

INTERNATIONAL TRADE AND ECONOMIC GROWTH

A Burmese Case Study.

An Economic and Statistical Analysis of Economic
Development of Burma Under British Rule.

by

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ABSTRACT.

This study of the economic history of Burma under British rule has been undertaken because the Burmese experience seems to show some characteristic features of the process of economic development under the influence of international forces, particularly of free trade. For nearly a century after Burma was opened up to the world, she was transformed, under the influence of the economic policy of *laissez faire*, from a subsistence economy to an export economy. In spite of this long contact with the rest of the world, Burma emerged from British rule as a typical 'underdeveloped' country, with a standard of living among the lowest in the world. Part I of this thesis is an analysis of this transformation, with special reference to the effect of international trade on various aspects of Burmese economic life.

The Burmese experience seems to raise certain questions in the theory of economic development, especially concerning the role of international trade and capital accumulation, which do not seem to have been widely considered among professional economists so far. Therefore Part II of this thesis is devoted to a re-examination of some topics in the theory of economic development and some aspects of international trade theory. In Chapter IV after a brief survey of the literature, a 'deficiency of capital' is identified as one of the important characteristic features of the poor countries. This raises the importance of fact-oriented

both as cause and consequence of patterns of international trade. For a more systematic analysis of these relationships, the Heckscher-Ohlin theory is reformulated in chapter V. Some results of this reformulation are used to study the process of capital accumulation in chapter VI and to study the nature of labour, wages and techniques of production in chapter VII. Some reflection on future policy for economic progress arising from the present analysis are briefly developed in the concluding chapter.

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LIST OF ABBREVIATIONS.

- CAB : Census of India, Burma volumes.
- R&B : Report on the Administration of Burma.
- MBEC : Report of the Burma Provincial Banking Enquiry Committee, 1929-30, volume I.
- RIAC : Report of the Land and Agriculture Committee 1938, 4 parts.
- RSO : Report on Settlement Operations (including Mission settlement operations) in the various States in Burma.
- SR : Season and Crop Report of Burma.
- SIIC : Second Interim Report of the Fiscal Commission 1936.

INTRODUCTION

In recent years there is the revival of keen interest on the problems of economic development of the nations and increasing number of economists have directed their attention and devoted their efforts into the enquiry of the causes of economic growth and development. One way in which the problem is posed relates to the differential rates of growth of nations, some of which have been able to achieve a sustained growth whereas others have remained in a state of stagnation and abject poverty. In this study we hope to make some contributions to this enquiry by taking the experience of Burma under British Rule as a case study and by reviewing some aspects of the theory of international trade and theory of economic development.

However, we would hasten to add that it is not our intention to produce a general theory of underdevelopment basing on the experience of one country partly because of a wide variety of differences among those countries which are usually regarded as underdeveloped countries. However, it is also true that the underdeveloped countries possess certain common characteristics^{1/} so that a proper perspective of a country would enhance the understanding of the nature of the problems of other types of underdeveloped countries. Moreover, Burma has several interesting

^{1/} See e.g. H. Leibenstein, Economic Backwardness and Economic Growth, (New York, 1957), pp : 40-41.

characteristics which make some of the existing explanations of underdevelopment invalid or inadequate. For instance, Burma has not suffered from a number of factors which are usually described as the critical obstacles to economic development. Burma does not have a high degree of over-population, at least in the sense of population density per square mile of land. She has not suffered from the adverse movement of the terms of trade, which in fact was continually improving during the greater part of the period of our study.^{2/} Nor were there any strong forces of tradition and custom, especially in Lower Burma where the greater part of economic expansion took place, acting as formidable obstacles to economic development. In fact, there was rapid "social disintegration" as a result of the introduction of the impersonal Western laws by the British.^{3/}

What is more important is the fact that Burma has not remained in isolation from the progressing world. It was fully opened to the world by a government which had consistently followed the Liberal economic policies of laissez faire and free trade in order to develop the economy. And the production did expand fairly rapidly at a rate higher than the population growth rate for a few decades following 1870. Thus she was not only free from some of the serious obstacles to economic development but also she was in

^{2/} See Tables I and II of Appendix B below.

^{3/} See J.S. Furnivall, Colonial Policy and Practice, A Comparative Study of Burma and Netherlands India, (Cambridge, 1948), especially pp : 107-9, 216.

active contact with the more developed ^{1/} parts of the world and producing a considerable amount of surplus available for capital accumulation. And yet at the end of the feverish economic expansion for more than half a century she remains one of the poorest countries in the world, with per capita income of Rs.68 or a little over £5 and with extremely inadequate social overhead capital and welfare facilities, reflected, for example in an extremely high rate of infant mortality. Thus Burma cannot be fit into any of the "stages of growth" of Rostow; she can neither be classified as a traditional society nor a pre-take-off society. It is not useful to assume away the problem by treating it as a special case, as an "enclave economy", with the implicit assumption that such an economy will remain underdeveloped because of the leakages through capital export. But the more important question is why there should be such a large proportion her national product leaked out of the country but not invested in it. Thus the experience of Burma calls for a more adequate economic theory of underdevelopment.

Moreover, Burma under British Rule provides a fruitful ground for research as the development of the economy during the period was recorded, both quantitatively and qualitatively, in fairly good detail in the considerable number of official reports

4/ W.W. Rostow, the Stages of Economic Growth, A Non-Communist Manifesto, (Cambridge, 1960), pp : 44-45.

5/ Cf : J.V. Lenin, the Export Economies, Their Pattern and Development in Historical Perspective, (Harvard, 1960).

and returns, the most important of which is the Annual Administration Report of Burma, which began in 1855. The first modern population censuses of Burma was enumerated in 1872 and between 1881 and 1941 there were decennial censuses, although the report for the last census was not completed. For external trade returns were published annually in separate volume since 1854. The Reports on Settlement Operations, the first of which was for the year 1879, give snapshot pictures of the rural life and changes thereof in the various parts of Burma. Then there are the various departmental reports in which the different aspects of economic and social life of the people were described. However, the statistical material found in these documents is not without defects, which arise mainly because of the frequent changes of definitions and classification thereby reducing greatly the usefulness of the data. For instance, the definition and classification of the occupied population change from census to census so that the data can only be used to give a broad picture of the structural changes. Similarly, the frequent changes in the country and commodity classifications of the trade returns make them, at best, useful only to show the changes in the direction of trade on regional basis. But these statistics, supplemented by the qualitative information, are sufficient to give an unmistakable picture of the trend and process of economic expansion that have taken place

in Burma during the period of this study.

