productivity Improvement	Gerardo A. Zafra, Jr.	G/F, DBM Bldg., III Gen. Solano St., Manila 742-41-60; 742-41-59
Bureau of Systems and Procedures	Josefino R. Angeles, Jr.	G/F, DBM Bldg. III Gen. Solano St., Manila 742-41-63; Fax No. 742-41-73

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Bureau of Accounting and Finance - A	Rita Z. Tada	G/F, Espinosa Bldg. III Gen. Solano St., Manila 741-40-80
Bureau of Accounting and Finance - B	Loida S. Abellera	2/F, DBM Bldg. III Gen. Solano St., Manila 742-05-84; 742-28-45
Bureau of Accounting and Finance Bureau - C	Aurora V. Beringuela	G/F, DBM Bldg. III Gen. Solano St., Manila 741-37-11; 741-40-37
Bureu of Budget Operations - A	Narcisa O. Santos	2/F, Espinosa Bldg. Gen. Solano St., Manila 741-40-89; 742-23-77
Bureau of Budget Operations - B	Nieves L. Osorio	2/F, Espinosa Bldg. Gen. Solano St., Manila 742-41-21; Fax No. 742-46-91
Bureau of Budget Operations - C	Mario Relampagos	4/F, Cathay Mansion Arlegui St., Manila 742-14-56; 742-05-78
Bureau of Budget Operations - D	Cristeta C. Franciso	G/F, Espinosa Bldg. Gen. Solano St., Manila 742-41-38; 742-47-40
Regional Coordination Staff	Julieta C. Dela Torre	G/F, Espinosa Bldg. Gen. Santos St., Manila
Bureau of Legislative and Legal Affairs	Mario P. Bravo	2/F, Administration Bldg. Malacañang, Manila 47-09-39; 48-77-24

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
National Education Testing and Research Center	Dr. Lucila F. Tibigar	University of Life Complex Meralco Ave., Pasig, Metro Manila 632-13-61 to 70 loc. 2097
National Historical Institute	Dr. Serafin D. Quiazon	National Library Bldg. T.M. Kalaw St., Ermita, Manila 59-06-46
National Library	Adoracion M. Bolos	T.M. Kalaw St., Ermita, Manila 58-26-88; 50-23-29
National Museum	Fr. Gabriel S. Casal	Executive House Bldg., P. Burgos St. Taft Avenue, Manila 48-14-27; 40-41-83
Records Management and Archives Office	Dr. Edgardo J. Celis	National Library Bldg. T.M. Kalaw St., Ermita, Manila 58-33-43; 58-11-21
School Health and Nutrition Center	Dr. Adelfo A. Trinidad	University of Life complex Meralco Ave., Pasig, Metro Manila 632-13-61 to 70
Teachers Camp	Reynaldo A. Atanacio	Baguio City 35-17
XII. Department of Energy	Delfin L. Lazaro Secretary	Merritt Road, Fort Bonifacio Makati, Metro Manila 85-28-50
Bureaus		
Bureau of Energy Industry Administration	Neptali S. Franco	Merritt Road, Fort Bonifacio Makati, Metro Manila
Bureau of Energy Planning and Monitoring	Flordeliza M. Andres	Merritt Road, Fort Bonifacio Makati, Metro Manila

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
XI. Department of Education, Culture and Sports (DECS)	Armand V. Fabella Secretary	University of Life Complex Meralco Ave., Pasig, Metro Manila 632-13-61 to 70; 632-08-05 Fax No. 631-62-82
Bureaus/Attached Agencies		
Bureau of Elementary Education	Edith B. Carpio	University of Life Complex Meralco Ave., Pasig, Metro Manila 632-13-61 to 70
Bureau of Higher Education	Dr. Mona D. Valisno	University of Life Complex Meralco Ave., Pasig, Metro Manila 632-13-61 to 70 loc. 2066
Bureau of Nonformal Education	Leonardo Dela Cruz	University of Life Complex Meralco Ave., Pasig, Metro Manila 632-13-61 to 70 loc. 2079
Bureau of Secondary Education	Avelina T. Llagas	University of Life Complex Meralco Ave., Pasig, Metro Manila 632-13-61 to 70 loc. 2059
Bureau of Physical Education and School Sports	Rolando Brillantes	University of Life Complex Meralco Ave., Pasig, Metro Manila 632-13-61 to 70 loc. 2073
Bureau of Technical and Vocational Education	Dr. Alcestis Guian	University of Life Complex Meralco Ave., Pasig, Metro Manila 632-16-61 to 70 loc. 2085
Instructional Materials Council	Dr. Marina S. J. Pangan	University of Life Complex Meralco Ave., Pasig, Metro Manila 632-13-61 to 70
Institute of Philippine Language	Dr. Ponciano B.P. Pineda	University of Life Complex Meralco Ave., Pasig, Metro Manila 632-13-61 to 70 loc. 2095 and 2096

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Bureau of Energy Resource Development	Griselda J. Garcia-Bausa	Merritt Road, Fort Bonifacio Makati, Metro Manila
XIII. Department of Environment and Natural Resources (DENR)	Angel S. Alcala Secretary	DENR Bldg., Visayas Ave. Diliman, Quezon City 97-66-71; 99-06-93; 99-55-95
Bureaus/Attached Agencies		
Bureau of Forest Management	Cirilo B. Serna	Visayas Ave., Diliman Quezon City 96-48-26; 98-47-88
Bureau of Ecosystems Research and Development	Carlos C. Tomboc	FORI Bldg., Los Baños, Laguna 3277; 3220; 3221
Bureau of Land Management	Abelardo G. Palad, Jr.	Plaza Cervantez Binondo, Manila 46-14-01; 48-72-27
Bureau of Mines and Geo-Sciences	Joel D. Muyco	North Ave., Quezon City 99-86-42
Bureau of Protected Areas and Wildlife	Samuel R. Peñafiel	Ninoy Aquino Park and Nature Center Diliman, Quezon City 97-85-11 loc. 25
Bureau of Environmental Management	Rodrigo U. Fuentes	Philippine Heart Center Bldg. East Ave., Quezon City 97-32-54, 98-04-21 loc. 3621, 3622
National Mapping and Resource Information Authority	Jose G. Solis	NAMRIA Bldg., Fort Bonifacio Metro Manila 810-54-68
Natural Resources Development Corporation	Francis Xavier F. How	259-269 EDSA Greenhills San Juan, Metro Manila 79-13-52

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
XIV. Department of Finance (DOF)	Ernest C. Leung Secretary	5 Storey Bldg. Central Bank, Roxas Blvd., Manila 58-67-19, 59-69-13, 5952-62, 59-71-39
Bureaus/Attached Agencies		
Bureau of Customs	Guillermo Parayno, Jr.	Port Area, Manila 48-41-61
Bureau of Economic Intelligence and Investigation	Servando Lara	Camp Gen. E. Aguinaldo, Quezon City 78-55-22
Insurance Commission	Adelita A. Vergel de Dios	1071 U.N. Ave., Manila 59-92-21
Bureau of Internal Revenue	Liwayway Vinzons-Chato	BIR Bldg., Quezon City 99-16-83; 49-80-67; Fax No. 922-48-94
Bureau of Treasury	Wilfredo Alampay	Palacio del Gobernador Intramuros, Manila 40-80-44
Philippine Crop Insurance Corporation	Jorge A. Abada	VAG Bldg., Ortigas Ave., Greenhills San Juan, Metro Manila 721-08-29
Bureau of Local Government Finance	Lorinda M. Carlos	DOF Bldg., Agrifina Circle Ermita, Manila 40-09-01
National Tax Research Center	Vicente G. Quintos	Railroad Corner 20th Streets Port Area, Intramuros, Manila 48-29-96; 48-92-97
Central Board of Assessment Appeals	Margarita G. Magistrado	DOF Bldg., Agrifina Circle Ermita, Manila 46-17-20; 46-16-30

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Philippine Export and Foreign Loan Guarantee Corporation	Victor C. Macalincag	6/F, Executive Center Bldg. Sen. Gil Puyat cor. Makati Ave. Makati, Metro Manila 818-03-16; 818-59-13; 817-28-35
Fiscal Incentive Review Board	Dante Sy	BF Condominium, Aduana St. Intramuros, Manila 48-29-05
XV. Department of Foreign Affairs (DFA)	Roberto R. Romulo Secretary	DFA Bldg. (Old ADB Bldg.) 2330 Roxas Blvd., Pasay City 834-30-15; 831-89-55
Implementing Agencies		
Office of Legal Affairs	Sime D. Hidalgo	ADB Bldg. 2330 Roxas Blvd., Pasay City 834-35-50
Office of Policy Planning and Coordination	Tomas T. Syquia	ADB Bldg. 2330 Roxas Blvd., Pasay City 834-40-15
Office of Data Banking and Communications	Edgardo A. Fernandez	ADB Bldg. 2330 Roxas Blvd., Pasay City 834-49-97
Foreign Service Institute	Rodolfo S. Sanchez	ADB Bldg. 2330 Roxas Blvd., Pasay City 834-47-94
Board of Foreign Service Administration	Tomas P. Padilla	ADB Bldg. 2330 Roxas Blvd., Pasay City 834-48-62

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Office of Protocol	Ariel Y. Abadilla	ADB Bldg 2330 Roxas Blvd., Pasay City 834-37-01
Office of Asian and Pacific Affairs	Jose A. Zaide, Jr.	ADB Bldg. 2330 Roxas Blvd, Pasay City 834-32-69
Office of West Asian and African Affairs	Rosalinda De Perio-Santos	ADB Bldg. 2330 Roxas Blvd., Pasay City 834-33-08
Office of American Affairs	Tomas T. Syquia	ADB Bldg. 2330 Roxas Blvd., Pasay City 834-39-81
Office of European Affairs	Jaime J. Yambao	ADB Bldg. 2330 Roxas Blvd., Pasay City 834-39-08
Office of ASEAN Affairs	Delia D. Albert	ADB Bldg. 2330 Roxas Blvd., Pasay City 834-34-27
Office of United Nations and International Organizations	Nelson D. Lavina	ADB Bldg. 2330 Roxas Blvd., Pasay City 834-30-94
Office of Personnel and Administration Services	Eufronia M. Recaido	ADB Bldg. 2330 Roxas Blvd., Pasay City 834-34-96
Office of Fiscal Management Services	Ophelia A. Gonzales	ADB Bldg. 2330 Roxas Blvd., Pasay City 834-47-01

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Appendix B. Directory of Government Agencies: A

Department/Bureau	Head of office
Office of Consular Affairs	Vesta I. Cuyugan
XVI. Department of Health (DOH)	Juan M. Flavier Secretary
Bureaus/Attached Agencies	
Bureau of Food and Drugs	Dr. Quintin L. Kintanar
Bureau of Licensing and Regulations	Dr. Zenaida Dela Fuente
Bureau of Research and Laboratories	Dr. Marieta C. Baccay
Bureau of Dental Health Services	Dr. Pacencia L. Miravite
Bureau of Quarantine Office	Dr. Benjamin Sarenas
Philippine Heart Center for Asia	Dr. Esperanza I. Cabral
Lung Center of the Philippines	Dr. Calixto Zaldivar, Jr.

St.

r.
, Metro Manila
-0
dg., EDSA cor.
., Mandaluyong, Metro Manila
31 loc. 206
iance Building
9 E. Rodriguez Jr. Ave.
Bo. Ugong, Pasig, Metro Manila
693-51-40; 693-17-90 to 94
6/F, Agustin I Bldg., Emerald Ave.,
Pasig, Metro Manila
631-71-94 to 95
2/F, PNCC Bldg. EDSA cor.
Reliance St. Mandaluyong, Metro Manila
631-84-31

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Philippine Children's Medical Center	Dr. Lilian Lee	East Ave., Quezon City 924-66-01; 924-08-36
National Kidney Institute	Dr. Filoteo Alano	East Ave., Quezon City 98-96-61; Fax No. 922-21-27
National Center for Mental Health	Dr. Brigida Buenaseda	Nueve de Febrero St. Mandaluyong, Metro Manila 79-22-01
San Lorenzo Hospital	Dr. Virgilio Gonzales	Quiricada St., Sta. Cruz, Manila 711-69-79
Tondo Medical Center	Dr. Victor J. Dela Cruz	Balut St., Tondo, Manila 26-16-16
Jose Fabella Memorial Hospital	Dr. Ricardo B. Gonzales	Lope de Vega St., Sta. Cruz, Manila 711-96-30
Quirino Memorial Medical Hospital	Dr. Domingo L. De Guzman	Katipunan Rd., Project 4, Quezon City 721-30-89
National Orthopedic Hospital and Rehabilitation Medical Center	Dr. Jesus M. Dueñas	Banaue St., Quezon City 712-47-46
East Avenue Medical Center	Dr. Edgardo F. A. Javillonar	East Ave., Diliman, Quezon City 98-99-80
National Children's Hospital	Dr. Isabelita Gozon	266 E. Rodriguez Ave., Quezon City 79-45-33
Rizal Medical Center	Dr. Romeo M. Cruz	Shaw Blvd., Pasig, Metro Manila 73-76-85
Jose R. Reyes Memorial Medical Center	Dr. Primo V. Brillantes	San Lazaro Cmpd., Rizal Ave. Sta. Cruz, Manila 711-94-91; 711-95-08
Philippine Medical Care Commission	Dr. Rodolfo A. Maceda	8/F, Phil. Heart Center Bldg. East Ave., Diliman, Quezon City 98-15-75; 98-12-72

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Research Institute for Tropical Medicine	Dr. Mediadora C. Saniel	Alabang, Muntinlupa, Metro Manila 842-28-28; Fax No. 842-22-45
Dangerous Drug Board	Atty. Manuel M. Supnet	Domestic Insurance Bldg. Anda Circle, Bonifacio Drive Port Area, Manila 40-36-25
XVII. Departmentof Interior and Local Government (DILG)	Rafael M. Alunan III Secretary	PNCC Bldg., cor EDSA and Reliance St. Mandaluyong, Metro Manila 631-84-31 (trunkline)
Bureaus/Attached Agencies		
Bureau of Local Government Development	Teresita Mistal	G/F, PNCC Bldg., EDSA cor. Reliance St., Mandaluyong, Metro Manila 631-50-20; 631-50-06
Bureau of Local Government Supervision	Everdina Doctor	G/F, PNCC Bldg., EDSA cor. Reliance St., Mandaluyong, Metro Manila 631-84-31 loc. 206
Bureau of Fire Protection	B. Gen. Alfonso T. Clemente	Reliance Building 99 E. Rodriguez Jr. Ave. Bo. Ugong, Pasig, Metro Manila 693-51-40; 693-17-90 to 94
Local Government Academy	Junio M. Ragragio	6/F, Agustin I Bldg., Emerald Ave., Pasig, Metro Manila 631-71-94 to 95
National Barangay Operations Office	Serafin M. Benaldo	2/F, PNCC Bldg. EDSA cor. Reliance St. Mandaluyong, Metro Manila 631-84-31

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
National Police Commission	Rafel M. Alunan III	Sen Gil J. Puyat Ave. Makati, Metro Manila 818-25-19; 819-29-70
Philippine National Police	Brig. Gen. Raul F. Imperial	Camp Crame, Quezon City 72-08-02; 78-79 61 (Trunkline)
XVIII. Department of Justice	Franklin M. Drilon Secretary	DOJ Bldg., Padre Faura St. Ermita, Manila 59-92-71 to 79
Bureaus/Attached Agencies		
Bureau of Immigration	Zafiro L. Respicio	Magallanes Drive, Port Area, Manila 49-27-82
Office of Government Corporate Counsel	Oscar I. Garcia	1203 Mabini Cor. Arquiza Sts. Ermita, Manila 59-14-82
National Bureau of Investigation	Epimaco A. Velasco	Taft Ave., Manila 50-50-84; 59-24-51
Bureau of Corrections	Eriberto B. Misa, Jr.	Muntinlupa, Metro Manila 842-23-65; 842-32-08
Parole and Probation Administration	Francisco Ruivivar	J and T Bldg., Sta. Mesa, Manila 60-22-81
Commission on the Settlement of Land Problems	Josefina Garcia-Se	Aries Bldg., 103 Quezon Ave., Quezon City 711-27-11; 742-55-54
Public Attorney's Office	Reynaldo S. Fajardo	DOJ Bldg., Padre Faura St., Manila 59-61-65
Land Registration Authority	Judge Reynaldo Maulit	PPSTA Bldg., Banawe St., Quezon City 711-82-95