Thus we select Burma both because of some interesting economic characteristics and because of the availability of information to give as yet another interpretation of her economic development. This we do in Part I of the study and this new perspective give us the indication of the direction of the re-examination that should be made regarding the existing theories of international trade and economic development. This we attempt in Part II of the study.

I have benefitted from many persons who have given me generous help in preparing this thesis. It will not be possible to mention the names of each and everyone of them in this brief acknowledgement. But I cannot fail to mention the names of Dr. R.M. Sundrum and the late J.S. Furnivall. For Part I of the thesis I have drawn freely on the work of Mr. Furnivall. I owe a very special debt to Dr. Sundrum without whose constant encouragement and guidance this thesis would not have been completed.

AYE HLAING

PART ONE

A Study of Economic Development of Burma Under British Rule

Chapter I : Trends of Economic Growth of Burma 1870 to 1940.

1. Introduction.

Burma is one of the countries of the Indo-China Peninsula in Southeast Asia, occupying the north western part of the peninsula. It has a total area of 262 thousand square miles forming a fairly compact and isolated area, being enclosed in the north and in the east by a ring of mountains and in the west and the south by the sea. The British occupied Burma in three stages, following the three Anglo-Burmese Wars, in 1824, 1852 and 1885. After the first war, the British occupied the maritime provinces of Arakan and Tenasserim; the former was governed directly from Bengal and the latter, for about ten years, from Penang and subsequently transferred also to the charge of the Bengal Government. In 1852, the then province of Pegu was annexed and in 1862 the three provinces were combined to form into the Province of British Burma, which was governed as a province of India. To this the remaining part of Burma was added in 1885 and politically it remained a province of India until 1937 when Burma was separated from India. Then the Japanese invaded Burma in early 1942 and it was re-occupied by the British in 1945. Finally it was granted independence in 1948. Since the British Government did not stay long enough after the Second World War to have any significant influence on the course of future economic development of the country, we will limit our study of economic development of Burma under British Rule up to 1940. Moreover, we will focus our attention to the period from 1870 to

1940 because the former year may conveniently be taken as the starting point^{1/} of feverish economic expansion which has transformed the Burmese economy from a mainly subsistence economy to a market-oriented export economy. It is this transformation which we would like to analyse and to give a new interpretation.

Therefore when the Suez Canal, which was one of the most important factors responsible for the tremendous changes in the East, was opened in 1869 only Lower Burma was under British Rule. When Upper Burma was added to the Province, economic expansion in Lower Burma had been going on for almost two decades. In fact, the history of economic growth in Burma under British Rule was mainly that of economic expansion in Lower Burma, which was a semi-empty area at the time of British occupation. For an area of 90,000 square miles, there was barely one and a half million population, with a total cultivated area of about one million acres out of a total arable area of 22 million acres. If the country was to pay its own administrative expenses it must be developed; the fertile lands must be brought under cultivation, the luxuriant forests exploited and the mineral resources tapped. But to do these it required labour and capital, both of which were scarce in Lower Burma. Consequently the Government set out to take measures to create the necessary conditions which will "pull" these resources

^{1/} It is for the purpose of analytical convenience that we have suggested this demarcation line of historical period, although economic development is essentially a continuous process. Cf. H.L. Beales, "Historical Revisions, I - the Industrial Revolution", History (July, 1929), pp : 125-129.

into the area. Law and order was maintained, easy conditions for occupying lands were granted, attempts were made to improve the means of communication and transportation; a code of laws suitable for freedom of enterprise was provided, restrictive regulations on trade and labour supply were abolished to promote trade and commerce. In short laissez faire and free trade doctrines were adopted as the basic economic policies to stimulate economic development in Burma.

These favourable conditions did "pull" immigrants from Upper Burma, India and other neighbouring areas. But before 1870 the rate of inflow^{2/} was far from being satisfactory to the British administrators for during the twenty years between 1852 and 1872, the population increased only by about one million and the area under cultivation also increased by about one million acres only. But what was more disturbing was the fact that the majority of the immigrants, including those from Upper Burma, did not settle down permanently in Lower Burma. Land was so abundant that immigrants from Upper Burma did not hesitate to abandon the land after the

2/ Before 1870, immigration from Upper Burma was more important than from other areas, although reliable data are not available. The figures given in the annual Reports on the Administration of Burma (RAB) are not very useful because these are "District figures" which are based on the returns of capitation tax. When a certain tax payer moved out from a district he would be classified as an emigrant from the district but he might not have emigrated from the Province. In fact, a large number of persons moved from district to district and they were not immigrants in the real sense of the word. RAB, 1868-69, p: 28. However, the RAB of 1861-62 noted that there was a steady stream of immigration from Upper Burma (p: 32) and it was estimated that between 1865 and 1875 average number of net immigrants from Upper Burma was about 20,000 per annum. RAB, 1861-62, p: 32.

harvest to go back to Upper Burma or to leave a piece of land after cultivating it a year or two for another piece of land. The Government tried to encourage a more permanent occupation of land by giving concessions in Land Revenue, such as assessing lands which were left uncultivated for a season at a reduced rate of Land Revenue called fallow rate, which was about one fifteenth of the ordinary rate on land of average quality. The annual Administration Reports of those years noted frequently the reluctance of the farmers to take advantage of even this concession. They preferred to abandon the land rather than the fallow rate to retain their occupancy rights. It was partly because of the abundant supply of land and partly because of the uncertain nature of rice export trade at that time, that the volume of rice export fluctuated considerably. When there was demand, the "exporters bought more or less according to the external demand and paid cash for such supplies as cultivators had in store"^{3/}. The farmers sold whatever surplus they had and sometimes squeezed a little bit out of the stock kept for own consumption. On the other hand, if there was no demand, they reaped only for their own consumption leaving the surplus unharvested. The external demand was so uncertain that it was a risky venture for an individual farmer to grow much more than what was required for his own consumption. In other words, at that time cultivation for own consumption was as important as for market. And the processing of paddy was done by

^{3/} J.S. Furnivall, A Study of the Social and Economic History of Burma, (mimeographed, Rangoon, 1957), Part IV, p : 17.

hard-pounding as and when necessary. Rice trade then was a "leisurely business". Thus during the 1860s although population and area under cultivation were increasing, the increases were so slow that the decade was described by Furnivall as a period of "comparative stagnation".