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Office of the Solicitor General	Raul I. Goco	134 Amorsolo St., Legaspi Village Makati, Metro Manila 818-63-01; 817-64-05
XIX. Department of Labor and Employment (DOLE)	Nieves R. Confesor Secretary	DOLE Executive Bldg. San Jose St., Intramuros Manila 47-25-54; Fax No. 47-28-57
Bureaus/Attached Agencies		
Bureau of Labor and Employment Statistics	Sonia H. Castro	3/F, DOLE Bldg., Intramuros, Manila 46-26-46; 48-19-37
Bureau of Labor Relations	Perlita B. Velasco	4/F, ECJ Bldg., Intramuros, Manila 40-54-19; 40-59-55; 40-53-96
Bureau of Local Employment	Clifford A. Paragua	Cojuangco Building Cor. Arzobispo and Sta. Lucia Streets Intramuros, Manila 48-32-04; 49-22-08
Bureau of Rural Workers	Josefino I. Torres	8/F, Palacio del Gobernador Intramuros, Manila 47-20-36
Bureau of Working Conditions	Augusto G. Sanchez	DOLE Bldg., Gen Luna cor. Muralla St. Intramuros, Manila 40-31-91
Bureau of Women and Young Workers	Aura A. Sabilano	Cojuangco Bldg. cor. Arzobispo and Sta. Lucia Streets Intramuros, Manila 40-26-46; 48-19-37
National Labor Relations Commission	Bartolome S. Carale	Associated Bank Bldg. T.M. Kalaw St., Ermita, Manila 58-23-26

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Institute for Labor Studies	Carmela I. Torres	5/F, Dole Bldg., Intramuros, Manila 40-08-22
Maritime Training Council	Cresencio M. Siddayao	POEA Bldg., EDSA cor. Ortigas Ave. Greenhills, San Juan, Metro Manila 722-11-56
Occupational Health Center	Helen D. Custodio	North Ave. cor. Science Road Diliman, Quezon City 97-60-03
Philippine Overseas Employment Administration	Felicisimo O. Joson, Jr.	POEA Bldg., EDSA cor. Ortigas Ave. Greenhills, San Juan, Metro Manila 722-11-51; 722-11-63 Fax No. 722-11-61
Overseas Workers Welfare Administration	David C. Corpin	OWWA Bldg., Solana St., Intramuros, Manila 40-45-28; 47-84-95
Employees Compensation Commission	Jorge B. Contreras	3/F, ECC Bldg. 355 Sen. Gil J. Puyat Ave. Makati, Metro Manila 816-43-05
National Manpower and Youth Council	Jose D. Lacson	Bicutan, Taguig Metro Manila 87-24-54
National Wages and Productivity Commission	Carmelita M. Pineda	Concepcion Licaros Bldg., Muralla cor. Victoria Sts., Intramuros, Manila 40-63-81 to 86 local 111
National Maritime Polytechnic	Renato Palomo	503 Doña Felisa Syjuco Bldg., Taft Ave., cor. Remedios St., Malate, Manila 59-57-22; Fax No. 521-05-91

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
National Conciliation and Mediation Board	Buenaventura C. Magsalin	G/F, DOLE Bldg. Intramuros, Manila 47-29-38
XX. Department of National Defense (DND)	Renato S. De Villa Secretary	3/F, DND Building Camp Aguinaldo, Quezon City 79-03-90; 78-97-26 Fax No. 47-28-57
Bureaus/Attached Agencies		
Armed Forces of the Philippines	Gen. Lisandro C. Abadia	Camp Aguinaldo, Quezon City 79-68-37; 70-69-37
Philippine Air Force	Maj. Gen. Leopoldo S. Acot	Villamor Air Base, Pasay City Metro Manila 832-10-66
Philippine Army	Lt. Gen. Arturo Enrile	Fort Bonifacio, Makati, Metro Manila 85-42-21
Philippine Navy	Vice Admiral Mariano J. Dumangcas, Jr.	Roxas Blvd., Manila 58-24-53; 50-26-61 to 69
Philippine Veterans Assistance Commission	Brig. Gen. Ernesto S. Gidaya	Camp Aguinaldo, Quezon City 78-24-76
Office of the Civil Defense	Fortunato M. Dejoras	Camp Gen. Emilio Aguinaldo Quezon City 78-68-58; 77-49-71
Philippine Marines	Brig. Gen. Eduardo T. Cabanlig	Fort Bonifacio, Makati, Metro Manila 85-15-77; 86-36-18
National Defense College of the Philippines	Brig. Gen. Cesar De Leon Go (Ret.)	Fort Bonifacio, Makati, Metro Manila 85-96-66; 815-97-51; 87-98-27
Philippine Vetrerans Affairs Office	Brig. Gen. Dalmacio G. Pizaña, Jr.	Arroceros Street, Manila 48-33-50; 47-12-26

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Philippine Coast Guard	Commodore Carlos Agustin	139 25th Street Port Area, Manila
XXI. Department of Public Works and Highways (DPWH)	Gregorio R. Vigilar Secretary	Bonifacio Drive, Port Area, Manila 49-92-37; 40-35-52
Bureaus/Attached Agencies		
Bureau of Construction	Manuel V. Mapa	Bonifacio Drive, Port Area, Manila 47-71-94
Bureau of Research and Standards	Jose H. Espiritu	EDSA, Diliman, Quezon City 96-28-26
Bureau of Design	Bienvenido C. Leuterio	Bonifacio Drive, Port Area, Manila 49-90-83
Bureau of Equipment	Cresenciano N. de Leon	2nd Street, Port Area, Manila 46-17-87
Bureau of Maintenance	Leonardo A. Nuñez	2nd Street, Port Area, Manila 47-79-31
National Water Resources Board	Luis N. Soza	8/F, NIA Bldg., EDSA, Quezon City 95-26-41; 99-23-65
Local Waterworks and Utilities Administration	Antonio R. De Vera	LWUA, Katipunan Rd., Balara, Quezon City 97-61-07
Metropolitan Waterworks and Sewerage System	Teofilo I. Asuncion	MWSS Bldg., Katipunan Rd., Balara Balara, Quezon City 922-29-69, 922-37-57
Toll Regulatory Board	Ma. Chona M. Dimayuga	10/F Strata 100 Bldg. Emerald Ave., Pasig, Metro Manila 631-27-93; 631-28-68; 631-28-53

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
XXII. Department of Science and Technology (DOST)	Dr. Ricardo T. Gloria Secretary	Gen. Santos Avenue Bicutan, Taguig, Metro Manila 822-06-14 Fax No. 822-05-61
Bureaus/Attached Agencies		
Philippine Council for Agriculture, Forestry and Natural Resources, Research and Development	Dr. Clodualdo B. Perez, Jr.	Los Baños, Laguna 72-33; Fax No.: 50-016
Philippine Council for Health Research and Development	Dr. Pacita L. Zara	DOST Complex, Gen. Santos Ave. Bicutan, Taguig, Metro Manila 822-06-07
Philippine Council for Industry and Energy Research and Development	Dr. Estrella F. Alabastro	DOST Complex, Gen. Santos Ave. Bicutan, Taguig, Metro Manila 822-04-70; Fax No. 322-12-54
Philippine Council for Aquatic and Marine Research and Development	Dr. Rafael D. Guerrero III	Los Baños, Laguna 500-15 loc. 2100
Philippine Council for Advanced Science and Technology Research and Development	Dr. Rogelio A. Panlasigui	DOST Main Bldg., Gen. Santos Ave. Bicutan, Taguig, Metro Manila 822-09-60 loc. 2100
Food and Nutrition Research Institute	Dr. Rodolfo F. Florentino	Taft Ave., Manila 59-49-98
Forest Products Research and Development Institute	Dr. Emmanuel D. Bello	University of the Philippines Los Baños, Laguna 2526; 23-60
Philippine Nuclear Research Institute	Dr. Carlito R. Aleta	Diliman, Quezon City 97-60-16; Fax No.:95-16-46
Industrial Technology Development Institute	Dr. Rogelio Panlasigui	Pedro Gil St., Ermita, Manila 59-22-75

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Philippine Textile Research Institute	Dr. Eduardo P. Villanueva	Gen. Santos Ave. Bicutan, Taguig Metro Manila 822-13-25
Advanced Science and Technology Institute	Dr. Rolando P. Dayco	4/F, NEC Bldg., UP Diliman Quezon City 98-24-71 to 79 Fax No.: 98-24-71 to 79 loc. 5870
Science Education Institute	Dr. Ester B. Ogena	PTRI Bldg., Gen. Santos Ave. Bicutan, Taguig, Metro Manila 822-13-59
Technology Application and Promotion Institute	Dr. Maripaz Perez	DOST Complex, Gen. Santos Ave. Bicutan, Taguig, Metro Manila 822-06-09
Philippine Institute of Volcanology and Seismology	Dr. Raymundo S. Punongbayan	5/F, Hizon Bldg., Quezon Ave. Quezon City 712-46-69; Fax No.: 711-30-77
Science and Technology Information Institute	Dr. Jose L. Guerrero	DOST Complex, Gen. Santos Ave. Bicutan, Taguig, Metro Manila 822-09-54
National Academy of Science and Technology	Dr. Conrado Dayrit	TAPI Bldg., Gen. Santos Ave. Bicutan, Taguig, Metro Manila 822-09-61 to 67
National Research Council of the Philippines	Dr. Raul P. de Guzman	Gen. Santos Ave., Bicutan, Taguig Metro Manila 822-04-09
Philippine Science High School	Dr. Vicenta F. Reyes	Agham Rd., Diliman, Quezon City 96-27-42

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Philippine Atmospheric, Geophysical and Astronomical Services Administration	Dr. Roman L. Kintanar	1424 Quezon Ave., Quezon City 922-84-01 loc. 211 Fax No.: 922-18-72, 921-37-17
Metals Industry Research and Development Center	Dr. Leopoldo V. Abis	Gen. Santos Ave., Taguig, Metro Manila 822-04-30 to 35
XXIII. Department of Social Welfare and Development (DSWD)	Corazon Alma G. De Leon Secretary	Batasan Pambansa Complex Constitution Hills, Quezon City 741-07-36; 741-07-86 Fax No. 741-69-39
Bureaus/Attaced Agencies		
Bureau of Emergency Assistance	Nilda S. Aldior	Batasan Pambansa Complex Constitution Hills, Quezon City 922-18-11 to 15
Bureau of Family and Community Welfare	Rosario B. dela Rosa	Batasan Pambansa Complex Constitution Hills, Quezon City 922-18-11 to 15
Bureau of Child and Youth Welfare	Concepcion C. Manalang	Batasan Pambansa Complex Constitution Hills, Quezon City 922-18-11 to 15
Bureau of Disabled Persons Welfare	Marita S. Capadocia	Batasan Pambansa Complex Constitution Hills, Quezon City 922-18-11 to 15
Bureau of Women's Welfare	Belinda C. Manahan	1680 F. T. Benitez, Malate, Manila 59-87-25
National Council for the Welfare of Disabled Persons	Dr. Zeno O. Zuñiga	2/F, Philsucen Annex Bldg. North Ave., Diliman, Quezon City 96-11-65

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Council for the Welfare of Children	Ma. Elena S. Caraballo	DSWD South, Nichols Interchange South Superhighway, Taguig, Metro Manila 85-63-55; 85-61-04
XXIV. Department of Tourism (DOT)	Vicente J. Carlos Secretary	DOT Agrifina Circle Rizal Park, Manila 50-17-51; 50-55-28
Bureaus/Attached Agencies		
Administrative Service	Vernie M. Velarde	DOT Bldg., T.M. Kalaw Street Rizal Park, Manila 521-73-76; 50-16-94
Financial and Management Services	Grace R. Yoro	DOT Bldg., T.M. Kalaw Street Rizal Park, Manila 59-58-54
Legal Sevices	Ricia Remollo	DOT Bldg., T. M. Kalaw St. Rizal Park, Manila 50-17-42
Bureau of Domestic Tourism Promotion	Cynthia C. Lazo	DOT Bldg., T.M. Kalaw Street Rizal Park, Manila 50-90-31 loc. 258, 259
Bureau of International Tourism Promotion	Romulo Delos Reyes	DOT Bldg., T.M. Kalaw Street Rizal Park, Manila 50-21-31
Office of Tourism Information	Raul J. Teehankee	DOT Bldg., T.M. Kalaw Street Rizal Bank, Manila 58-62-27
Office of Tourism Coordination	Maria Theresa Martinez	DOT Bldg., T.M. Kalaw Street Rizal Park, Manila 59-32-95; 50-21-03

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Office of Tourism Development Planning	Rene Delos Santos	DOT Bldg., T.M. Kalaw Street Rizal Park, Manila 58-61-38; 58-75-32
Office of Product Research and Development	Elizabeth S. Nel	DOT Bldg. T.M. Kalaw Street Rizal Park, Manila 50-22-54
Office of Tourism Standard	Victoria Jasmin	DOT Bldg., T.M. Kalaw Street Rizal Park, Manila 58-44-26
Intramuros Administration	Edda V. Henson	Palacio Del Governador Bldg. Intramuros, Manila 46-11-95
National Parks Development Committee	Gaudencio Tobias	Agrifina Circle Rizal Park, Manila 59-49-48
Philippine Tourism Authority	Eduardo Joaquin	Department of Tourism Bldg. Agrifina Circle, Rizal Park, Manila 50-10-32
Philippine Convention and Visitors Corporation	Daniel G. Corpuz	Legaspi Tower 300 Vito Cruz St., cor. Roxas Blvd., Manila 57-11-96; 58-15-01
Duty Free Philippines	Benjamin S. Lim	Fiesta Shopping Center Ninoy Aquino Ave., Parañaque 832-31-91; 832-35-67
Nayong Pilipino	Atty. Apolonio B. Anota, Jr.	MIA Road, Pasay City 832-37-60, 832-37-67, 832-37-68 Fax No.: 832-05-93
Camp John Hay	Silverio G. De la Cruz	Baguio City

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
XXV. Department of Trade and Industry (DTI)	Rizalino S. Navarro Secretary	Trade and Industry Bldg. 361 Sen. Gil Puyat Ave. Buendia, Makati, Metro Manila 816-01-21; Attached 818-45-61 Fax No.: 85-11-66/818-08-92
Bureaus/Attached Agencies		
Bureau of Domestic Trade Promotion	Zenaida C. Maglaya	Trade and Industry Bldg. 361 Sen. Gil J. Puyat Ave., Makati Metro Manila 818-24-77
Bureau of Export Trade Promotion	Edsel Custodio	5/F, New Solid Bldg., 357 Sen. Gil Puyat Ave. Makati, Metro Manila 817-52-03; 817-52-98
Bureau of Trade Regulations and Consumer Protection	Lucy Aquino	Trade and Industry Bldg. 361 Sen. Gil J. Puyat Ave. Makati, Metro Manila 817-52-80
Center for International Trade Expositions Missions	Araceli Ma. Pintor-Mansor	Philtrade, Roxas Blvd., Manila 831-23-8; 832-39-56
Bureau of Small and Medium Business Development	Zoila Proledo	Welding Building 349 Sen. Gil Puyat Ave. Makati, Metro Manila 817-53-90
Bureau of Patents, Trademarks and Technology Transfer	Ignacio S. Sapalo	Trade and Industry Bldg. 361 Sen. Gil J. Puyat Ave. Makati, Metro Manila 818-49-19

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (concluded)

Department/Bureau	Head of office	Address
Bureau of Import Services	Aurora F. Timbol	Trade and Industry Bldg. 361 Sen. Gil Puyat Ave. Makati, Metro Manila 831-22-01
Bureau of Product Standards	Renato V. Navarette	Trade and Industry Bldg. 361 Sen. Gil J. Puyat Ave. Makati, Metro Manila 817-55-27
Bonded Export Marketing Board	Atty. Leticia V. Ibay	BOI Building Sen. Gil Puyat Ave. Makati, Metro Manila 85-61-27
Press Relations Office	Romeo J. Pajarillo	285 Sen. Gil J. Puyat Ave. Makati, Metro Manila 85-65-30 Fax No.: 86-35-58
Trade and Industry Information Center	Minerva R. Fajardo	361 Sen. Gil J. Puyat Ave. Makati, Metro Manila 818-36-11; Fax No.: 85-64-87
Philippine Trade Training Center	Ma. Angelina V. Angeles	International Trade Center Complex Roxas Blvd., cor. Gil Puyat Ave. Pasay City, Metro Manila 834-13-41
Board of Investments	Ofelia V. Bulaong	385 Sen. Gil Puyat Ave. Makati, Metro Manila 88-51-67
Construction Manpower Development Foundation	Rodolfo C. Menguita	6/F, Prudential Life Bldg. 2158 Pasong Tamo Makati, Metro Manila 815-11-51

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Office of Operational Planning	Aurora A. Dela Cruz	Philman Building Finmangen Bldg., Tordesillas St. Makati, Metro Manila 818-67-60
Office of Special Concerns	Arnaldo A. Del Rosario	Board of Investment Building Makati, Metro Manila 818-31-97; 817-50-77
National Industrial Manpower Training Council	Emilene R. Navera	Mezzanine Flr., New Solid Bldg. Makati, Metro Manila
Management Information Service	Clemencia Galvez	5/F, DTI Bldg. Sen. Gil Puyat Avenue Makati, Metro Manila 817-74-08
Center for Labor Relations Assistance	Federico G. Luchico, Jr.	285 Sen. Gil Puyat Ave. Makati, Metro Manila 86-68-78
Philippine Shippers' Bureau	Alfonso C. Villaverde	361 Sen Gil Puyat Ave. Makati, Metro Manila 817-54-34; 818-57-01 loc. 362
International Coffee Organization Certifying Agency	Antonio R. Reyes	5/F, New Solid Building 357 Sen. Gil Puyat Ave. Makati, Metro Manila 817-52-04
National Development Company	Arthur Aguilar	Producer's Bank Bldg. 371 Sen Gil Puyat Ave. Makati, Metro Manila 88-16-67; 818-32-84

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Garments and Textile Export Board	Atty. Aurora Maria F. Timbol	3/F, New Solid Bldg. 357 Sen. Gil Puyat Ave. Makati, Metro Manila 817-443-21; 817-43-23
XXVI. Department ofTransporation and Communications (DOTC)	Jesus B. Garcia, Jr. Secretary	Philcomcen Bldg., Ortigas Ave. Pasig, Metro Manila 631-87-61 to 63, 631-79-55 to 58 Fax No.: 632-99-85
Bureaus/Attached Agencies		
Philippine Postal Corporation	Atty. Jorge V. Sarmiento	Liwasang Bonifacio, Manila 47-14-11 to 13; 47-23-12
Air Transportation Office	Major Gen. Gerardo C. Protacio (Ret.)	BAT, Nayong Pilipino Complex Pasay City, Metro Manila 832-33-08; 832-19-69
Land Transportaion Franchising Regulatory Board	Dante M. Lantin	East Ave., Quezon City 921-90-59
Land Transportation Office	Brig. Gen Manuel Bruan (Ret.)	East Ave., Quezon City 921-90-71 to 72
National Telecommunication Commission	Simeon L. Kintanar	Scout Reyes cor. Panay Ave. Quezon City 97-56-44
Telecommunication Office	Francis S. Ganzon	Roces Ave., Quezon City 95-15-65
Philippine Ports Authority	Rogelio A. Dayan	Marsman Bldg., Port Area, Manila 40-81-66
Ninoy Aquino International Airport Authority	Guillermo Cunanan	Pasay City 832-29-38
Metro Manila Transit Corporation	Antonio E. Neri	North Ave., Quezon City 922-58-16

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Appendix B. Directory of Government Agencies: As of June 17, 1993 (continued)

Department/Bureau	Head of office	Address
Philippine Aerospace Development Corporation	Angelo Dwight L. Penson	Airport Rd., Pasay City 832-23-81
Philippine National Railways	Atty. Jose Dado	PNR Training Center Torres Bagallon St., Kalookan City 362-08-24
Transport Training Center	Dr. Primitivo C. Cal	TTC Bldg., UP Diliman, Quezon City 97-56-64
Light Rail Transit Authority	Alberto J. Arevalo, Jr.	LRTA Compound, Aurora Blvd. Pasay City, Metro Manila 832-04-23
Maritime Industry Authority	Phillip S. Tuazon	PPL Bldg., United Nations Ave., Manila 521-01-07
Office of Transportation Cooperatives	Roberto V. Reyes	Houston Bldg., Emerald Ave. Pasig, Metro Manila 631-30-55
Civil Aeronautics Board	Atty. Silvestre M. Pascual	Airport Road, Pasay City 832-30-47
Philippine Merchant Marine Academy	Comm. Gil S. Fernandez	Fort Bonifacio, Makati 86-71-85; 817-161; 817-110

Source: Office of the Press Secretary.

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993

President of the Philippines	Hon. Fidel V. Ramos
Vice-President of the Philippines	Hon. Joseph E. Estrada
Department Secretaries and Members of the Cabinet	
Foreign Affairs	Hon. Roberto R. Romulo
Finance	Hon. Ernest Leuing
Justice	Hon. Franklin M. Drilon
National Defense	Hon. Renato de Villa
Agriculture and Food	Hon. Roberto S. Sebastian
Environment and Natural Resources	Hon. Angel Alcala
Agrarian Reform	Hon. Ernesto D. Garilao
Education, Culture and Sports	Hon. Armand V. Fabella
Interior and Local Government	Hon. Rafael M. Alunan III
Labor and Employment	Hon. Nieves R. Confesor
Public Works and Highways	Hon. Gregorio R. Vigilar
Science and Technology	Hon. Ricardo T. Gloria
Trade and Industry	Hon. Rizalino S. Navarro
Transportation and Communication	Hon. Jesus B. Garcia, Jr.
Tourism	Hon. Vicente J. Carlos
Health	Hon. Juan M. Flavier
Social Welfare and Development	Hon. Corazon Alma de Leon
Budget and Management	Hon. Salvador M. Enriquez, Jr.
National Economic and Development Authority	Hon. Cielito F. Habito
Press Secretary	Hon. Jesus Sison
Executive Secretary	Hon. Edilmiro Amante
Chairman, Presidential Commission on Good Government	Hon. Magtanggol Gunigundo
National Security Director, National Security Council	Hon. Jose T. Almonte
Energy	Hon. Delfin L. Lazaro

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

Justices of the Supreme Court of the Philippines	
Chief Justice	Hon. Andres R. Narvasa
Associate Justices	Hon. Isagani A. Cruz
	Hon. Florentino P. Feliciano
	Hon. Teodoro R. Padilla
	Hon. Abdulwahid A. Bidin
	Hon. Carolina Griño Aquino
	Hon. Florenz D. Regalado
	Hon. Hilarion G. Davide Jr.
	Hon. Flerida Ruth P. Romero
	Hon. Rodolfo A. Nocom
	Hon. Josue N. Bellosillo
	Hon. Jose A. R. Melo
	Hon. Camilo D. Quiason
	Hon. Reynato S. Puno
	Hon. Jose C. Vitug
Justices of the Intermediate Appellate Court	
Presiding Justice	Hon. Santiago M. Kapunan
Associate Justices	Hon. Vicente V. Mendoza
	Hon. Fidel P. Purisima
	Hon. Nathaniel P. de Pano, Jr.
	Hon. Manuel C. Herrera
	Hon. Arturo B. Buena
	Hon. Gloria Conti Paras
	Hon. Ricardo J. Franciso
	Hon. Pedro A. Ramirez
	Hon. Antonio M. Martinez
	Hon. Emeterio C. Cui
	Hon. Segundo G. Chua

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

Hon. Oscar M. Herrera
Hon. Jaime N. Lantin
Hon. Alfredo M. Marigomen
Hon. Jorge S. Imperial
Hon. Alfredo L. Benipayo
Hon. Minerva Gonzaga Reyes
Hon. Jesus M. Elbinias
Hon. Justo P. Torres, Jr.
Hon. Asaali S. Isnani
Hon. Alicia V. Sempio-Dy
Hon. Cezar D. Francisco
Hon. Artemon D. Luna
Hon. Jainal D. Rasul
Hon. Serafin V. C. Guingona
Hon. Salome A. Montoya
Hon. Cancio C. Garcia
Hon. Quirino D. Abad Santos, Jr.
Hon. Fermin A. Martin, Jr.
Hon. Consuelo Ynares Santiago
Hon. Eduardo G. Montenegro
Hon. Angelina Sandoval-Gutierrez
Hon. Ma. Alicia M. Austria-Martinez
Hon. Ricardo P. Galvez
Hon. Pacita Cañizares-Nye
Hon. Lourdes K. Tayao-Jaguros
Hon. Bernardo P. Pardo
Hon. Corona Ibay Somera
Hon. Buenaventura J. Guerrero
Hon. Alfredo J. Lagamon
Hon. Ramaun U. Mabutas, Jr.
Hon. Eubulo G. Verzola

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

Office of the Ombudsman	
Ombudsman	Hon. Conrado M. Vasquez
Deputy Ombudsman	Hon. Franciso A. Villa
Deputy Ombudsman for Luzon	Hon. Manuel C. Domingo
Deputy Ombudsman for Visayas	Hon. Arthuro Mojica
Deputy Ombudsman for Mindanao	Hon. Cesar Nitorreda
Deputy Ombudsman for Military	Hon. Manuel B. Casaclang
Office of the Special Prosecutor	
The Special Prosecutor	Hon. Aniano A. Desierto
Prosecutors	Hon. Teresita D. Baldos
	Hon. Roger C. Berbano
	Hon. Gualberto J. dela Llana
	Hon. Humilde S. Ferrer
	Hon. Robert E. Kallos
	Hon. Mario V. Lopez
	Hon. Reynaldo L. Mendoza
	Hon. Carlos D. Montemayor
	Hon. Erdulfo Q. Querubin
	Hon. Leonardo P. Tamayo
	Hon. Concordio C. Villamero
	Hon. Dionisio A. Caoili
	Hon. Fidel D. Galindez
	Hon. Marlyn T. Galvez
	Hon. Edgardo C. Labella
	Hon. Antonio T. Manzano
	Hon. Luz Q. Marcos
	Hon. Angel C. Mayoralgo
	Hon. Humphrey T. Monteroso
	Hon. Jose D. Parentala
	Hon. Gregorio G. Pimentel

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

	Hon. Wendell B. Sulit
	Hon. Manuel T. Amante
	Hon. Pelagio S.. Apostol
	Hon. Manuel A. Corpuz
	Hon. Rodolfo T. Espinosa
	Hon. Francisco L. Ilustre
	Hon. Orlnado I. Ines
	Hon. Daniel B. Jovacon
	Hon. Jesus A. Micael
	Hon. Cornelio L. Somido
	Hon. Victorio U. Tabanguil
Chief General Services	Hon. Ador Paulino
Justices of the Sandiganbayan	
Presiding Justice	Hon. Francis Garchitorena
Associate Justices	Hon. Sabino De leon, Jr.
	Hon. Romeo Escareal
	Hon. Augusto Amores
	Hon. Regino Hermosizima
	Hon. Narciso Atienza
	Hon. Jose Balajadia
	Hon. Cipriano del Rosario
	Hon. Minita Chilo-Nazario
Solicitor-General	Hon. Raul Goco
Constitutional Commissioners	
Commission on Audit	Hon. Pastasio Banaria (Holdover capacity)
Commission on Elections	Hon. Christian Monsod
Civil Service Commission	Hon. Patricia Sto. Tomas

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

Commission on Human Rights	Hon. Sedfrey Ordoñez
Presidential Commission on Good Government	Hon. Magtanggol Gunigundo

Congress of the Philippines

Members of the Senate

President of the Senate	Hon. Edgardo J. Angara
Senators	Hon. Teofisto T. Guingona - Pro Tempore
	1. Hon. Vicente Sotto III
	2. Hon. Ramon B. Revilla
	3. Hon. Edgardo J. Angara
	4. Hon. Ernesto F. Herrera
	5. Hon. Alberto G. Romulo
	6. Hon. Ernesto M. Maceda
	7. Hon. Orlando S. Mercado
	8. Hon. Neptali A. Gonzales
	9. Hon. Heherson T. Alvarez
	10. Hon. Leticia R. Shahani
	11. Hon. Blas F. Ople
	12. Hon. Freddie M. Webb
	13. Hon. Gloria M. Arroyo
	14. Hon. Santanina T. Rasul
	15. Hon. Jose D. Lina, Jr.
	16. Hon. Anna Dominique Coseteng
	17. Hon. Arturo M. Tolentino
	18. Hon. Raul S. Roco
	19. Hon. Rodolfo G. Biazon
	20. Hon. Wigberto E. Tañada
	21. Hon. Francisco S. Tatad
	22. Hon. John Henry Osmeña
	23. Hon. Agapito A. Aquino

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

House of Representatives		
Speaker	Hon. Jose de Venecia	
Speaker Pro-tempore	Hon. Antonio Cuenco	
Majority Floor Leader	Hon. Francisco Sumulong	
Region/Province	**District**	**Representative**
National Capital Region (NCR)		
Manila	First	Martin B. Isidro
	Second	Jaime C. Lopez
	Third	Leonardo B. Fugoso
	Fourth	Ramon S. Bagatsing, Jr.
	Fifth	Amado Bagatsing
	Sixth	Rosenda Ann M. Ocampo
Quezon City	First	Renato Yap
	Second	Dante V. Liban
	Third	Mitchell Y. Gumabao
	Fourth	Feliciano R. Belmonte, Jr.
Kalookan City	First	Aurora A. Henson
	Second	Luis A. Asistio
Pasay City	Lone	Jovito O. Claudio
Malabon-Navotas	Lone	Teresa Aquino Oreta
San Juan-Mandaluyong	Lone	Ronaldo B. Zamora

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

Marikina	Lone	Romeo C. Candazo
Makati	Lone	Joker P. Arroyo
Parañaque	Lone	Jose Roilo S. Golez
Las Piñas-Muntinlupa	Lone	Manuel B. Villar, Jr.
Pasig	Lone	Rufino S. Javier
Pateros-Tagig	Lone	Dante O. Tinga
Valenzuela	Lone	Antonio M. Serapio
Cordillera Admininstrative Region (CAR)		
Abra	Lone	Jeremias Z. Zapate
Benguet	Lone	Samuel M. Dangwa
Mt. Province	Lone	Victor S. Dominguez
Kalinga Apayao	Lone	Elias K. Bulut
Baguio City	Lone	Bernardo M. Vergara
Ifugao	Lone	Benjamin B. Cappleman

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

Region I - Ilocos		
Ilocos Norte	First	Roque R. Ablan, Jr.
	Second	Ferdinand R. Marcos, Jr.
Ilocos Sur	First	Mariano M. Tajon
	Second	Eric D. Singson
La Union	First	Victor F. Ortega
	Second	Jose D. Aspiras
Pangasinan	First	Oscar M. Orbos
	Second	Chris F. Mendoza
	Third	Eric Galo P. Acuna
	Fourth	Jose C. de Venecia, Jr.
	Fifth	Amadeo R. Perez, Jr.
	Sixth	Conrado M. Estrella III
Region II - Cagayan Valley		
Batanes	Lone	Enrique C. Lizardo
Cagayan	First	Juan Ponce Enrile
	Second	Edgar R. Lara
	Third	Francisco K. Mamba
Isabela	First	Rodolfo B. Albano
	Second	Faustino S. Dy, Jr.
	Third	Santiago P. Respicio
	Fourth	Antonio M. Abaya

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

Nueva Vizcaya	Lone	Leonardo B. Perez
Quirino	Lone	Junie Evangelista Cua
Region III-Central Luzon		
Bataan	First	Felecito C. Payumo
	Second	Dominador N. Venegas
Bulacan	First	Teodulo C. Natividad
	Second	Pedro M. Pancho
	Third	Ricardo C. Silverio
	Fourth	Angelito M. Sarmiento
Nueva Ecija	First	Renato V. Diaz
	Second	Eleuterio R. Violago
	Third	Pacifico M. Fajardo
	Fourth	Victorio A. Lorenzo
Pampanga	First	Carmelo F. Lazatin
	Second	Emigdio L. Lingad
	Third	Andrea D. Domingo
	Fourth	Emigdio A. Bondoc
Tarlac	First	Jose S. Cojuangco, Jr.
	Second	Jose V. Yap
	Third	Herminio S. Aquino
Zambales	First	Katherine H. Gordon
	Second	Antonio M. Diaz

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

Region IV - Southern Tagalog

Aurora	Lone	Benedicto G. Miran
Batangas	First	Eduardo R. Ermita
	Second	Hernando B. Perez
	Third	Milagros L. Trinidad
	Fourth	Ralph G. Recto
Cavite	First	Dominador G. Nazareno, Jr.
	Second	Renato P. Dragon
	Third	Telesforo A. Unas
Laguna	First	Roy M. Almoro
	Second	Rodolfo R. Tingzon
	Third	Florante L. Aquino
	Fourth	Magdaleno M. Palacol
Marinduque	Lone	Carmencita O. Reyes
Occidental Mindoro	Lone	Jose T. Villarosa
Oriental Mindoro	First	Renato V. Leviste
	Second	Jesus M. Punzalan
Palawan	First	David A. Ponce de Leon
	Second	Alfredo Amor E. Abueg, Jr.
Quezon	First	Wilfredo L. Enverga
	Second	Marcial C. Punzalan, Jr.