2. Transformation Into an Export Economy.

This stagnant situation was changed into a state of feverish expansion in agricultural production beginning from the middle of 1870s. Cultivators then no longer abandoned their land or left part of it uncultivated because they could sell as much as they grew. The secure demand was provided by the rice millers. And at the same time there were attractive imports on which the cultivators could spend their income. Production became predominantly for market and everyone tried to get hold of as much land as possible and cleared them for cultivation as quickly as possible. Thus the average annual increase in acreage under paddy rose from 50,000 acres during the decade of 1860s to 130,000 acres in the quinquennium from 1875; it rose to higher levels in the following decades reaching a peak of 200,000 acres per annum in the second half of 1890s. The expansion of area under paddy in Lower Burma is shown in Table No. 1.

In the past, this rapid expansion of paddy production in Burma was usually explained by the opening of the Suez Canal which made it possible to ship white rice from Burma direct to Europe. But this explanation does not seem to be quite tenable. During the

Table No. 1

Growth of Area Under Paddy in Lower Burma.

Year	Quinquennial Average Area (In thousands)	Average Annual Increase (of acres)	Average Price of paddy per 100 baskets at Rangoon (in rupees)
1851 - 1852	1000	-	18
1861 - 1865	1486	-	40
1866 - 1870	1606	40	68
1871 - 1875	2034	82	63
1876 - 1880	2758	129	89
1881 - 1885	3529	158	78
1886 - 1890	4150	124	87
1891 - 1895	5062	182	90
1896 - 1900	6064	200	94
1901 - 1905	6927	173	94
1906 - 1910	7762	167	113
1911 - 1915	8182	84	122
1916 - 1920	8426	49	133
1921 - 1925	9058	126	124
1926 - 1930	9702	129	145
1931 - 1935	9678	- 5	78
1936 - 1940	9912	49	105

Source : Report on the Administration of the Province of Pegu, 1855-56, RAB, SCR, RSOs, Agricultural Department, Burma, Agricultural Survey No.17, Market Section Survey No. 9.

ten years following the opening of the Suez Canal, the quantity of rice exported through it remained relatively small. For instance, even in 1878 only about 16% of rice exported to Europe from Burma went through the Canal although this proportion increased fairly rapidly thereafter and by 1890 about 80% went through the Canal.^{4/}

^{4/} See M. Shein, the Role of Transport and Foreign Trade in the Economic Development of Burma Under British Rule, (1885-1914), (Ph.D. thesis, Cambridge, 1959); pp : 202-203 and also J.E. Burnivall, op.cit., Part IV, p : 17.

Similarly, for some time after the opening of the Suez Canal, the bulk of rice exported to Europe continued to be in the form of cargo rice. Only in 1881 export of white rice became sufficiently large for separate recording in the trade returns. Even in that year cargo rice still formed about 80% of the total rice export, although the share of white rice was increasing.^{5/}

Furnivall has given an alternative explanation, in which he suggested that the more direct influence and the immediate result of the opening the Suez Canal was "a new stimulus to the import of machinery for steam rice mills"^{6/} into Burma rather than the possibility of direct shipment of white rice to Europe. He suggested that the emergence of rice milling industry provided the missing link of secure demand to the paddy cultivators, because the millers had to buy paddy in advance before the harvest in order to ensure sufficient supplies of paddy to keep their mills working as long a period as possible during the year. The initial investment in rice mills was so heavy that the rice millers could not afford to leave the mill idle for a period longer than was absolutely necessary. Thus the secure demand for paddy on the one hand, and the attractive consumers good imports on which money could be spent on the other hand, provided the necessary incentives to the cultivators to expand area under

^{5/} By 1910, cargo rice accounted for only 10% of the total rice export. But increasing importance of white rice export was mainly because of the Eastern markets which became more and more important. Regarding the rice export to Europe, cargo rice continued to be fairly important; even in 1910 about 30% of rice sent to Europe was in this form. It was because the Continental countries either prohibited the importation of white rice or provided tariff protection for their rice milling industry.

^{6/} J.S. Furnivall, op.cit., p : 17.

cultivation and a scramble for land followed. Again this explanation, so far as the beginning of rapid agricultural expansion was concerned, does not stand close scrutiny because the development of rice milling industry in Burma was taking place before the opening of the Suez Canal. By 1870 there were already 20 rice mills in Burma. Only one of these mills could produce white rice; all others were set up to produce cargo rice only.

Moreover, the advantage of the Suez Canal route over that of the Cape was the speed with which goods could be sent to or from Europe. But in the case of rice mill equipment speedy transportation was not an important factor. The more relevant consideration would be the costs of transportation. In this respect, the sailing vessels, which went around the Cape, continued to retain advantage over the steamers of the Suez route for many years after the opening of the Canal. As late as in 1880 the freight rate of sailing vessels for paddy from Burma to England was lower than that of the steamers by ten to fifteen shillings per ton.^{1/} Therefore, there seems to be no particular reason why the opening of the Suez Canal should have given a new stimulus to the import of machinery for steam rice mills into Burma. What would then be the immediate cause or causes of the beginning of rapid agricultural expansion in Lower Burma about that time? It was true that the emergence of the rice milling industry had provided the necessary secure market to induce the cultivator to expand the area under cultivation. However, as we have just

^{1/} M. Shein, op.cit., p : 198.

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mentioned, the development of rice milling industry preceded the opening of the Suez Canal.

The fact was that during the sixties, the decade before the opening of the Suez Canal, the economy of Lower Burma, under the influences of economic freedom and a stable government, was expanding. With the removal of restriction on rice export and the consequent rise in the paddy price from Rs.8 per 100 baskets in 1848 to Rs.40 in 1853, production and the export of rice from Lower Burma was rising. Between 1852 and 1870 rice export from the ports of Rangoon and Bassein increased fourfold, from an average of 60 thousand tons per annum in 1850s to an average of 240 thousand tons in 1860s. And in the Province of Pegu, which was to become the main area of economic expansion in later period, area under cultivation rose from 400 thousand acres in 1852 to 1.5 million acres by 1870. Therefore towards the later part of 1860s, the Province of Pegu was exporting about 30% of her paddy output. This expanding volume of rice export was responsible for the emergence of rice milling industry in Burma. When the quantity of rice export was small, it was adequate to use the method of hand-pounding for unhusking paddy. But when the quantity of paddy to be processed became relatively large, it then became necessary and economic to replace hand-pounding by rice mills for a number of reasons. Firstly, paddy had to be unhusked within a relatively short period of three to four months after the harvest. It was both

8/ The paddy output was estimated to be about 770 thousand tons. This was obtained by multiplying the paddy acreage by 30 baskets of 50 lbs each, which was given as the average yield of paddy in the BEU in the Syriam Township of the Hanthawaddy District for the season 1879-1880.