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

	Third	Danilo Suarez
	Fourth	Manolet O. Lavides
Rizal	First	Manuel R. Sanchez
	Second	Emigdio S. Tanjuatco, Jr.
Romblon	Lone	Eleandro Jesus F. Madrona
Region V - Bicol		
Albay	First	Edcel C. Lagman
	Second	Carlos R. Imperial
	Third	Al Francis C. Bichara
Camarines Norte	Lone	Emmanuel B. Pimentel
Camarines Sur	First	Rolando R. Andaya
	Second	Celso O. Baguio
	Third	Arnulfo P. Fuentebella
	Fourth	Ciriaco R. Alfelor
Catanduanes	Lone	Leandro B. Verceles, Jr.
Masbate	First	Tito R. Espinosa
	Second	Luz Cleta R. Bakunawa
	Third	Antonio T. Kho
Sorsogon	First	Salvador H. Escudero III
	Second	Bonifacio H. Gillego

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

Region VI - Western Visayas		
Aklan	Lone	Allen S. Quimpo
Antique	Lone	Exequiel B. Javier
Capiz	First	Manuel A. Roxas
	Second	Vicente J. Andaya, Jr.
Iloilo	First	Oscar G. Garin
	Second	Alberto J. Lopez
	Third	Licurgo P. Tirador
	Fourth	Necitas P. Panes
	Fifth	Niel D. Tupas
Iloilo City	Lone	Rafael J. Lopez-Vito
Negros Occidental	First	Tranquilino B. Carmona
	Second	Manuel H. Puey
	Third	Jose Carlos V. Lacson
	Fourth	Edward M. Matti
	Fifth	Mariano M. Yulo
	Sixth	Hortensia L. Starke
Bacolod City	Lone	Romeo G. Guanzon
Region VII- Central Visayas		
Bohol	First	Venice Borja Agana
	Second	Erico B. Aumentado
	Third	Isidro C. Zarraga

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

Cebu	First	Eduardo R. Gullas
	Second	Crisologo A. Abines
	Third	Pablo P. Garcia
	Fourth	Celestino E. Martinez, Jr.
	Fifth	Ramon D. Durano III
	Sixth	Nerissa Corazon S. Ruiz
Cebu City	First	Raul V. del Mar
	Second	Antonio V. Cuenco
Negros Oriental	First	Jerome V. Paras
	Second	Miguel L. Romero
	Third	Margarito B. Teves
Siquijor	Lone	Orlando B. Fua
Region VIII - Eastern Visayas		
Eastern Samar	Lone	Jose Tan Ramirez
Leyte	First	Cirilo Roy G. Montejo
	Second	Sergio Antonio F. Apostol
	Third	Alberto S. Veloso
	Fourth	Carmelo J. Locsin
	Fifth	Eriberto V. Loreto, Jr.
Northern Samar	First	Raul Daza
	Second	Pending election case

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Appendix C. Government Officials of the Republic of the Philippines: As of Decemeber 1993 (continued)

Southern Leyte	Lone	Roger G. Mercado
Western Samar	First	Rodolfo T. Tuazon
	Second	Catalino V. Figueroa
Region IX - Western Mindanao		
Basilan	Lone	Elnorita P. Tugung
Sulu	First	Bensaudi O. Tulawie
	Second	Asani S. Tammang
Tawi-Tawi	Lone	Nur G. Jaafar
Zamboanga del Norte	First	Artemio A. Adasa, Jr.
	Second	Ernesto S. Amatong
	Third	Angel Carloto
Zamboanga del Sur	First	Alejandro S. Urro
	Second	Antonio H. Cerilles
	Third	Belma A. Cabilao
Zamboanga City	Lone	Maria Clara L. Lobregat
Region X - Northern Mindanao		
Agusan del Norte	First	Charito B. Plaza
	Second	Edelmiro Amante
Agusan del Sur	Lone	Ceferino S. Paredes, Jr.

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (continued)

Bukidnon	First	Socorro O. Acosta
	Second	Reginaldo M. Tilanduca
	Third	Jose Ma. R. Zubiri, Jr.
Camiguin	Lone	Pedro P. Romualdo
Misamis Occidental	First	Percival B. Catane
	Second	Hilarion J. Ramiro, Jr.
Misamis Oriental	First	Homabono T. Cezar
	Second	Victorico L. Chavez
Surigao del Norte	First	Glenda B. Ecleo
	Second	Robert Z. Barbers
Cagayan de Oro City	Lone	Erasmo B. Damasing
Region XI - Southern Mindanao		
Davao del Norte	First	Rogelio M. Sarmiento
	Second	Baltazar A. Sator
	Third	Rodolfo P. del Rosario
Davao City	First	Jesus G. Dureza
	Second	Manuel Garcia
	Third	Elias B. Lopez
Davao del Sur	First	Alejandro P. Almendros, Sr.
	Second	Benjamin V. Bautista, Sr.

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Appendix C. Government Officials of the Republic of the Philippines: As of December 1993 (concluded)

Davao Oriental	First	Maria Elena T. Palma Gil
	Second	Thelma Z. Almario
South Cotabato	First	Lualhati R. Antonino
	Second	Daisy P. Fuentes
	Third	James L. Chiongbian
Surigao del Sur	First	Mario Serra Ty
	Second	Ernesto T. Estrella
Region XII - Central Mindanao		
Lanao del Norte	First	Mariano Ll. Badelles, Sr.
	Second	Macabangkit B. Lanto
Lanao del Sur	First	Namintal M. Adiong
	Second	Mohamad Alih Dimaporo
Maguindanao	First	Michael O. Mastura
	Second	Simeon A. Datumanong
Cotabato (North)	First	Anthony P. Dequina
	Second	Gregorio A. Andolana
Sultan Kudarat	Lone	Estanislao V. Valdez

Source: Office of the President; Supreme Court of the Philippines; and Commission on Elections.

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993

Region/Province	Public colleges and universities	Private colleges and universities
National Capital Region (NCR)		
Kalookan City District	Kalookan City Polytechnic College Gen. San Miguel Rd., Sangandaan, Kalookan City	Araneta University Extension B. Monument Circle, Kalookan City
Kalookan		
Malabon		Arellano University - Malabon Gov. W. Pascual Ave., Concepcion, Malabon, Metro Manila
Valenzuela		Biblical Seminary of the Philippines 77 B.T. de Leon, Karuhatan Valenzuela, Metro Manila
		Dalubhasaang Epifanio de los Santos Bernales St., Malabon, Metro Manila
		Fatima Medical Science Foundation 120 McArthur Highway, Valenzuela, Metro Manila
		Febias College of Bible Karuhatan, Valenzuela, Metro Manila
		Gregorio Araneta University Foundation Victoneta Park, Malabon, Metro Manila
		Holy Rosary College Tala, Kalookan City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		La Consolacion College - Kalookan 496 A. Mabini St., Kalookan City
		Manila Central University - Kalookan EDSA, Kalookan City, Metro Manila
		Martinez Memorial College 198 A. Mabini St., Kalookan City
		Our Lady of Fatima College 120 McArthur Highway, Valenzuela, Metro Manila
		Philippine College of Technological Resources Maysan Road, Valenzuela, Metro Manila
		University of the East - Kalookan Samson Road, Kalookan City
Manila District	Eulogio "Amang" Rodriguez Institute of Science and Technology Nagtahan, Sampaloc, Manila	Adamson University 900 San Marcelino St., Ermita, Manila
	Pamantasan ng Lungsod ng Maynila Intramuros, Manila	Arellano University - Manila 2600 Legarda St., Sampaloc, Manila
	Philippine Normal University Taft Avenue corner Ayala Blvd., Manila	Asian Institute of Journalism Corner Santol St. and R. Magsaysay Blvd. Sta. Mesa, Manila

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Polytechnic University of the Philippines - Manila Anonas St., Sta. Mesa, Manila	Asian Social Institute 1518 Leon Guinto St., Malate, Manila
	Technological University of the Philippines - Manila Ayala Boulevard, Manila	Central Institute of Technology P. Paredes St. corner Quezon Blvd. Sampaloc, Manila
	University of the Philippines - Manila Padre Faura St., Ermita, Manila	Centro Escolar University - Manila Mendiola St., Manila
		Chiang Kai Shek College 1274 P. Algue St., Tondo, Manila
		Chinese General Hospital College of Nursing 286 Blumentritt St., Sta. Cruz, Manila
		Clinica Arellano School of Midwifery 1430 Doroteo Jose St., Sta. Cruz, Manila
		Colegio de San Juan de Letran 151 Muralla St., Intramuros, Manila
		College of the Holy Spirit of Manila 163 E. Mendiola St., Manila
		Concordia College 1739 Pedro Gil St., Paco, Manila

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		De la Salle University 2401 Taft Avenue, Ermita, Manila
		De Ocampo Memorial College 2921 Nagtahan St., Sta. Mesa, Manila
		Emilio Aguinaldo College 918 Gonzales St., Ermita, Manila
		Emmanuel Community Hospital School of Midwifery 2449 Jose Abad Santos, Tondo, Manila
		Europhil Technical Institute 628 Quezon Blvd., Quiapo, Manila
		Family College Foundation 1452 Gov. Forbes, Sta. Cruz, Manila
		Far Eastern University - Manila Nicanor Reyes, Sr. St., Sampaloc, Manila
		FEATI University Helios St., Sta. Cruz, Manila
		FEU Dr. Nicanor Reyes Medical Foundation Nicanor Reyes, Sr. St., Sampaloc, Manila

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Galang Medical Center College 1240 Batangas St., Sta. Cruz, Manila
		Gregg Business School 1021 Soler, Sta. Cruz, Manila
		Guzman Institute of Technology 509 Mendoza St., Quiapo, Manila
		La Consolacion College - Manila Mendiola, Manila
		Lyceum of the Philippines Muralla St., Intramuros, Manila
		Manila Central University - Sta. Cruz V. Fugoso St., Sta. Cruz, Manila
		Manila Doctor's College 667 U.N. Avenue, Ermita, Manila
		Manuel L. Quezon University 916 R. Hidalgo St., Quiapo, Manila
		Mapua Institute of Technology Muralla St., Intramuros, Manila

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Mary Chiles College 667 Gastambide St., Sampaloc, Manila
		Metropolitan Hospital School of Nursing 1357 B. Masangkay St., Sta. Cruz, Manila
		National College of Business and Arts - Lepanto Lepanto cor. R. Papa, Sampaloc, Manila
		National College of Business and Arts - Sta. Mesa 994 V. Mapa St., Sta. Mesa, Manila
		National Radio School and Institute of Technology 1813 C.M. Recto Avenue, Manila
		National Teachers College 629 Nepomuceno St., Quiapo, Manila
		National University 551 M.F. Jhocson St., Sampaloc, Manila
		Perpetual Help College of Manila 1240 V. Concepcion St., Sampaloc, Manila
		Philippine Christian University 1648 Taft Avenue corner Pedro Gil, Ermita, Manila

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Philippine College of Criminology 641 Sales St., Sta. Cruz, Manila
		Philippine Merchant Marine School - Sta. Cruz 5th Floor, Republican Bldg., Plaza Sta. Cruz, Manila
		Philippine School of Business Administration - Manila 826 R. Papa St., Sampaloc, Manila
		Philippine Women's University - Manila Taft Avenue, Manila
		PMI Colleges - Manila 419 David St., Sta. Cruz, Manila
		Saint Francis General Hospital School of Midwifery G. Tuazon St., Balic-balic, Sampaloc, Manila
		Saint Paul College of Manila 680 Pedro Gil St., Malate, Manila
		Saint Rita College - Quiapo Plaza del Carmen, Quiapo, Manila
		Saint Scholastica's College 2560 Leon Guinto St., Manila

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		San Beda College Mendiola, San Miguel, Manila
		San Sebastian College - Recoletos C.M. Recto Avenue, Quiapo, Manila
		Santa Catalina College 2660 Legarda, Sampaloc, Manila
		Santa Isabel College 210 Taft Avenue, Manila
		Scout Ramon V. Albano Memorial College 2407 T. Earnshaw St., Gagalangin, Tondo, Manila
		St. Jude College Don Quijote St., Dimasalang, Sampaloc, Manila
		Technological Institute of the Philippines - Manila 888 Gonzalo Puyat St., Quiapo, Manila
		Unciano Paramedical College V. Mapa cor. Guadalcanal St., Sta. Mesa, Manila
		University of Manila 588 Dr. M.V. delos Santos St., Sampaloc, Manila

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		University of Santo Tomas España St., Sampaloc, Manila
		University of the East - Manila C.M. Recto Avenue, Manila
Pasay City District Las Piñas Makati Parañaque Pasay	Makati College - Fort A. Bonifacio Fort A. Bonifacio, Makati, Metro Manila	Air Link International Aviation School Domestic Airport Road, Pasay City
	Makati College - Gil Puyat Sen. Gil Puyat Ave., Makati, Metro Manila	AMA Computer College - Makati 5486 South Super Highway corner Hen. Tinio St. Makati, Metro Manila
	Muntinlupa Polytechnic College Alabang, Muntinlupa, Metro Manila	Arellano University - Pasay Taft Avenue, Pasay City
	Philippine Air Force College of Aeronautics Villamor Airbase, Pasay City	ASEAN Institute of Arts Kalare-Ledesma Cond. 117 Gamboa St. Legaspi Village, Makati, Metro Manila
	Philippine Merchant Marine Academy Fort Bonifacio, Metro Manila	Asian Institute for Distance Education Makati Stock Exchange Bldg., Ayala Ave. Makati, Metro Manila
	Polytechnic University of the Philippines - Tagig Tagig, Metro Manila	Asian Institute of Management 123 Paseo de Roxas, Makati, Metro Manila

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Assumption College San Lorenzo Village, Makati, Metro Manila
		Ateneo de Manila University - Makati 130 H. V. de la Costa, Makati, Metro Manila
		CAP College 149 Legaspi St., Legazpi Village Makati, Metro Manila
		Bernardo Foundation Institute Pulang Lupa, Las Piñas, Metro Manila
		Dr. Faustino Legaspi Uy College Pilar Village, Almanza, Las Piñas, Metro Manila
		International Academy of Management and Economics 214 Windsor Tower, 163 Legaspi St. Legaspi Village, Makati, Metro Manila
		Lacson College 2188 F.B. Harrison St., Pasay City
		Olivarez College Sucat Road, Parañaque, Metro Manila
		Our Lady of the Miraculous Medal School 2032 F.B. Harrison corner David St., Pasay City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		PATS College of Aeronautics PATS Hangar, Domestic Airport Rd., Pasay City
		Perpetual Help College of Rizal Pamplona, Las Piñas, Metro Manila
		Philippine Merchant Marine School - Las Piñas Bo. Talon, Las Piñas, Metro Manila
		Remedios Trinidad Romualdez Memorial School 2 Amorsolo St., Makati, Metro Manila
		San Carlos Seminary EDSA, Makati, Metro Manila
		San Juan de Dios College Roxas Blvd., Pasay City
		Southeastern College College Rd., Pasay City
		St. Francis of Assisi College Admiral Village, Talon Las Piñas, Metro Manila
		St. Paul Seminary 7708 St. Paul Rd., Makati, Metro Manila