to avoid the payment of heavy demurrage charges to the ships waiting at the ports and to avoid the equally heavy cost of storing rice through the following rainy season if paddy could not be processed in time to be shipped away before the onset of the monsoon. Secondly, to process a large quantity of paddy with hand-pounding would require a large supply of seasonal labour. But before 1870 Burma was a labour-scarce and high-wage country.^{2/} Cheap Indian labour had not yet come in sufficient numbers. Thirdly, although the initial capital outlay of a rice mill was high, its operating costs were relatively low because of the possibility of using rice husks as fuel to run the mills. This had an incidental advantage of solving the problem of disposal of thousands of tons of paddy husks, which previously were thrown into the creeks, blocking the much needed waterways for the transportation of paddy and rice. Thus the expanding rice export led to the development of rice milling industry in Burma, and this in turn provided the necessary secure market to the cultivators causing, thereby, a rapid expansion in paddy production.

If the Suez Canal was not the originator of the agricultural expansion in Lower Burma, it was certainly an important

^{2/} In 1856 the Commissioner of the Province of Pegu complained that "the price of labour (in Burma) is treble and sometimes quadruple of what it ever is in India" and therefore that "the Cost of Government is thereby greatly increased and the progress of commercial enterprise impeded." Report on the Administration of the Province of Pegu for 1856-57, p. 46. Because of labour shortage at that time attempts were also made to introduce tractors and other agricultural machinery into Burma. However, before the technical problems of using tractors in rain-fed paddy cultivation could be solved, the influx of cheap Indian labourers took place, making mechanization of agriculture unnecessary.

factor which had accelerated and sustained the rate of agricultural expansion, particularly through its effect on the Eastern countries, which, with economic expansion, became more important markets for Burma rice than the Western markets, especially after the turn of the century. It may also be mentioned that the expanding domestic market itself was one of the important factors for the sustained growth in rice production over a fairly long period in Burma. The growth of her rice export, changes in the direction of rice trade and the importance of the domestic market are shown in Table No. 2.

Table No. 2

Growth and Direction of Rice Export of Burma.

Quinquennium ending	Quinquennial average of rice exports (000 tons)	Percentage Distribution of Export to				Export as % of Production
		England	Total West	India	Total East	
1875	679	72.1	74.7	13.2	25.5	62
1880	736	63.2	73.6	13.2	26.4	58
1885	946	44.3	78.1	4.1	21.9	53
1890	932	23.7	70.8	5.1	29.2	62
1895	1226	16.8	65.5	15.2	34.5	56
1900	1492	11.3	55.3	25.2	44.7	58
1905	1937	7.4	46.1	15.9	53.9	56
1910	2052	6.1	48.4	29.7	51.6	67
1915	1970	8.3	42.3	26.3	57.0	62
1920	2062	13.0	24.6	44.5	75.5	46
1925	2402	3.3	31.5	26.2	68.5	53
1930	2678	1.7	26.8	31.9	73.2	57
1935	2998	2.0	21.1	48.1	79.8	63
1940	2877	2.1	16.0	53.3	84.3	55

Source : Annual Statements of Seaborne Trade and Navigation of Burma, RAB, SCR, Department of Agriculture, Burma, Statistical Bulletin, No.2.

3. Growth of Population and Foreign Investments.

If secure demand for paddy and the attractive consumers goods imports provided the necessary conditions for economic growth, the increasing inflow of factors of production, both of labour and capital, made it possible for the economy to expand. We have already mentioned that there was increasing number of immigrants coming down from Upper Burma to Lower Burma to colonise the Irrawaddy Delta even before 1870. Then came the influx of Indian immigrants beginning from the second half of 1880. During 1870s the average number of Indian immigrants that came to Burma was about 15,000 per year but by the end of the 1890s it rose to nearly 100,000 and by the end of the century it was about 150,000. The peak period of Indian immigration was during 1920s when the average number of Indian immigrants was about 400,000 per year. This large annual inflow of unskilled labour had changed Burma from a labour-scarce to a labour-abundant country, resulting in far reaching economic consequences. Similarly, population of other foreign races increased. The growth of population and its racial composition are shown in Table No. 3.

The 1872 Census area can be taken as roughly corresponding to the area of Lower Burma; between 1872 and 1901 its population grew at an average rate of 2.4% per annum which may be compared with the average annual growth rate of paddy acreage of 4%. But between 1901 and 1940 the former became higher than the latter, being 1.5% and 0.9% respectively. It may be mentioned that inspite of the large number of Indian immigrants annually coming into Burma after

Table No. 3

Growth of Population in Burma

(In thousands)

Year	Population in 1872 census Area	Provincial Total Population	Population of Foreign Races*		
			Indian	Chinese	Others
1862	2021	-	73	10	4
1872	2737	-	137	12	9
1881	3737	-	246	14	12
1891	4603	7722	433	42	18
1901	5580	10490	606	63	19
1911	6393	12115	745	123	24
1921	7047	13212	887	149	27
1931	7964	14667	1018	194	34
1941	9066	16824	-	-	-

* Figures for the first three years are for Lower Burma only.

Source : RAB for the year 1865-66, and CIB - Reports.

1880, the Indian population in Burma had never been more than 7% of the total population. It was because of the equally large number of Indian emigrants from Burma. Most of them stayed in Burma only long enough to save some money and then went back to India, although more and more Indians settled down in Burma as time went on.

A great majority of immigrants that came to Lower Burma whether they were from Upper Burma or from India, were very poor with practically no capital of their own. Typical unskilled Indian immigrants came only "with a mat and an earthen receptacle which contains their food for the voyage"... and with only "a dirty

cloth covering their loins and a similar strip wound round their heads" and their passage was financed by the maistries or contractors of the enterprises.^{10/} Similarly, typical immigrants from Upper Burma came down to live and work with their relatives or friends, who had migrated before, and they would stay with them for a year or two during which they would try to save as much as they could so that they could set up on their own. But when there was a scramble for land after 1875 they could not wait that long to save enough and therefore they usually would borrow to supplement their savings. This demand for loans was met by the Chettyars who began to lend to the cultivators on a considerable scale beginning from 1880. But most of the early rice mills, in fact so also the saw mills, were built by the Europeans,^{11/} who first came to Burma as traders.^{12/} There were also the borrowing of the Government of Burma from abroad in connection with its public works construction,^{13/} especially railways and irrigation works. Thus the Chettyars

^{10/} E.J.L. Andrew, Indian Labour in Rangoon, (Calcutta, 1933), pp : 20 and 38.

^{11/} In 1880-81 there were 49 rice mills, of these Europeans owned 41, Indians 3, Chinese 3 and Burmans 2.

^{12/} This is the usual pattern of the development of Western enterprises in the East. They began as trading concerns and then they went into processing industry. At a much later time some of them went into manufacturing activities. Cf. G.C. Allen and A.C. Dornithorne, Western Enterprise in Far Eastern Economic Development, China and Japan, (London, 1954) and Western Enterprise in Indonesia and Malaya, (London, 1957).

^{13/} It may be mentioned that expenditures on road buildings were never financed with loans, but out of the current revenue. The Government borrowed to build railways and irrigation works. In 1935 the assets of the Burma Railways was valued at Rs.485 millions, which became a part of Burma's debt to India after the Separation in 1937.

financed the agricultural expansion directly whereas the European investments were mainly in the processing industry and trade.

There was very little information on the amount of foreign capital that flowed into Burma, especially for the early period. The existence of export-surplus from the very beginning of British Rule in Burma made it doubtful whether there was any net import of capital into Burma at all. Myint has attributed this sort of phenomenon to the nature of foreign capital and to the high rate of profits of the foreign enterprises. He argued that most of the foreign investment in the underdeveloped countries was in the form of short term trade capital which could be turned over within one year and that inspite of the short period of investment their profits were so large that the remittances of these profits covered all other foreign investment in the form of durable capital goods, resulting in the emergence of export surplus from the beginning of the opening-up of the underdeveloped countries.^{14/} Profits of most of the European firms were high^{15/} and these large profits soon became one of the main sources of capital for these firms to expand their activities in Burma as well as outside. Furnivall believed that until the beginning of the 20th century, most of the European capital were

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- ^{14/} H. Myint, "The Gains from International Trade and the Backward Countries", Review of Economic Studies (1954-55), p : 138.
- ^{15/} For example, the Bombay Burmah Trading Corporation Ltd., paid dividend averaging 20% during the few decades following 1870. See R.H. Macaulay, History of the Bombay Burmah Trading Corporation Ltd., 1864-1910, (London, 1934) and see also H.G. Callis, Foreign Capital in Southeast Asia, (New York, 1942), p : 93.

"provided by local business men or firms out of the surplus profits^{16/} of their business; or else by their relations and friends in Europe". In other words most of the European enterprises began as small ones either in the form of individual proprietorship or the association of two or three partners.^{17/} But with the development of non-agricultural production, such as oil and other minerals, raising of capital by the association of a few partners became inadequate; more and more joint stock companies were formed and registered in Burma and by the turn of the century this form of business organisation had become sufficiently important that the annual Report on the Administration of Burma included, beginning from the report for the year 1907-8, a section on joint stock companies. However, this additional information throws little light on foreign capital in Burma, partly because it does not provide information on the nationality of ownership and partly because most of the more important foreign firms were not registered in Burma.^{18/} In 1906, there were 55 registered companies with a total nominal capital of Rs.24 millions and paid up capital of Rs.13.2 millions. Thereafter, there was somewhat rapid growth of joint stock companies registered in Burma as shown in Table No. 4.

^{16/} J.S. Furnivall, *op.cit.*, Part IV a, p : 45.

^{17/} Most of the large European firms in Burma had their progenitors in the form of individual entrepreneurs who either started on their own or in partnership with their relatives or friends, e.g. William Wallace of the Bombay Burmah Trading Corporation, Ltd., Ferdinand Foucar of the Foucar Brothers, William Strang Steel of the Steel Brothers, David Syme Cargill of the Burmah Oil Company. In the case of many Indian and Chinese firms, their owners began their career with very little capital.

^{18/} The Indian Companies Act of 1913 gave certain advantages to the companies operating in Burma to be registered also in Burma. Thereafter increasing number of companies registered elsewhere either transferred their registration or filed papers in Rangoon. The first large British firm registered in Burma was the Burma Corporation Ltd., in 1919.

Table No. 4

Growth of Joint Stock Companies in Burma.

Year	No. of Companies on register.	Total Authorised Capital (Rs. in millions)	Paid Up Capital
1906	55	24.6	13.2
1910	104	107.3	30.3
1915	106	91.7	53.8
1920	190	428.5	n.a.
1925	259	490.0	n.a.
1930	311	n.a.	n.a.
1935	387	n.a.	n.a.

Source : RAB.

In 1925 the total amount of nominal capital of the joint stock companies registered in Burma was Rs.490 millions, which may be compared with Rs.630 millions as the total foreign business investment in 1941 as estimated by Callis.^{19/} The growth of joint stock companies in Burma was the result of the continued growth of peasant export production as well as the development of other export staples such as timber, mineral oils, other minerals and rubber. We will turn to consider the growth of the various sectors of the economy.

^{19/} This amount (£47.2 millions) does not include "rentier investment" and Chinese capital. See G.H. Callis, *op.cit.*, pp : 94-96. Harvey believed that it was an underestimate, he put the estimate at £51.25 millions. Even this figure refers only to the original share capital. He put the actual amount of foreign business investment at £70 millions. See G.E. Harvey, British Rule in Burma, (London, 1925), pp : 67-68. Then there were rentier investment, Chinese and Indian Capital. Andrus estimated the total amount of foreign capital in Burma in 1941 to be about £ 155 millions. J.R. Andrus, Burmese Economic Life, (Calcutta, 1957), p : 184.

4. Sectoral Economic Growth : (a) Agriculture :

With the inflow of labour and capital into Lower Burma, the "colonisation" of the fertile plain of the Delta took place. We have already described the rapid growth of area under paddy, which accounted for more than 85% of the total cultivated area in Lower Burma throughout the period of this study. Between 1870 and 1940 area under paddy in Lower Burma increased by more than eight million acres with two peak periods of expansion; one was during 1890s and the other was in 1920s, but the growth practically ceased after the Great Depression of 1930. This was partly due to depressed economic conditions and partly due to the exhaustion of arable area in Burma proper that could economically be brought under cultivation without considerable amount of investment in such things as irrigation, embankment and drainage. In other words, the "horizontal expansion"^{21/}, which had been taking place since 1870, reached the limit by 1930. Thereafter there was no indication of the continuation of growth in the agricultural sector through increased intensity of agricultural operation. Nevertheless, the growth was a remarkable one in the sense that it was sustained over a fairly long period and for a few decades the rate of growth in area was above that of population growth.