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		St. Rita College - Parañaque Dr. A. Santos Avenue, Sucat, Parañaque, M.M.
		Trace Computer College Guadalupe Commercial Complex Makati, Metro Manila
		Victor R. Medina Junior College Quirino Avenue, Parañaque, Metro Manila
Quezon City District Mandaluyong Marikina Novaliches Pasig Quezon City San Juan	Marikina Institute of Science and Technology Marikina, Metro Manila	Alejandro Colleges Novaliches, Quezon City
	Rizal Technological Colleges Boni Avenue, Mandaluyong Metro Manila	AMA Computer College - Quezon City Project 8, Quezon City
		Andres Bonifacio Memorial School of Midwifery Roosevelt Ave., SFDM, Quezon City
	University of the Philippines - Quezon City Diliman, Quezon City	Arellano University Pasig Pag-asa St., Pasig, Metro Manila
		Asian Theological Seminary 54 Scout Madriñas, Quezon City
		Ateneo de Manila University - Quezon City Loyola Heights, Quezon City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Center for Research and Communication Pearl Drive, Ortigas Complex, Pasig, Metro Manila
		Central Colleges of the Philippines 52 Aurora Blvd., Quezon City
		Claret Formation Center Claret House, Cenacle Drive, Quezon City
		De los Santos College 201 E. Rodriguez Sr. Ave., Quezon City
		Divine Word Mission Seminary E. Rodriguez Sr. Ave., Quezon City
		Dominican College 179 Blumentritt St., San Juan, Metro Manila
		Don Bosco Technical College 736 Gen. Kalentong St., Mandaluyong, Metro Manila
		Dr. Carlos S. Lanting College 16 Tandang Sora Ave., Novaliches, Quezon City
		Famous Academy 308 Shaw Blvd., Mandaluyong, Metro Manila

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Far East Military Academy EDSA, Quezon City
		Far Eastern University Technical Institute Mapayapa Village, Diliman, Quezon City
		Jose Rizal College 80 Shaw Blvd., Mandaluyong, Metro Manila
		J.P. Sison Medical Center School of Midwifery 75 Bukidnon, Bago Bantay, Quezon City
		Maryhill School of Theology 13th St. cor. Gilmore Avenue, New Manila Quezon City
		Metro Manila College Suite 201 Miranda Building 966 Plaza Novaliches, Quezon City
		Miriam College Foundation, Inc. Katipunan Rd., Loyola Heights, Quezon City
		Mother of Life Center Bo. San Agustin, Novaliches, Quezon City
		Mt. Carmel College of Quezon City 48 N. Domingo Ave., Quezon City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Namei Polytechnic College 123 A. Mabini St., Mandaluyong, Metro Manila
		National College of Business and Arts - Quezon City 994 Aurora Blvd., Cubao, Quezon City
		New Era College St. Joseph St., Milton Hills Subdivision Diliman, Quezon City
		Our Lady of the Angels Seminary P.O. Box 191, Bagbag, Novaliches, Quezon City
		Pace Graduate School of Christian Education Cubao, Quezon City
		Pasig Catholic College Malinao, Pasig, Metro Manila
		Philippine Dominican Center of International Studies Sto. Domingo Convent, Quezon City
		Philippine School of Business Administration - Quezon City 1029 Aurora Blvd., Quezon City
		Philippine Women's University - Quezon City Epifanio de los Santos Avenue, Quezon City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		PMI Colleges - Quezon City San Francisco del Monte, Quezon City
		Quezon City Medical Center and College 960 Aurora Blvd., Quezon City
		Quezon Memorial Colleges 9 Tomas Morato Ave., Quezon City
		Republican College 42 18th Ave., Murphy, Quezon City
		Roosevelt College Lamuan, Marikina, Metro Manila
		Santa Teresita College, Inc. 100 D. Tuazon St., Quezon City
		Siena College Del Monte Avenue, Quezon City
		Sister Formation Institute 214 N. Domingo St., San Juan, Metro Manila
		St. Camillus College Seminary No. 17 Apitong St., Marikina Heights Marikina, Metro Manila

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		St. Joseph College 295 E. Rodriguez, Sr. Avenue, Quezon City
		St. Paul College of Quezon City Cor. Gilmore Ave. and Aurora Blvd., Quezon City
		Technological Institute of the Philippines - Quezon City 20th Ave. Cubao, Quezon City
		Trinity College of Quezon City Cathedral Heights, Quezon City
		UE Ramon Magsaysay Memorial Medical Center Aurora Blvd., Quezon City
		United Doctors Medical Center 6 N. Ramirez St., Quezon City
Cordillera Adminstrative Region (CAR)		
Abra	Abra School of Arts and Trade Bangued, Abra	Abra Valley College Mckinley St., Bangued, Abra
	Abra State Institute of Science and Technology Lagangilang, Abra	Baguio Central University Bonifacio St., Baguio City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
Benguet	Benguet School of Arts and Trades Bokod, Benguet	Baguio Colleges Foundation 18 Gov. Pack Rd., Baguio City
	Benguet State University La Trinidad, Benguet	Divine Word College of Bangued Rizal St., Bangued, Abra
	Tublay School of Home Industries Tublay, Benguet	Pines City Educational Center Magsaysay Avenue, Baguio City
	University of the Philippines Baguio College Baguio City	Saint Louis University Bonifacio St., Baguio City
		San Pablo Major Seminary 20 Crystal Cave Road, Baguio City
		Seminario Mayor - Recoletos P.O. Box 91 Quirino Highway, Baguio City
		University of Baguio Gen. Luna Road, Baguio City
Ifugao	Ifugao College of Arts and Trades Lagawe, Ifugao	
	Ifugao State College of Agriculture and Forestry Nayon, Lamut, Ifugao	

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Ifugao State College of Agriculture and Forestry - Potia Potia, Ifugao	
Kalinga-Apayao	Kalinga-Apayao School of Arts and Trades Corner, Kalinga-Apayao	St. William's Academy Bulanao, Tabuk, Kalinga-Apayao
	Kalinga-Apayao State College Tabuk, Kalinga-Apayao	
Mountain Province	Mountain Province State Polytechnic Bontoc, Mountain Province	
	Tadian School of Arts and Trades Tadian, Mountain Province	
I. Ilocos Region		
Ilocos Norte	Ilocos Norte College of Arts and Trades Laoag City	Ablan Memorial College Solsona, Ilocos Norte
	Mariano Marcos State University (MMSU) Batac, Ilocos Norte	Bacarra Medical Center School of Midwifery Bacarra, Ilocos Norte
	MMSU, College of Fisheries Currimao, Ilocos Norte	Badoc Junior College Badoc, Ilocos Norte
	MMSU, Institute of Technology Laoag City	Batac Junior College Batac, Ilocos Norte

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	MMSU, School of Agriculture Dingras, Ilocos Norte	Divine Word College of Laoag Laoag City
		Northern Christian College Laoag City
		Northwestern College P. Burgos St., Laoag City
		Sacred Heart School Badoc, Ilocos Norte
Ilocos Sur	Ilocos Sur Agricultural College Sta. Maria, Ilocos Sur	Divine Word College of Vigan Vigan, Ilocos Sur
	Ilocos Sur Community College Bantay, Ilocos Sur	Ilocos Central Academy Narvacan, Ilocos Sur
	University of Northern Philippines - Candon San Jose, Candon, Ilocos Sur	St. Mary's College Sta. Maria, Ilocos Sur
	University of Northern Philippines - Vigan Tamag, Vigan, Ilocos Sur	St. Paul College of Ilocos Sur Vigan, Ilocos Sur
La Union	Don Mariano Marcos Memorial State University (DMMMSU) Bacnotan, La Union	Central La Union College Naguilian, La Union

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	DMMMSU, College of Agriculture and Forestry - Rosario Rosario, La Union	Congress College San Nicolas Sur, Agoo, La Union
	DMMMSU, College of Education and Science - Agoo Agoo, La Union	La Union Technical School San Fernando, La Union
	DMMMSU, College of Fisheries - Balaoan Balaoan, La Union	Lorma College San Fernando, La Union
	DMMMSU, College of Fisheries - Sto. Tomas Sto. Tomas, La Union	Northern Philippines College of Technical and Maritime Studies San Fernando, La Union
	DMMMSU, College of Law - San Fernando Agoo, La Union	Osias Educational Foundation Balaoan, La Union
		St. Louis College of San Fernando Carlatan, San Fernando, La Union
		Union Christian College San Fernando, La Union
Pangasinan	Pangasinan School of Arts and Trades Lingayen, Pangasinan	Adelphi College Lingayen, Pangasinan
	Pangasinan State University (PSU) - Asingan Asingan, Pangasinan	Agno Valley College Malasiqui, Pangasinan

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	PSU - Bayombong Bayombong, Pangasinan	Asbury College Anda, Pangasinan
	PSU - Binmaley Binmaley, Pangasinan	Asia Career Education Foundation Dagupan City, Pangasinan
	PSU - Infanta Infanta, Pangasinan	Benitez Institute of Technology Binmaley, Pangasinan
	PSU - Lingayen Lingayen, Pangasinan	College of St. Michael the Archangel Dagupan City, Pangasinan
	PSU - San Carlos City San Carlos City, Pangasinan	Dagupan Institute of Computer Electronics and Technology Pangasinan
	PSU - Sta. Maria Sta. Maria, Pangasinan	Divine Word College of Urdaneta Urdaneta, Pangasinan
	PSU - Urdaneta Urdaneta, Pangasinan	Great Plebeian College Plaridel St., Alaminos, Pangasinan
	Urdaneta Community College Urdaneta, Pangasinan	International Maritime Technical School Tambak District, Dagupan City
	Villasis Community College Villasis, Pangasinan	Luna College Tayug, Pangasinan

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Luzon Business School Lingayen, Pangasinan
		Luzon Colleges Perez Blvd., Dagupan City
		Lyceum Northwestern Medical Foundation Tapuac District, Dagupan City
		Mary Help of Christians College Seminary Bonuan Gueset, Dagupan City
		Northern Luzon Adventist College Sison, Pangasinan
		Palaris Colleges San Carlos City, Pangasinan
		Pangasinan Memorial College Artacho St., Lingayen, Pangasinan
		Pangasinan Merchant Marine Academy Perez Blvd., Dagupan City
		Perpetual Help College Montemayor St., Malasiqui, Pangasinan

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Philippine Institute for Maritime Studies and Technology Bulosan, Dagupan City
		PMMC Cabansag Foundation Urdaneta, Pangasinan
		Pyramid Computer Center Urdaneta, Pangasinan
		San Carlos College Mabini St., San Carlos City, Pangasinan
		St. Columban College Lingayen, Pangasinan
		University of Pangasinan Arellano St., Dagupan City
		Urdaneta College of Technology Urdaneta, Pangasinan
		Virgen Milagrosa Educational Institute, Inc. Taloy District, San Carlos City
		Zaragosa College Tayug, Pangasinan

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
II. Cagayan Valley		
Batanes		St. Dominic College of Batanes Basco, Batanes
Cagayan	Bukig National Agricultural and Technical School Aparri, Cagayan	AMA Computer Training Center Tuguegarao, Cagayan
	Cagayan State University (CSU) - Aparri Bukig, Aparri, Cagayan	Cagayan Colleges Tuguegarao Tuguegarao, Cagayan
	CSU - Gonzaga Gonzaga, Cagayan	Ilocandia Technical School of Electronics Tuguegarao, Cagayan
	CSU - Lal-lo Lal-lo, Cagayan	Lyceum of Appari Aparri, Cagayan
	CSU - Piat Piat, Cagayan	MCN Computer Center Tuguegarao, Cagayan
	CSU - Sanchez Mira Sanchez Mira, Cagayan	Navarro Computer Training Center and Services Tuguegarao, Cagayan
	CSU - Tuguegarao Tuguegarao, Cagayan	Northern Cagayan Academy Ballesteros, Cagayan

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Quezon Colleges of the North Ballesteros, Cagayan
		Saint Louis College of Tuguegarao Mabini St., Tuguegarao, Cagayan
		St. Anthony's College Sta. Ana, Cagayan
		St. Paul University - Tuguegarao Tuguegarao, Cagayan
Isabela	Isabela School of Arts and Trades Ilagan, Isabela	Eveland Junior College San Mateo, Isabela
	Isabela State University (ISU) - Cabagan Cabagan, Isabela	Isabela College Cauayan, Isabela
	ISU - Ilagan Ilagan, Isabela	Isabela Computer Training Center Santiago, Isabela
	ISU - Jones Jones, Isabela	La Salette of Santiago Dubinan East, Santiago, Isabela
	ISU - Roxas Roxas, Isabela	Northeastern College Villasis, Santiago, Isabela

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	ISU - San Fabian San Fabian, Isabela	Our Lady of the Pillars Institution Cauayan, Isabela
	ISU - San Mateo San Andres, San Mateo, Isabela	Philippine Union College - Northeast Luzon Campus Mabini, Alicia, Isabela
	Philippine Normal University - Alicia Bgy. Aurora, Alicia, Isabela	School of St. Paul the Apostle Cabagan, Isabela
	Roxas Memorial Agricultural and Industrial School Roxas, Isabela	St. Ferdinand College Ilagan, Isabela
Nueva Vizcaya	Nueva Vizcaya State Institute of Technology Bayombong, Nueva Vizcaya	Aldersgate College Solano, Nueva Vizcaya
	Nueva Vizcaya State Polytechnic College Bambang, Nueva Vizcaya	PLT Computer and Technical School Bayombong, Nueva Vizcaya
		St. Mary's College of Bayombong Bayombong, Nueva Vizcaya
		Vizcaya Institute of Computer Science Bayombong, Nueva Vizcaya
Quirino	Quirino Colleges Cabarroguis, Quirino	

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Quirino State College Diffun, Quirino	
III. Central Luzon		
Bataan	Bataan Colleges Balanga, Bataan	Bataan Educational Institution Ma. Fe Subdv., Orani, Bataan
	Bataan Teachers College Dinalupihan, Bataan	Bataan Heroes Memorial College Highway, Balanga, Bataan
	M.L. de Leon National School of Arts and Trades Balanga, Bataan	Northern Bataan Institute Dinalupihan, Bataan
	PUP - BEPZ Branch, Mariveles Mariveles, Bataan	T. del Rosario Academy San Jose, Balanga, Bataan
Bulacan	Bulacan College of Arts and Trades Malolos, Bulacan	Asian Institute of Applied Electronics Poblacion, Baliuag, Bulacan
	Bulacan National Agricultural School San Ildefonso, Bulacan	Assumption Sapang Palay College Sapang Palay, San Jose del Monte, Bulacan
	Bulacan Public Community College Malolos, Bulacan	Baliuag Colleges Baliuag, Bulacan
	Philippine National Agricultural School Santa Maria, Bulacan	Centro Escolar University at Malolos Km. 44 McArthur Hi-way, Malolos, Bulacan

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Colegio de San Pascual Baylon Obando, Bulacan
		Dr. Yanga's Francisco Balagtas Colleges McArthur Hi-way, Bocaue, Bulacan
		Galang Technical Institute Meycauayan, Bulacan
		Immaculate Conception Seminary Guiguinto, Bulacan
		Lourdes College of Bulacan Angat, Bulacan
		Meycauayan College Calvario, Meycauayan, Bulacan
		Meycauayan Legaspi Junior College Meycauayan, Bulacan
		Mount Carmel College Bunlo, Bocaue, Bulacan
		Nazarenus College Meycauayan, Bulacan

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Regina Carmeli College Barasoain, Malolos, Bulacan
		St. Augustine College Dr. Gonzales St., Baliuag, Bulacan
		St. Mary's College of Meycauayan Saluysoy, Meycauayan, Bulacan
		St. Paul College of San Miguel San Miguel, Bulacan
Nueva Ecija	Central Luzon Polytechnic College Gen. Tinio St., Cabanatuan City	College of the Immaculate Concepcion Del Pilar St., Cabanatuan City
	Central Luzon State University Muñoz, Nueva Ecija	Colleges of the Republic San Jose City, Nueva Ecija
	Sabani Estate Agricultural College Gabaldon, Nueva Ecija	Computer Research and Training, Inc. Burgos Ave., Cabanatuan City
		Coregidor College Guimba, Nueva Ecija
		Divina Pastora College Gapan, Nueva Ecija