^{20/} See CIB - Report, 1931, pp : 14-15.

^{21/} Increase in production without significant technological progress, but merely by bringing in more land under cultivation with more or less the same technique has been referred to as "horizontal expansion". However, it may be mentioned that in Burma the wasteful method of "shifting cultivation" and broadcasting of paddy seeds gave way to fields with permanent boundaries and transplanting of seedlings. But these changes are in the direction of labour-intensive rather than capital-intensive method of production.

There was also a considerable growth in area under other crops. Groundnut was successfully introduced in Burma in 1903 when there was about 4000 acres. Within ten years the acreage rose to 250,000, and then by 1923 it became more than 400,000. Similarly, area under beans and pulses increased from 160,000 acres in 1891 to 1.5 million acres in 1940, and area under cotton was trebled during the same period. With the growth of urban areas, acreage under fruits and vegetables had also grown considerably. The only important plantation crop in Burma was rubber, which became important only towards the First World War and in 1940 there were about 110,000 acres under rubber. Table No.5 shows the distribution of area under different crops in Burma. It can be seen that there was a tendency, though not to any marked degree, towards diversification within agriculture in Burma. However, it may be mentioned that most of the crops other than paddy are grown in Central and Upper Burma; whereas in Lower Burma paddy acreage never fell below 83% of the total cultivated area and therefore, by and large, it remains a mono-crop area.

(b) Forestry.

However, the economy itself was reducing its dependence on rice export through the development of "capitalist industries."^{22/} One

22/ This concept was used by Furnivall in Colonial Policy and Practice. By "capitalist industry" we mean an industry directly operated by enterprises of joint stock form, with considerable amount of capital, but it does not necessarily follow that their method of operation is capital-intensive. For instance, the Bombay Burmah Trading Corporation, Ltd., which was the largest timber firm of joint stock form, used very little mechanical power in the extraction of timber. The firm was organised in a joint stock form because of its scale of operation. Moreover, it required a large amount of working capital because it took about four years for a log to reach the mill from the time a tree was felled in the forest.

Table No. 5

Distribution of Area Under Various Crops in Burma.
(Area in thousand of acres)

Crop	1891		1911-1955		1936-1940	
	Area	%	Average Area	%	Average Area	%
Paddy	5749	72.3	10169	71.5	12269	66.7
Millet	665	8.4	789	5.5	491	2.7
Maize	179	2.3	159	1.1	209	1.1
Beans and Pulses	160	2.0	568	4.0	1552	8.4
Oilseeds	217	2.7	1328	9.3	2281	12.1
Sugarcane	13	0.2	14	0.1	56	0.3
Cotton	152	1.9	237	1.7	468	2.5
Tobacco	46	0.6	91	0.6	108	0.6
Fruits and Vegetables	183	2.3	562	4.0	671	3.6
Rubber	n.a.	-	55	0.4	109	0.6
Other food Crops	489	6.1	124	0.9	86	0.5
Other non-food crops	94	1.2	129	0.9	166	0.9

Source : Data for 1891 are from the RAB and others are from SCR.

of them was the timber industry, which in fact was an older and at one time more important industry than the rice export trade. As in the case of agriculture, forest industry was dominated by one particular product, viz. teak timber.^{23/} Also as in the case of rice trade, at the earlier period of development the chief market for teak was

^{23/} Timber, other than teak, never became important in the export trade. For instance, at the beginning of the century the volume of teak export was about 200 thousand tons a year whereas that of all other timber was barely 10 thousand tons; the position was not significantly changed in later periods. However, other types of timber were more important in the domestic market. Other important forest produce that entered the export trade were catch and lac, but in terms of value of export these were also relatively unimportant as compared with teak export; the average value of catch and lac export during 1920s was about Rs.6 millions as compared with Rs.37 millions of teak export.

the European market, but the demand for teak from India rose rapidly especially because of the railway construction. Consequently as early as 1860 the export, in terms of volume, to India was as large as the quantity exported to Europe. Thereafter, the increase in the volume of teak export was mainly due to the increasing demand from India. Again as in the case of rice export trade, timber export was increasing before the opening of the Suez Canal, but it was accelerated by the opening of the Canal. The growth and direction of teak export is summarised in Table No.6. As in the case of agriculture, the expanding domestic market was a factor responsible for the growth in the output of forestry products. We have mentioned that timber other than teak was mainly used in Burma and the output rose from about 250 thousand tons in 1900 to an annual average output of 500 thousand tons in 1920s. Similarly, the output of firewood, charcoal and other minor forest produce such as bamboo and janes, which did not enter the external trade at all, was trebled during the same period.

One important fact of the development of timber industry was that not only the Burmese firms were replaced by foreign enterprises, but also the Burmese foresters were replaced by European assistants. By 1905, the "big five"^{24/} European firms accounted for 75% of teak extracted in Burma.

24/ These big-five European firms were the Bombay Burmah Trading Corporation, Ltd., Steel Brothers and Co., Ltd., MacGregor & Co. Ltd., Foucar & Co. Ltd., and T.D. Findlay & Son, Ltd.

Table No. 6

Teak Production and Export of Burma.

(Quinquennial average : in thousands of tons of 50 cu. ft.)

Year	Output in Burma	Total Quantity Handled ^{1/} in Burma	Total ^{2/} Export	Export to India	Export to Europe	Export to India as % of total Export	Average value per ton
1856 - 1860	24	73	66	28	33	43	-
1861 - 1865	44	110	113	52	48	46	-
1866 - 1870	56	111	87	n.a.	n.a.	n.a.	-
1871 - 1875	71	180	118	n.a.	n.a.	n.a.	68
1876 - 1880	73	198	135	85	47	63	-
1881 - 1885	102	241	152	100	30	66	100
1886 - 1890	147	254	166	119	36	72	-
1891 - 1895	227	286	189	132	46	70	73
1896 - 1900	290	360	239	143	72	60	-
1901 - 1905	205	263	153	98	44	64	94
1906 - 1910	268	320	155	117	33	75	109
1911 - 1915	287	324	161	115	36	72	130
1916 - 1920	958	428	168	137	22	82	146
1921 - 1925	530	553	195	173	24	89	147
1926 - 1930	469	499	215	168	33	78	183
1931 - 1935	415	458	174	140	27	81	144
1936 - 1940	454	485	227	133	40	59	146

Source : Government of Burma : Office of the Chief Conservator of Forests, "Certain Statistics Relating to the Forest Department in Burma (Rangoon, 1948)", and Annual Statements of Seaborne Trade and Navigation of Burma.