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		General de Jesus Academy San Isidro, Nueva Ecija
		Good Samaritan College Burgos Ave., Cabanatuan City
		Holy Cross College - Nueva Ecija Sta. Rosa, Nueva Ecija
		Manuel V. Gallego Foundation College Cabanatuan City
		Nueva Ecija College Cagayan Valley Rd., Cabanatuan City
		Pamantasan ng Araullo Bitas, Cabanatuan City
		Philippine Statesman College Cabanatuan City
		San Jose College Sto. Niño St., San Jose City
		Wesleyan University - Philippines Mabini St., Cabanatuan City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
Pampanga	Don Honorio Ventura College of Arts and Trades Bacolor, Pampanga PAFCA - Basa Air Base Basa Air Base, Pampanga Pampanga Agricultural College Magalang, Pampanga University of the Philippines - Clark Air Base Clark Airbase, Angeles City	Angeles University Foundation McArthur Hi-way, Angeles City Computer Systems Specialist Miranda St., Angeles City East Central College B. Mendoza St., San Fernando, Pampanga Guagua National College Guagua, Pampanga Harvardian College San Fernando, Pampanga Holy Angel University Sto. Rosario St., Angeles City Holy Cross College - Pampanga Sta. Ana, Pampanga Mother of Good Counsel Seminary Del Pilar, San Fernando, Pampanga Mother of Perpetual Help School of Midwifery Angeles City, Pampanga

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Pampanga College Macabebe, Pampanga
		Republic Central College Plaridel St., Angeles City
		R.M. Data Center Institute of Science and Technology San Fernando, Pampanga
		Somascan Fathers Seminary Sto. Niño, Lubao, Pampanga
		St. Anthony College of Technology Mabalacat, Pampanga
		St. Michael's College of Guagua Guagua, Pampanga
		Systems Plus Incorporation Angeles City, Pampanga
		University of the Assumption Unisite Subd., Del Pilar, San Fernando, Pampanga
		Virgen de los Remedios Medical Center San Fernando, Pampanga

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
Tarlac	Tarlac College of Agriculture Malacampa, Camiling, Tarlac	Camiling Colleges Camiling, Tarlac
	Tarlac State University Romulo Blvd., Tarlac, Tarlac	Central Institute of Technology Burgos St., Paniqui, Tarlac
		Central Luzon Doctors Hospital Educational Institution Hospital Drive, San Vicente, Tarlac, Tarlac
		Central Luzon Institute of Technology Paniqui, Tarlac
		College of the Holy Spirit of Tarlac San Sebastian Village, Tarlac, Tarlac
		Dominican School Capas, Tarlac
		Dr. Nicanor Reyes Memorial College Paniqui, Tarlac
		Ednor Academy San Vicente, Tarlac, Tarlac
		Interworld College of Technology Paniqui, Tarlac

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Olra College Foundation School of Midwifery San Manuel, Tarlac
		Osias College F. Tañedo St., Tarlac, Tarlac
		Our Lady of Peace College Seminary San Luis, Tarlac
Zambales	R.M. Memorial School of Arts and Trades Iba, Zambales	Columban College No. 1 Mt. Apo, East Tapinac, Olongapo City
	Western Luzon Agricultural College San Marcelino, Zambales	Virgen de los Remedios College No. 10 Fontaine St., East Bajac-Bajac, Olongapo City
IV. Southern Tagalog		
Aurora		Mt. Carmel College Baler, Aurora
Batangas	Apolinario R. Apacible School of Fisheries Nasugbu, Batangas	De La Salle - Lipa Mataas na Lupa, Lipa City
	Pablo Borbon Memorial Institute of Technology Rizal Avenue, Batangas City	Golden Gate College Batangas City
	PAFCA - Fernando Air Base Fernando Air Base, Lipa City	I.B. Calingasan Memorial Institute J.P. Laurel St., Nasugbu, Batangas

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Immaculate Concepcion College - Balayan Balayan, Batangas
		Lipa City College G.A. Solis St., Lipa City, Batangas
		Lyceum of Batangas Capitol Drive, Batangas City
		Mabini Junior College Talaga, Tanauan, Batangas
		N.L. Villa Memorial Hospital School of Midwifery Gatpolintan St., Lipa City
		Our Lady of Lourdes Seminary San Sebastian, Lipa City, Batangas
		Rizal College Taal, Batangas
		Sacred Formation Center for Religious Sabang, Lipa City
		St. Bridget's College M.H. del Pilar St., Batangas City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		St. Francis de Sales Regional Seminary Marauoy, Lipa City, Batangas
		Tanauan Institute J.V. Pagaspas St., Tanauan, Batangas
		Western Philippine College M.H. del Pilar St., Batangas City
Cavite	Cavite College of Arts and Trades Rosario, Cavite	Divine Word Seminary Tagaytay City, Cavite
	Cavite College of Fisheries Naic, Cavite	DLSU Emilio Aguinaldo College Bagong Bayan, Dasmariñas, Cavite
	Don Severino Agricultural College Indang, Cavite	DLSU Emilio Aguinaldo College of Medicine Bagong Bayan, Dasmariñas, Cavite
	PAFCA - Sangley Point Sangley Point, Cavite City	Imus Institute Imus Blvd., Imus, Cavite
	PUP - Maragondon Maragondon, Cavite	Philippine Union College Puting Kahoy, Silang, Cavite
	Technological University of the Philippines - Dasmariñas URC Avenue, Salawag, Dasmariñas, Cavite	San Sebastian College-Recoletos Sta. Cruz, Cavite City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		St. Joseph College Plaridel St., San Roque, Cavite City
		Western Colleges Capt. C. Nazareno St., Naic, Cavite
Laguna	Balian Community College Balian, Pangil, Laguna	Canossa College San Pablo City, Laguna
	Laguna College of Arts and Trades Sta. Cruz, Laguna	Colegio de San Juan de Letran Bucal, Calamba, Laguna
	Laguna State Polytechnic College Wawa East, Siniloan, Laguna	Deaf Evangelical Alliance Foundation School Paowin, Cavinti, Laguna
	Los Baños College of Fisheries Los Baños, Laguna	Don Bosco College Seminary Mayapa, Canlubang, Laguna
	San Pablo City College of Arts and Trades San Pablo City, Laguna	Eastern Laguna Colleges J. Rizal St., Paete, Laguna
	University of the Philippines at Los Baños Los Baños, Laguna	Laguna College Paseo de Escuader, San Pablo City, Laguna
		Laguna College of Business and Arts Burgos St., Calamba, Laguna

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Laguna Northwestern College 192 Mabini St., San Antonio, San Pedro, Laguna
		Perpetual Help College of Laguna Sto. Niño, Biñan, Laguna
		Perpetual Help School of Laguna Foundation for Medicine and Health Science Biñan, Laguna
		Saint Louis Anne Academy San Pedro, Laguna
		Saint Michael's College of Laguna Platero, Biñan, Laguna
		San Antonio de Padua College Pila, Laguna
		San Pablo College Hermano Belen St., San Pablo City, Laguna
		San Pedro College of Business Administration San Pedro, Laguna
		St. Peter's Major Seminary Marcos Paulino St., San Pablo City, Laguna

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Union College A. Mabini St., Sta. Cruz, Laguna
Marinduque	Marinduque Community College Pag-asa, Sta. Cruz, Marinduque	Immaculate Concepcion College of Boac Boac, Marinduque
	Marinduque State College Boac, Marinduque	Sta. Cruz Institute Sta. Cruz, Marinduque
Occidental Mindoro	Occidental Mindoro Community College Mamburao, Occidental Mindoro	Colegio de San Sebastian Sablayan, Occidental Mindoro
	Occidental Mindoro National College San Jose, Occidental Mindoro	Divine Word College of San Jose San Jose, Occidental Mindoro
	San Jose Community College San Jose, Occidental Mindoro	
Oriental Mindoro	Mindoro College of Agriculture and Technology Alcate, Victoria, Oriental Mindoro	Abada College Pinamalayan, Oriental Mindoro
		Divine Word College of Calapan Calapan, Oriental Mindoro
		Eastern Mindoro College Bongabong, Oriental Mindoro

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Grace Mission College Catiningan, Socorro, Oriental Mindoro
		Luna-Goco Medical Center and Colleges Calapan, Oriental Mindoro
		Roxas College Roxas, Oriental Mindoro
		Saint Augustine Seminary Suqui, Calapan, Oriental Mindoro
Palawan	Palawan College of Arts and Trade Cuyo, Palawan	Holy Trinity College Quezon St., Puerto Princesa City, Palawan
	Palawan National Agricultural College Aborlan, Palawan	Loyola College of Culion Culion, Palawan
	Palawan State College Sta. Monica Heights Tiniguiban, Puerto Princesa City	Palawan Polytechnic College Manalo Ext., Puerto Princesa City, Palawan
		San Francisco Javier College Narra, Palawan
Quezon	Polytechnic University of the Philippines - Lopez Lopez, Quezon	Calauag Central College Calauag, Quezon

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Southern Luzon Polytechnic College Lucban, Quezon	Eastern Quezon College Ipil-Ipil Avenue, Gumaca, Quezon
		Eastern Tayabas Junior College Lopez, Quezon
		Holy Infant Technical School Atimonan, Quezon
		M.S. Enverga University Foundation - Candelaria, Inc. Candelaria, Quezon
		M.S. Enverga University Foundation - Catanauan, Inc. Catanauan, Quezon
		Manuel S. Enverga University Foundation University Site, Lucena City
		Medical Center of Lucena Educational Institute Red-V Lucena City, Quezon
		Northern Quezon Cooperative College Infanta, Quezon
		Quezonian Educational College G. Orda St., Atimonan, Quezon

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Appendix D: Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Sacred Heart College No.1 Merchan St., Lucena City
		Saint Anne School of Medical Sciences, Inc. Gulang-Gulang, Lucena City
Rizal	Rizal College of Agriculture and Technology Sampaloc, Tanay, Rizal	Asia-Pacific Nazarene Theological Seminary Ortigas Ext., Kaytikling, Taytay, Rizal
	Rizal Technological and Polytechnic Institute Morong, Rizal	Harris Memorial College Development Center for Women Taytay, Rizal
		National College of Business and Arts - Taytay Taytay, Rizal
		Roosevelt College - Sumulong Unit Sumulong Highway, Cainta, Rizal
		San Ildelfonso College M.H. del Pilar St., Tanay, Rizal
		Sienna College of Taytay E. Rodriguez Avenue, Taytay, Rizal
		Southeast Asia Interdisciplinary Development Institution Taktak Drive, Antipolo, Rizal

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Tomas Claudio Memorial College T. Claudio St., Morong, Rizal
		Unciano Colleges, Inc. Circumferential Road, Antipolo, Rizal
Romblon	Romblon College of Fisheries and Forestry San Andres, Romblon	Romblon College Odiongan, Romblon
	Romblon State College Odiongan, Romblon	
V. Bicol		
Albay	Bicol University - Legazpi Legazpi City	Ago Medical and Educational Center Rizal St., Legazpi City
	Bicol University, College of Agriculture - Guinobatan Guinobatan, Albay	Aquinas University Legazpi City
	Bicol University, College of Fisheries - Tabaco Tabaco, Albay	Bicol Christian College of Medicine Rizal St., Legazpi City
	Polangui Community College Polangui, Albay	Bicol College Daraga, Albay
		Daniel B. Peña Memorial College Foundation Tabaco, Albay

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Divine Word College of Legazpi Rizal St., Legazpi City
		Dynamic Computer Centrum Legazpi City
		Immaculate Conception College Daraga, Albay
		Mariner's Polytechnic Foundation College Rawis, Legazpi City
		Polytechnic Institute of Tabaco Tabaco, Albay
		Republic College G. Alban St., Guinobatan, Albay
		School for Philippine Craftsmen Polangui, Albay
		Southern Luzon Technical Institute Daraga, Albay
		St. Gregory the Great College Seminary Sipi, Daraga, Albay

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Tabaco College 5 Tomas Cabiles Avenue, Tabaco, Albay
		Tanchuling School of Midwifery Imperial Subd., Legazpi City
Camarines Norte		Camarines Norte College Labo, Camarines Norte
		Heroes Memorial College Daet, Camarines Norte
		La Consolacion College of Daet Daet, Camarines Norte
		Lady of Peñafrancia Junior College Vinzon Ave., Daet, Camarines Norte
		Mabini College Mercedes Rd., Daet, Camarines Norte
		Our Lady of Lourdes College Foundation Pandan, Daet, Camarines Norte
		Valiente Institute Daet, Camarines Norte

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
Camarines Sur	Bicol College of Arts and Trades Peñafrancia Ave., Naga City	Ago Foundation College Concepcion Grande, Naga City
	Camarines Sur Community College Peñafrancia Ave., Naga City	Ateneo de Naga Ateneo Avenue, Naga City
	Camarines Sur Polytechnic Colleges Nabua, Camarines Sur	Balatan College Balatan, Camarines Sur
	Camarines Sur State Agricultural College San Jose, Pili, Camarines Sur	Camarines Sur Institute Tambuco, Goa, Camarines Sur
	Caramoan Community College Caramoan, Camarines Sur	Ceguerra Institute of Science and Technology Highway I, Iriga City
	Partido State College Goa, Camarines Sur	Colegio de Santa Isabel Naga City
		Fatima School of Science and Technology Goa, Camarines Sur
		Gov. Alfelor, Sr. Foundation College Sipocot, Camarines Sur
		Gov. Felix Alfelor, Sr. Foundation School Del Gallego, Camarines Sur

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Holy Rosary Major Seminary Concepcion Heights, Naga City
		Holy Trinity College Don D.B. Fortuno St., Santiago, Bato, Camarines Sur
		Kolehiyo ng Mamamayan San Isidro, Pili, Camarines Sur
		Mariner's Polytechnic College 323 Igualdad St., Naga City
		Mariner's Polytechnic Colleges Foundation of Canaman Baras, Canaman, Camarines Sur
		Naga College Foundation Peñafrancia Avenue, Naga City
		Peña de Francia College Naga City
		Philippine Union College - Naga Naga View Campus, Panicuason, Naga City
		Pili Capital Educational Center, Inc. San Isidro, Pili, Camarines Sur

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Saint Dominique Foundation College Sagrada Familia, Bula, Camarines Sur
		St. Jude Agro-Industrial College Topas, Nabua, Camarines Sur
		University of Northeastern Philippines San Roque, Iriga City
		University of Nueva Caceres Naga City
		University of Saint Anthony Iriga City, Camarines Sur
		Valiente Institute of Technology Naga City
Catanduanes	Catanduanes Agricultural and Industrial College Panganiban, Catanduanes	Catanduanes College Virac, Catanduanes
	Catanduanes State College Calatagan, Virac, Catanduanes	Central Lyceum of Catanduanes Bato, Catanduanes
Masbate	Cataingan Community College Cataingan, Masbate	Burias College Claveria, Masbate

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Dr. Emilio B. Espinosa Sr. Memorial Agricultural College Mandaon, Masbate	College of San Jacinto San Jacinto, Masbate
		College of the Orient Placer, Masbate
		Liceo de Masbate Masbate, Masbate
		Liceo de San Jacinto Almonte St., San Jacinto, Masbate
		Masbate Colleges Rosero St., Masbate, Masbate
		Osmeña College Masbate, Masbate
		Ovilla Technical College 38 Danao St., Masbate, Masbate
		Southern Masbate Roosevelt College Katipunan, Placer, Masbate
Sorsogon	Sorsogon College of Arts and Trades Sorsogon, Sorsogon	Aemilianum Institute Sorsogon, Sorsogon