^{1/} Includes teak imported from Karenni and Siam.

^{2/} Export tonnage was in converted timber and the figures should be multiplied by two for comparison with the output data.

(c) Petroleum Industry.

Another important "capitalist industry" was the petroleum industry which had a more spectacular growth than the teak industry

and which quickly developed into the second most important export industry of Burma. In this case also foreign enterprises and capital replaced the Burmese producers but unlike teak industry, the method of operations became highly mechanised. The Burma Oil Company, which leased and bought oil wells from the native producers as well as from the British Government, introduced machine drilling in 1888; the oilfields were electrified, a pipe-line was constructed to pump crude oil from the oilfields at Yenangyaung to the refinery in Syriam, near Rangoon, and it had its own tankers for export. Thus the production of crude oil rose sharply from a mere two million gallons in 1886 to the level of 40 million gallons by 1900; and then to 230 millions by 1907^{25/}. From that time to the outbreak of the Second World War, the output level fluctuated about 260 million gallons a year.

As in the case of the previous two export commodities India was the chief market, where the Burmah Oil Co., after a period of competition with the Royal Dutch Shell Group, formed a marketing combine called the Burmah Shell Oil Storage and Distributing Co. of India, Ltd., in 1927. About 80% of petroleum output was sent to India. Other petroleum products exported were petrol benzine, lubricating oil, paraffin wax and candles. The first two products were

^{25/} The increase in output was also due to the extension of the area of operation from the main centre of Yenangyaung to other new fields in the neighbourhood, such as Yenangyat, Singu, Minbu and Lanywa. There were also new entries into the industry; other important oil companies were the Indo-Burma Petroleum Co., the British Burmah Petroleum Co., Rangoon Oil Co., Nathasingh Oil Co. and the Moola Oil Co.

mainly exported to India whereas the latter two products had more diverse markets. The total value of the export of petroleum products rose from about Rs.2 million in 1895 to an average of Rs.150 millions per annum during 1930s, forming the second most important export product of Burma.

(d) Other Minerals.

Some of the important minerals of Burma other than petroleum were tin, wolfram, lead, silver and zinc. In these cases also some of the native producers were replaced by the capitalist enterprises. Early attempts made by the Western enterprises to exploit the tin resources were not successful. For instance, in 1870 two European firms tried to work the tin mines in the Tenasserim Division but they had to give them up. It was the First World War which had created enormous demand for these metals making their production profitable. The first sharp rise in the value of mineral export, other than petroleum products, came with a large export of lead in 1910; the second jump was between 1915 and 1916 when substantial quantity of tungsten was exported, then came remarkable increases in tin concentrates, copper and zinc about 1920. Therefore the total value of mineral export rose tenfold between 1900 and 1910 and it rose again about tenfold during the next six years. In spite of all these phenomenal increases the share of these products had never exceeded 12% of the total value of export.

(e) Other Industries.

We have mentioned that one of the incentives for the agricultural expansion was the availability of attractive imported

manufactures on which money could be spent. Free import of these consumers goods caused declines in most of the domestic industries, but, surprisingly enough, these did not disappear altogether. One of the first victims to the economic growth and specialisation was the salt-boiling industry, which was one of the important industries at the time of the opening-up of the country. Beginning from 1869 ships coming from Europe to Burma for the bulky cargo of paddy and rice carried salt as ballast. At that time the imported salt paid a customs duty of 25% ad valorem, which was about three times as high as the excise duty on salt manufactured locally. However, even at these rates the imported salt was able to compete favourably with the local salt. Thus the production of local salt declined from more than 70,000 tons in 1869 to about 18,000 tons in 1885, whereas the quantity of imported salt rose from 8000 tons to 65,000 tons during the same period. Nevertheless, the local salt industry was not completely extinguished; annual production remained at about 18,000 tons until the beginning of the century when it began to rise gradually towards the First World War. During the War it reached the 70,000 tons level but after the War, it declined again and remained about 30,000 tons to the end of the period.

The salt industry was able to hold on because of a special demand, which, as we shall see below, also had prevented a few other cottage industries from dying out completely. This demand came from fish-paste and dried-fish making industries. As a matter of fact, the dried-fish making industry also declined or at least was prevented

from growing pari passu with the growth of the economy.^{26/} However, the production of one particular type of fishery product remained unaffected and that was the Burmese fish-paste (ngapi) which was one of the most important items of the Burmese diet. For making fish-paste the local salt was preferred to the imported salt. Thus the local salt manufacturing industry managed to survive at the margin and it got fillips from time to time when, for some reason or other, the supply of foreign salt declined; for instance during the First World War local salt production rose back to the 1870 level of 70,000 tons a year but with the cessation of the war it declined to less than 30,000 tons.

Another important domestic industry which had suffered from foreign competition but was not completely extinguished was the weaving industry, both of silk and cotton textiles, although home spinning virtually died out by the turn of the century. Again as in the case of salt, silk weaving industry was protected from being completely wiped out by a special demand for silk longyi (sarong) of Burmese design. As it is a luxury good catering the Burmese taste only its market was small and therefore foreign producers did not show much interest to produce similar product to

^{26/} There was very little data on the production of fish. The fishery revenue figures were also not very useful for the amount of revenue varied with the method of selling the fishery leases by the Government. In any case, sea-fishing died out and only inland fishing remained. Import of dried-fish grew rapidly, from being a negligible amount in 1869 the value of import of salted-fish rose to about one million rupees in 1880.

compete directly with it.^{27/}

However, cotton textiles had to face serious competition of imported textiles; but the industry was able to survive in the production of coarse but strong and very cheap cotton longyi and blanket. These were relatively cheap mainly because of cheap labour which was provided by rural females who took up weaving as a subsidiary occupation working with handlooms at their homes and in their spare time, especially during the seasonally off periods.^{28/} Despite the advantage of cheap labour, this industry was believed to have suffered a serious decline. This view was held by the Superintendents of the population censuses of 1891, 1901 and 1911.^{29/} However, the trade returns on the import of cotton yarns show a rising trend, which can be seen in Table No. 7.

^{27/} However, it may be mentioned that fake Bangkok longyi, which is a high quality silk sarong, made of rayon in India and Japan did appear in Burma market, but they could easily be distinguished from the genuine silk sarong. The fake ones were used by poor people who, in any case could not afford to buy the genuine one. On the other hand, the higher income group would not buy these imitations. Thus there was no direct competition between the genuine Bangkok longyi and its imitation.