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Sorsogon Community College Sorsogon, Sorsogon	Annunciation College - Sorsogon 479 Magsaysay Ave., Sorsogon, Sorsogon
		Annunciation College of Gubat Panganiban St., Gubat, Sorsogon
		Colegio de la Milagrosa Sorsogon, Sorsogon
		Estenias Foundation College Sorsogon, Sorsogon
		Our Lady of Peñafrancia Seminary Bibincahan, Sorsogon, Sorsogon
		R.G. de Castro College Bulan, Sorsogon
		Southern Luzon Institute Bulan, Sorsogon
		Veritas College of Irosin Irosin, Sorsogon
VI. Western Visayas		
Aklan	Aklan National College of Fisheries New Washington, Aklan	Aklan College Archbishop Reyes St., Kalibo, Aklan

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Aklan State College of Agriculture Banga, Aklan	Aklan Polytechnic Institution Kalibo, Aklan
	Roxas Memorial College of Arts and Trades Andagao, Kalibo, Aklan	Garcia College of Technology Pastrana St., Kalibo, Aklan
		Northwestern Visayan Colleges XIX Martyrs St., Kalibo, Aklan
		Panay Computer Institute F. Quimpo St., Kalibo, Aklan
		Saint Gabriel College G. Pastrana St., Kalibo, Aklan
		Santo Niño Seminary Numancia, Aklan
Antique	Antique College of Agriculture Hamtic, Antique	Antique Paramedical Institute San Jose, Antique
	Antique National School San Jose, Antique	Saint Anthony's College San Jose, Antique
	Culasi Community College Culasi, Antique	

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Polytechnic State College of Antique Sibalom, Antique	
	TLM Antique School of Fisheries Tibiao, Antique	
Capiz	Capiz Institute of Technology Roxas City	Colegio de la Purisima Concepcion Arzobispo St., Roxas City
	Panay State Polytechnic College Mambusao, Capiz	Filamer Christian College Roxas Ave., Roxas City
	Panay State Polytechnic College - Pontevedra Pontevedra, Capiz	Seminary of Saint Pius X Lawa-an, Roxas City
		St. Anthony College of Roxas City San Roque Ext., Roxas City
Guimaras		Good Shepherd's Fold Academy Buenavista, Guimaras
Iloilo	Calinog Agricultural and Industrial College Calinog, Iloilo	Associated Computer Systems, Inc. Luna St., La Paz, Iloilo City
	Concepcion College of Fisheries Concepcion, Iloilo	Cabalum Western College Iznart St., Iloilo City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Dingle Agricultural and Technical College Dingle, Iloilo	Central Philippine University Jaro, Iloilo City
	Dumangas Polytechnic College Dumangas, Iloilo	Colegio del Sagrado Corazon de Jesus Iloilo City
	Iloilo State College of Fisheries Tiwi, Barotac Nuevo, Iloilo	Computer College of the Visayas JBI Bldg., Delgado St., Iloilo City
	Lambunao Institute of Science and Technology Lambunao, Iloilo	De Paul College E. Lopez St., Jaro, Iloilo City
	Leon National College of Agriculture Leon, Iloilo	Iloilo Doctors' College West Avenue, Molo, Iloilo City
	New Lucena Community College Quezon Ave., New Lucena, Iloilo	Iloilo Doctor's College of Medicine, Inc. West Ave., Molo, Iloilo City
	Northern Iloilo Polytechnic State College Estancia, Iloilo	John B. Lacson College Foundation - Iloilo M.H. del Pilar St., Iloilo City
	Pototan College of Arts and Sciences Pototan, Iloilo	MTC College Tigbauan, Iloilo
	San Enrique Polytechnic College San Enrique, Iloilo	Pius XII Institute of Catechetical and Social Studies E. Lopez St., Jaro, Iloilo City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	West Visayas State University (WVSU) La Paz, Iloilo City	San Jose College E. Lopez St., Jaro Iloilo, City
	WVSU - College of Agriculture and Forestry Lambunao, Iloilo	St. Paul College of Iloilo Gen. Luna St., Iloilo City
	Western Visayas College of Science and Technology Burgos St., La Paz, Iloilo City	St. Therese College Gen. Luna St., Iloilo City
	University of the Philippines in the Visayas General Luna St., Molo, Iloilo City	St. Vincent Ferrer Seminary Jaro, Iloilo City
		University of Iloilo Rizal St., Iloilo City
		University of San Agustin Gen. Luna St., Iloilo City
		Western Institute of Technology Gen. Luna St., La Paz, Iloilo City
Negros Occidental	Bago City School Bgy. Balingasag, Bago City	Binalbagan Catholic College Binalbagan, Negros Occidental
	La Carlota City College La Carlota City	Cabarrus Catholic College Sipalay, Negros Occidental

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Negros Occidental Agricultural College Camingawan, Kabankalan, Negros Occidental	Central Negros College Severino St., San Carlos City, Negros Occidental
	Negros Occidental College of Fisheries Binalbagan, Negros Occidental	Central Philippine Adventist College Alegria, Murcia, Negros Occidental
	Paglaum State College Talisay, Negros Occidental	Colegio de San Agustin de Bacolod Sen. Aquino Drive, Bacolod City
	Philippine Normal University - Cadiz Cabahug St., Cadiz City	Colegio de Sta. Rita Atienza Ave., San Carlos City, Negros Occidental
	Technological University of the Philippines - Talisay Talisay, Negros Occidental	Don Felix Montinola Memorial College Victorias, Negros Occidental
		Fellowship Baptist College Rizal St., Kabankalan, Negros Occidental
		Fortress College Kabankalan, Negros Occidental
		Hinigaran Institute Hinigaran, Negros Occidental
		John B. Lacson Colleges Foundation - Bacolod Alijis, Bacolod City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Kabankalan Catholic College Kabankalan, Negros Occidental
		La Consolacion College - Bacolod City Cor. Galo and Gatuslao Sts., Bacolod City
		La Consolacion College - La Carlota La Carlota City
		Mount Carmel College New Escalante, Negros Occidental
		Negros Institute of Technology V.T. Galo St., Bacolod City
		North Negros College Cadiz City, Negros Occidental
		Riverside College Pablo O. Torre St., Bacolod City
		Silay Institute Rizal St., Silay City
		Southern Negros College Binalbagan, Negros Occidental

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		University of Negros Occidental Recoletos Lizares Avenue, Bacolod City
		University of St. La Salle La Salle Ave., Bacolod City
		Visayan Data Computer College RBL Bldg., Gatuslao St., Bacolod City
		Visayan Maritime Academy Sum-ag, Bacolod City
		West Negros College Burgos St., Bacolod City
VII. Central Visayas		
Bohol	Bohol Agricultural College Zamora, Bilar, Bohol	Bohol Institute of Technology - Jagna Jagna, Bohol
	Bohol School of Arts and Trades Tagbilaran City	Bohol Institute of Technology - Tagbilaran City Gallares St., Tagbilaran City
	Bohol School of Fisheries Cogtong, Candijay, Bohol	Divine Word College of Tagbilaran Tagbilaran City
	Calape Polytechnic College Calape, Bohol	Immaculate Heart of Mary Seminary Taloto, Tagbilaran City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Mater Dei College Tubigon, Bohol
		PMI Colleges - Bohol CPG Ave., Tagbilaran City
		Trinidad Junior College Trinidad, Bohol
		University of Bohol Tagbilaran City
Cebu	Cebu State College Osmeña Blvd., Cebu City	Cebu Aeronautical Technical School Salinas Drive, Lahug, Cebu City
	Cebu State College of Science and Technology (CSCST) MJ Cuenco Avenue, Cebu City	Cebu Doctors College of Arts and Sciences Osmeña Blvd., Cebu City
	CSCST - Abellana College of Arts and Trades Osmeña Blvd., Cebu City	Cebu Doctors College of Medicine Osmeña Blvd., Cebu City
	CSCST - Agro-Industrial and Forestry College Argao, Cebu	Cebu Eastern College Kilat-Dimasalang St., Cebu City
	CSCST - College of Agriculture - Lahug Lahug, Cebu City	Cebu Institute of Medicine F. Ramos St., Cebu City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	CSCST - College of Fisheries - Daanbantayan Daanbantayan, Cebu	Cebu Institute of Technology Natalio Bacalso Ave., Cebu City
	CSCST - College of Fisheries Technology - Carmen Carmen, Cebu	Cebu Polytechnic School Sanciangko St., Cebu City
	CSCST - College of Industrial Technology - Danao Danao City	Cebu Roosevelt Memorial Colleges Bogo, Cebu
	CSCST - Fishery and Industrial College San Francisco, Cebu	Cebu Saint Paul College Juan Luna St., Cebu City
	CSCST - Moalboal College of Fisheries Moalboal, Cebu	Cebu Technical School Sanciangko St., corner Osmeña Sr., Blvd. Cebu City
	CSCST - Polytechnic College Tuburan, Cebu	Colegio de la Immaculada Concepcion 45 Gorordo Avenue, Cebu City
	PAFCA - Mactan Air Base Mactan Air Base, Cebu City	Concord Technical Institute Jakosalem corner España Sts., Cebu City
	University of the Philippines Cebu College Lahug, Cebu City	Gullas College of Medicine Banilad, Mandaue City
		Holy Trinity College Ginatilan, Cebu

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Mandaue Academy Plaridel St., Mandaue City
		Manto Memorial Foundation College A. Bonifacio St., Danao City
		Northern Cebu College Sor D. Rubio St., Bogo, Cebu
		Saint Theresa's College R. Aboitiz St., Cebu City
		Salazar Institute of Technology 211 Rizal Ave., Cebu City
		San Carlos Seminary San Jose dela Montana, Mabolo, Cebu City
		San Vicente School of Midwifery Jones Ave., Cebu City
		Southwestern University Urgello St., Cebu City
		Toledo Gullas College Toledo City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		University of Cebu Sanciangko St., Cebu City
		University of San Carlos P. del Rosario St., Cebu City
		University of San Jose-Recoletos P. Lopez corner Magallanes St., Cebu City
		University of Southern Philippines Mabini St., Cebu City
		University of the Visayas P. Jakosalem corner Colon St., Cebu City
		Velez College F. Ramos St., Cebu City
Negros Oriental	Bais Development School Tavera St., Bais City	Bayawan College Bayawan, Negros Oriental
	Central Visayas Polytechnic College Dumaguete City	Dumaguete Cathedral College Dumaguete City
	Negros Oriental National Agricultural School Bayawan, Negros Oriental	East Negros Institute Tanjay, Negros Oriental

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Siaton Community College Siaton, Negros Oriental	Foundation University Dr. Miciano Road, Dumaguete City
		Manuel L. Teves Memorial Hospital School of Midwifery Teves Private Rd., Dumaguete City
		Silliman University Hibbard Ave., Dumaguete City
		St. Joseph Academy Canlaon City, Negros Oriental
		St. Joseph Seminary Sibulan, Negros Oriental
		St. Paul College of Dumaguete Dumaguete City
		Villaflores College Legaspi St., Tanjay, Negros Oriental
Siquijor	Larena National Vocational College Larena, Siquijor	Valencia Junior College Siquijor, Siquijor

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
VIII. Eastern Visayas		
Biliran	Naval Institute of Technology Naval, Biliran	
Leyte	Abuyog Community College Abuyog, Leyte	Divine Word University of Tacloban Avenida Veteranos, Tacloban City
	Biliran National Agricultural College Biliran, Leyte	Franciscan College of the Immaculate Conception Baybay, Leyte
	Leyte Institute of Technology Salazar St., Tacloban City	Holy Infant College Tacloban City
	Leyte National Agricultural College Villaba, Leyte	Leyte College Zamora St., Tacloban City
	Leyte State Agricultural College Alangalang, Leyte	Northern Leyte College Palompon, Leyte
	Leyte State College P. Paterno St., Tacloban City	Remedios T. Romualdez Medical Foundation T. Claridero St., Tacloban City
	Leyte State School of Fisheries Tolosa, Leyte	Sacred Heart Seminary Palo, Leyte
	Palompon Institute of Technology Palompon, Leyte	St. Peter's College of Ormoc Ormoc City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	University of the Philippines College of Tacloban Tacloban City	Western Leyte College Bonifacio St., Ormoc City
	Visayas State College of Agriculture Baybay, Leyte	
Southern Leyte	Ruperto K. Kangleon Memorial Agro-Fisheries Bontoc, Southern Leyte	St. Joseph College Maasin, Southern Leyte
	San Juan Polytechnic College San Juan, Southern Leyte	The College of Maasin Maasin, Southern Leyte
	Southern Leyte School of Arts and Trades Sogod, Southern Leyte	
	Tomas Oppus Normal College San Isidro, Tomas Oppus, Southern Leyte	
Eastern Samar	Can-Avid Junior Agricultural College Can-Avid, Eastern Samar	St. Joseph's College Borongan, Eastern Samar
	Eastern Samar State College Bgy. Maypangdan, Borongan, Eastern Samar	
	Felipe J. Abrigo National Memorial College of Arts and Trades Salug, Guiuan, Eastern Samar	

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Southern Samar Agricultural College Salcedo, Eastern Samar	
Northern Samar	Laoang National Trade School Laoang, Northern Samar	San Lorenzo Ruiz de Manila School of Midwifery Catarman, Northern Samar
	Pedro Rebadulla Memorial Agricultural College Catubig, Northern Samar	St. Francis Educational Institute Allen, Northern Samar
	University of Eastern Philippines Catarman, Northern Samar	
Western Samar	Samar National Agricultural School San Jorge, Western Samar	Christ the King College Magsaysay Blvd., Calbayog City
	Samar State Polytechnic College Catbalogan, Western Samar	Sacred Heart College Catbalogan, Western Samar
	Tiburcio Tancinco Memorial Institute of Science and Technology Umbria St., Calbayog City	Samar College Mabini Ave., Catbalogan, Samar
		St. Vincent de Paul Seminary Dagum Hills, Calbayog City
IX. Western Mindanao		
Basilan	Basilan State College Isabela, Basilan	Claret College of Isabela Roxas Ave., Isabela, Basilan

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Juan S. Alano Memorial Hospital School of Midwifery Isabela, Basilan
Zamboanga del Norte	Dipolog School of Fisheries Olingan, Dipolog City	Andres Bonifacio College College Park, Dipolog City
	Katipunan National Agricultural School Katipunan, Zamboanga del Norte	Dipolog Medical Center School of Midwifery Mibing, Sta. Filomena, Dipolog City
	Siocon National Vocational School Siocon, Zamboanga del Norte	Lisun Institute Fatima, Liloy, Zamboanga del Norte
	Zamboanga del Norte Agricultural College Tampisilan, Zamboanga del Norte	Philippine Advent College Sindangan, Zamboanga del Norte
		Rizal Memorial Institute Gov. Carnicero St., Dapitan City
		Saint Joseph College Sindangan, Zamboanga del Norte
		San Estanislao Kostka College Manukan, Zamboanga del Norte
		Southern Philippine College Labason, Zamboanga del Norte

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		St. Vincent's College Padre Ramon St., Dipolog City
Zamboanga del Sur	Kabasalan National Vocational School Kabasalan, Zamboanga del Sur	Ateneo de Zamboanga La Purisima St., Zamboanga City
	MSU - Buug College Buug, Zamboanga del Sur	Brent Hospital School of Midwifery Justice R.T. Lim Blvd., Zamboanga City
	Western Mindanao State University Baliwasan, Zamboanga City	Dr. Aurelio Mendoza Memorial Colleges Ipil, Zamboanga del Sur
	Zamboanga City Polytechnic College R.T. Lim Blvd., Zamboanga City	Marian College Ipil, Zamboanga del Sur
	Zamboanga del Sur Agricultural College Domingag, Zamboanga del Sur	Mindanao Electronics Institute San Jose Rd., Zamboanga City
	Zamboanga State College of Marine Science and Technology Fort Pilar, Zamboanga City	Molave Institute Mabini St., Molave, Zamboanga del Sur
		Pilar College Justice Roseller T. Lim Blvd., Zamboanga City
		SMC Agro-Tech Sumadat, Dumalinao, Zamboanga del Sur

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Southern City College Pilar St., Zamboanga City
		Southern Mindanao College Jamisola St., Pagadian City
		St. Columban College Corner Alano and Sagun Sts., Pagadian City
		Zamboanga Arturo Eustaquio Foundation Juan S. Alano St., Zamboanga City
X. Northern Mindanao		
Agusan del Norte	Elisa R. Ochoa Memorial Northern Mindanao School of Midwifery San Jose St., Butuan City	Agusan Business and Arts Foundation Zamora St., Butuan City
	Northern Mindanao State Institute of Science and Technology Ampayon, Butuan City	Agusan Colleges P. Gomez St., Butuan City
		Agusan Institute of Technology R. Calo St., Butuan City
		Asian College Foundation Km. 3, Zamora St., Butuan City
		Asian Vocational-Technical Academy Cabadbaran, Agusan del Norte

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Butuan City Colleges Montilla Blvd., Butuan City
		Butuan Doctor's College Estacio Village, Butuan City
		Liceo de Agusan Nasipit, Agusan del Norte
		MN Institute of Technology Ochoa Avenue, Butuan City
		Northern Mindanao College Cabadbaran, Agusan del Norte
		Northwestern Agusan Colleges Bay View Hill, Nasipit, Agusan del Norte
		Saint Joseph Institute of Technology Corner Montilla Blvd. and Rosales St. Butuan City
		Urios College Corner Zamora and San Francisco Sts. Butuan City
Agusan del Sur	Philippine Normal University - Prosperidad Prosperidad, Agusan del Sur	Agusan del Sur College Bayugan, Agusan del Sur

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Southern Agusan National Agricultural College Bunawan, Agusan del Sur	San Francisco Colleges San Francisco, Agusan del Sur
		Southern Mindanao Academy Bayugan, Agusan del Sur
Bukidnon	Bukidnon State College Malaybalay, Bukidnon	Alemarz Technical Institute Valencia, Bukidnon
	Central Mindanao University Musuan, Bukidnon	Cultural Mission Academy Kibawe, Bukidnon
		Mindanao Arts and Technological Institute Malaybalay, Bukidnon
		Mountain View College Mt. Nebo, Valencia, Bukidnon
		Quezon Institute of Technology Quezon, Bukidnon
		San Agustin Institute of Technology Valencia, Bukidnon
		San Isidro College Impalambong, Malaybalay, Bukidnon

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Southern Bukidnon Foundation Academy Don Carlos, Bukidnon
Camiguin		Fatima College of Camiguin Mambajao, Camiguin
Misamis Occidental		Faith Hospital School of Midwifery Las Aguadas, Ozamis City
		Immaculate Conception College Ozamis City
		Medina College Ozamis City
		Medina Foundation College Sapang Dalaga, Misamis Occidental
		Misamis Institute of Technology Bañadero, Ozamis City
		Misamis University Mabini corner Bonifacio Sts., Ozamis City
		Misamis University - Oroquieta Unit Capitol Drive, Oroquieta City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Northwestern Mindanao Christian College Tudela, Misamis Occidental
		Oroquieta Vocational School Oroquieta City
		Sacred Heart School Calamba, Misamis Occidental
		Saint John the Baptist Junior College Jimenez, Misamis Occidental
		Southern Capital College Washington St., Oroquieta City
		Stella Maris College Oroquieta City
Misamis Oriental	Mindanao Polytechnic State College Lapasan, Cagayan de Oro City	Aguilar Foundation School Gusa, Cagayan de Oro City
	Misamis Oriental State College of Agriculture and Technology Claveria, Misamis Oriental	Cagayan Capitol College Conales Ext., Cagayan de Oro City
		Cagayan de Oro College Carmen, Cagayan de Oro City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Cagayan de Oro Institute of Science and Technology Cor. Yakapin and D. Velez Sts., Cagayan de Oro City
		Cathedral School of Technology Carmen, Cagayan de Oro City
		Christ the King College Gingoog City
		Colegio de Santo Niño de Jasa-an Jasa-an, Misamis Oriental
		Gingoog City Junior College Paz Village, Gingoog City
		Gingoog Institute National Highway, Gingoog City
		Liceo de Cagayan Carmen, Cagayan de Oro City
		Lourdes College Capistrano St., Cagayan de Oro City
		Northern Mindanao Technical Institute Yakapin St., Cagayan de Oro City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Pilgrim Christian College Cagayan de Oro City
		Southern de Oro Philippines College Julio Pacana St., Cagayan de Oro City
		St. Peter's College - Balingasag Balingasag, Misamis Oriental
		St. Rita's College - Balingasag Balingasag, Misamis Oriental
		Xavier University Corrales Ave., Cagayan de Oro City
Surigao del Norte	Gov. Alfonso D. Tan Memorial College Tangub City	Don Jose Ecleo Memorial Educational Foundation San Jose, Dinagat, Surigao del Norte
	Surigao del Norte College of Agriculture and Technology Mainit, Surigao del Norte	Northeastern Mindanao Colleges Surigao City
	Surigao del Norte School of Arts and Trades Narciso St., Surigao City	Saint Jude Thaddeus Institute of Technology Borromeo St., Surigao City
	Tangub Agro-Industrial School Labuyo, Tangub City	San Nicolas College San Nicolas St., Surigao City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Surigao Education Center Km. 1, Surigao City
South Cotabato	Mindanao State University - General Santos Tambler, General Santos City	Canda School of Medical and Allied Sciences Capareda St., Lagao, General Santos City
		Doctor's Clinic and Hospital School of Midwifery Marbet, Koronadal, South Cotabato
		Domingo B. Tamondong Memorial School South Cotabato
		Edenton Mission College Maitum, South Cotabato
		Emmanuel College Atis St., General Santos City
		General Santos City Institute of Technology General Santos City
		Holy Trinity College General Santos City
		King's College of Marbel Koronadal, South Cotabato

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Mindanao Polytechnic College Crossing Nakar, General Santos City
		Notre Dame of Dadiangas College Marist Avenue, General Santos City
		Notre Dame of Marbel University Alunan Avenue, Koronadal, South Cotabato
		Ramon Magsaysay Memorial Colleges Pioneer Ave., General Santos City
		Santa Cruz Mission College Lake Sebu, South Cotabato
Davao del Norte	Panabo Community College of Technology Panabo, Davao del Norte	Arriesgado Maternity College Hospital and School of Midwifery Tagum, Davao del Norte
	University of Southeastern Philippines College of Agriculture Apokon, Davao del Norte	Assumption College of Nabunturan Nabunturan, Davao del Norte
	University of Southeastern Philippines Mampising Campus Mampising, Davao del Norte	North Davao College of Tagum Tagum, Davao del Norte
		North Davao College - Panabo Panabo, Davao del Norte

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Philippine Institute of Technical Education Tagum, Davao del Norte
		Queen of Apostles College Seminary Tagum, Davao del Norte
		Samal Institute Babak, Davao del Norte
		St. Mary's College - Tagum Tagum, Davao del Norte
		U.M. Panabo College Panabo, Davao del Norte
		U.M. Tagum College Tagum, Davao del Norte
Davao Oriental	Davao Oriental State College of Science and Technology Mati, Davao Oriental	
Davao del Sur	Southern Philippines Agri-Business and Marine and Aquatic School of Technology Malita, Davao del Sur	Agro-Industrial Foundation College of the Philippines Bolton Riverside, Davao City
	University of Southeastern Philippines Bo. Obrero, Davao City	Assumption Academy Mawab, Davao

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	University of Southeastern Philippines Mintal Campus Mintal, Davao City	Ateneo de Davao University E. Jacinto St., Davao City Brokenshire College Brokenshire Heights, Davao City Canos Paramedics School Foundation of Davao del Sur Davao del Sur COR Jesu College Sacred Heart Ave., Digos, Davao del Sur Davao Bible Seminary Catalunan, Pequeño, Davao City Davao Central College Toril St., Davao City Davao Doctors College E. Quirino Avenue, Davao City Davao Maternity Hospital School of Midwifery L.M. Guerrero St., Davao City Davao Medical School Foundation Circumferential Road, Davao City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Fabie School of Midwifery Pelayo Sr. St., Davao City
		Fernandez Piano School 110 Bonifacio St., Davao City
		General Baptist Bible College Libby Rd., Puan, Davao City
		Holy Cross College of Calinan Calinan, Davao City
		Holy Cross of Bansalan College Bansalan, Davao del Sur
		Holy Cross of Davao College Sta. Ana Avenue, Davao City
		International Harvardian University 123 Malvar St., Davao City
		Learning Center of the Arts Buhangin, Davao City
		MATS College of Technology R. Castillo St., Agdao, Davao City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Mindanao School of Midwifery San Pedro Ext., Davao City
		Mt. Apo Science Foundation College Eden-Bayabas, Toril, Davao City
		Paramedics School of Midwifery Digos, Davao del Sur
		Philippine Women's College of Davao Juna Subdivision, Matina, Davao City
		Polytechnic School of Davao del Sur Digos, Davao del Sur
		Rizal Memorial Colleges A. Pichon Sr. St., Davao City
		Saint Peter's College of Toril McArthur Highway, Toril, Davao City
		San Pedro College 12 de Guzman St., Davao City
		Serapion C. Basalo Memorial Foundation College Kiblawan, Davao del Sur

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		St. Francis Xavier Seminary Catalunan Grande, Davao City
		Southeastern College Padada, Davao del Sur
		Tecarro School of Midwifery New Matina, Davao City
		Toril Community Educational Institution McArthur Highway, Crossing Bayabas Toril, Davao City
		UCCP Pag-asa School of Theology Davao City
		University of Immaculate Conception Father Selga St., Davao City
		University of Mindanao Bolton St., Davao del Sur
		University of Mindanao Bansalan College Bansalan, Davao del Sur
		University of Mindanao Digos College Roxas Extension, Digos, Davao del Sur

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
Surigao del Sur	Surigao del Sur Institute of Fisheries and Aquaculture Lianga, Surigao del Sur	Andres Soriano College Mangagoy, Bislig, Surigao del Sur
	Surigao del Sur Institute of Technology Cantilan, Surigao del Sur	Recaredo Castillo College Mangagoy, Bislig, Surigao del Sur
		Saint Vincent de Paul College Mangagoy, Bislig, Surigao del Sur
		Southern Philippines Technical Education Mangagoy, Bislig, Surigao del Sur
		St. Michael's College - Cantilan Cantilan, Surigao del Sur
		St. Theresa's College - Tandag Tandag, Surigao del Sur
XII. Central Mindanao Cotabato	Cotabato Foundation of Science and Technology Doroluman, Magpet, Cotabato	Carmen Foundation College Poblacion, Carmen, Cotabato
	North Cotabato College of Arts and Trades Kidapawan, Cotabato	Central Mindanao College Kidapawan, Cotabato
	University of Southern Mindanao Kabacan, North Cotabato	Central Mindanao Institute of Technology Midsayap, Cotabato

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		North Cotabato Technical School Kidapawan, North Cotabato
		Notre Dame of Kidapawan College Datu Ingkal St., Kidapawan, Cotabato
		Notre Dame of Midsayap College Midsayap, Cotabato
		Southern Baptist College M'lang, Cotabato
		Southern Christian College Midsayap, Cotabato
Lanao del Norte	Lanao del Norte Agricultural College Karomatan, Lanao del Norte	Central Mindanao Technical Institute Lala, Maranding, Lanao del Norte
	Maigo School of Arts and Trades Maigo, Lanao del Norte	Iligan Capitol College Mahayahay, Iligan City
	MSU- Iligan Institute of Technology Iligan City	Iligan City Institute of Technology Iligan City
		Iligan Medical Center College Pala-o, Iligan City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Santa Monica Institute of Technology Iligan City
		St. Michael's College - Iligan Quezon Ave., Iligan City
		St. Peter's College - Iligan Sabayle St., Iligan City
Marawi City	Lanao National College of Arts and Trades Saduc, Marawi City	Jamiatu Muslim Mindanao Marawi City
	Mindanao State University - Marawi Marawi City	Jamiatul Philippine Al-Islamia Marawi City
		Mapandi Memorial Medical School Saduc, Marawi City
		Marawi Capitol College Foundation, Inc. Quezon Ave., Marawi City
		Mindanao School of Business Administration Quezon Ave., Marawi City
		Pacasum Colleges Marawi City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
Cotabato City	Cotabato City State Polytechnic College Sinsuat Avenue, Cotabato City	Cotabato City Technical School Bonifacio St., Cotabato City
		De La Vida Institute Notre Dame Ave., Cotabato City
		Ma'had Kutawato Al-Islamie Campo Muslim, Cotabato City
		Mindanao Institute of Technology Circuit Road, Rosary Heights, Cotabato City
		Notre Dame Hospital and School of Midwifery Rosary Heights, Cotabato City
		Notre Dame University Notre Dame Ave., Cotabato City
		Ocampo Institute De Mazonod Ave., Cotabato City
		Philippine Harvardian College 68 Almonte St., Cotabato City
		Shariff Kabunsuan College SK Pendatun Ave., Cotabato City

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		University of Mindanao Cotabato City
Sultan Kudarat	Sultan Kudarat State Polytechnic College Tacurong, Sultan Kudarat	King's Junior College of Isulan Isulan, Sultan Kudarat
		Kulaman Academy Kulaman, Kalamansig, Sultan Kudarat
		Magsaysay Memorial College - Isulan Isulan, Sultan Kudarat
		Magsaysay Memorial College - Tacurong Alumanan Ave., Tacurong, Sultan Kudarat
		Mindanao School of Business and Technology Isulan, Sultan Kudarat
		Notre Dame of Salaman College Lebak, Sultan Kudarat
		Notre Dame of Tacurong College Tacurong, Sultan Kudarat
		Quezon College of Southern Philippines Tacurong, Sultan Kudarat

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
		Southern Mindanao Institute of Technology Tacurong, Sultan Kudarat
		Sultan Kudarat Educational Institution Tacurong, Sultan Kudarat
Autonomous Region in Muslim Mindanao (ARMM)		
Lanao del Sur	Lanao Agricultural College Lumbatan, Lanao del Sur	Lanao Educational Institution Malabang, Lanao del Sur
		Macadatu Eastern Academy Butig, Lanao del Sur
Maguindanao	Mindanao State University - Maguindanao Dinaig, Maguindanao	Central Maguindanao Institute Buayan, Datu Piang, Maguindanao
Sulu	Hadji Butu School of Arts and Trades Jolo, Sulu	Central Sulu College Siasi, Sulu
	Lapak Agricultural School Siasi, Sulu	Notre Dame of Jolo College Jolo, Sulu
	Lapak School of Fisheries Lapak, Siasi, Sulu	

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Appendix D. Directory of Public and Private Colleges and Universities in the Philippines: As of June 1993 (continued)

Region/Province	Public colleges and universities	Private colleges and universities
	Mindanao State University Sulu Development and Technical College Jolo, Sulu	
	Siasi School of Fisheries Jolo, Sulu	
	Sulu State College Garcia St., Jolo, Sulu	
Tawi-tawi	Mindanao State University - Tawi-tawi School of Technology Bongao, Tawi-tawi	
	Tawi-tawi Regional Agricultural College Bongao, Tawi-tawi	

Source: Department of Education, Culture and Sports, Bureau of Higher Education.

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THE FRONT COVER

The Medium-Term Philippine Development Plan 1993-1998 outlines the vision and goal of development as well as the socioeconomic policies and programs to be carried out by the Ramos administration. Human development occupies the central place in the Plan, with emphasis on the promotion of the people's well-being through the attainment of their most basic needs and the expansion of their capabilities to become more productive citizens.

Focusing on people empowerment as the key strategy to achieve human development, the Plan invests on human capital and technology upgrading -- in such areas as **labor skills training, infrastructure,** and **small- scale industries** (shown in the photos, from left to right) -- so as to bring forth an efficient, innovative and inspired workforce that is equipped for international competitiveness.

THE BACK COVER

Located in secluded cove on Samal Island off the coast of Davao City, the **Pearl Farm Beach Resort** boasts of calm, crystal-clear waters, inviting beaches, and exotic houses decorated by indigenous arts and crafts of the seafaring tribal peoples of Mindanao.

The 11-hectare resort was once a pearl farm where thousands of white-lipped oysters, transported from the Sulu Sea, were cultivated for their pink, white and gold pearls. Today, offering a relaxing, private retreat, it is among the newest tourist attractions in the country and is fast becoming as popular as the world-class Boracay in Aklan and Dakak in Dapitan City, Zamboanga del Norte.

The Pearl Farm Beach Resort is 45 minutes away by pumpboat from Sta. Ana Wharf in Davao City, which, on the other hand, is 90 minutes by air from Manila.

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