^{28/} The 1921 CIB - Report shows that the total number of persons engaged in "cotton sizing and weaving" was a little over one hundred thousands, of which 78% were females. Of the female workers about 50% was engaged in weaving as a subsidiary occupation, and of these 93% was shown to have agriculture as their principal occupation. In other words, most of the weavers were female agriculturists.

^{29/} See CIB Part I, 1891, p : 263, 1901, p : 141 and 1911, p : 322. Their conclusion was primarily based on the decreasing number of persons returned as cotton textile weavers, although they were never satisfied with the reliability of the data which were also difficult to compare even for two consecutive censuses.

Table No. 7

Import of Cotton Yarns and Cotton Piece Goods
into Burma.

Year	Cotton Yarns (In million pounds)	COTTON PIECE GOODS (In millions of yards)		Total
		Grey and White	Coloured	
1876 - 1880	5.4	31	13	44
1881 - 1885	7.5	37	15	57
1886 - 1890	10.1	45	26	70
1891 - 1895	12.3	47	26	73
1896 - 1900	14.3	52	32	85
1901 - 1905	14.1	52	50	101
1906 - 1910	13.1	60	60	120
1911 - 1915	13.6	71	76	147
1916 - 1920	15.6	48	63	111
1921 - 1925	19.1	52	57	109
1926 - 1930	15.2	68	7	155
1931 - 1935	13.8	70	5	154
1936 - 1940	15.7	75	8	163

Source : Annual Statements of Seaborne Trade and Navigation of Burma.

If we assume that the level of weaving activity varies with the volume of cotton yarns import^{30/} then the data suggest that there was in fact expansion in the cotton weaving industry during the period of this study. The contradiction of these two conclusions may be explained by the fact that the nature of domestic weaving had undergone a fundamental change during the period. At the early stage

^{30/} Some of the imported yarns were used in the factories, which were owned by Indians, for making hosiery and towels. In 1938-39 the Vailin Hosiery Works, the largest knitting factory in Burma, produced knit-wares weighing a little over half a million pounds.

of agricultural expansion the thrifty rural women folks, who had handlooms and also some spare time, continued to weave the coarse cotton textiles at home mainly for own consumption. But when the tempo of agricultural expansion rose to a high level during 1880s, weaving for own use died off rapidly in most parts of Burma. However, because of cheap labour weaving continued to exist; but it was primarily for market and not for own use and the industry became localised especially in Central and Upper Burma. Thus in many parts of Burma there was decline in cotton weaving, but the industry as a whole had not suffered a decline in terms of its total output. Nevertheless, it is still true that the development of textile industry, especially that of higher quality cotton textiles, was greatly hampered by foreign competition. During 1930s about 85% of the total requirement of cotton piece goods was met by imports. Since the domestic weaving depended on the supply of cotton yarns from abroad, it may be said that Burma depended

31/ The 1921 Special Industrial Census shows the distribution of handlooms in Burma. About 60% of the handlooms were located in the Central Districts, of which the important ones are Pakokki, Shwebo, Myingyan, Maitila, Magwe and Prome Districts. There was also localisation of weaving within the district and specialisation in certain products e.g. Shwedzang in Prome District was noted for its coarse cotton longyi, Maitila for better quality longyi, Pakokki for blanket, etc. CIB - 1921, Part I, p : 272.

32/ Thus the Superintendent of the 1901 Census noted that "sound of the loom which used to be heard continuously from morn till eve in almost every house in the village was heard not so continuously nor so frequently as formerly". CIB - 1901 Part I, p : 322.

33/ During 1930s the average annual import of cotton yarns was 15 million pounds, some of which were re-exported to China. On the assumption that (a) the domestic weavers used about 10 million pounds of yarns for weaving and (b) that a pound of yarns gives three yards of cloth, the average annual output of cloth of the domestic weaving industry would be about 30 million yards of cloth as compared with the average annual import of 100 million yards of cotton textiles.

completely on imports for her cotton textile requirements.

Some other important domestic industries which also had not died off were tobacco manufacturing, (cheroot and cigar rolling), footwear (slippers), pottery (amtkam pots), lacquer wares and Burmese umbrella making industries. Similar imported commodities such as cigarettes, boots and shoes, aluminium and other sort of hardwares etc. remained luxury commodities for the lower income groups. However, as income increased these commodities were increasingly substituted in place of domestic products. This took place, by and large, through increase in imports rather than emergence of "residential industry" producing these new types of consumers goods catering for the domestic market. The new industries were predominantly export-base or its "auxiliary industries". Thus at the end of the 19th century, with already three decades of feverish agricultural expansion, rice mills and saw mills constituted about 90% of the total number of industrial establishments and accounted for nearly 70% of industrial employment. Two other export-base industries, namely petroleum refining and cotton ginning, accounted for another 11% of industrial employment and practically all the remaining industrial workers were employed in the auxiliary industries. ^{34/}

This feature of the structure of industry of Burma remained more or less the same until 1930s when Burma, with a few manufacturing industries such as cotton spinning factories, was at the

^{34/} Among the auxiliary industries there were three small foundries of the Burma Railways, of the Rangoon Municipality and of a private firm; one dockyard of the Irrawaddy Flotilla Company. See Report on the Working of the Indian Factories Act for the year 1899.

"beginnings of industrialisation."^{35/} Some indications of the industrial development of Burma is shown in Table No. 8.

It may be mentioned that large increase in the number of factories between 1911 and 1931 was partly due to the extension of the Factories Act, which until 1911 covered establishments with 50 or more workers. In that year, the lower limit was reduced to 20 workers. Furthermore, large increase in the number of rice mills was due to the increase in the number of small mills which were mostly set up in the districts by Burmans with profits made during the First World War and the post-war boom. The growth of industry was mainly in the processing industry of rice and timber, and the manufacturing industry remained insignificant to the end of the period. In 1931, the total number of workers in the "factories" was 90,593 which was only 1.5% of the working population (earners and working dependents) of the country, and of this more than 53,000 were employed in the rice mills and saw mills.

(f) Transportation and Communication.

Economic expansion that we have described was accelerated by progress in the means of transportation. In overseas shipping it took the form of replacement of sailing vessels by steamships. The annual Statements of Seaborne Trade and Navigation^{of B. I. C.} began to record the tonnage of steamers coming into the ports of Burma beginning from 1869-70, when the steamer tonnage in external shipping accounted for only 7% of the total tonnage of ships that called at

^{35/} See O.H.K. Spate "Beginnings of Industrialisation in Burma", Economic Geography, (January, 1941), pp : 75-92

Table No. 8

Number of Factories in Burma.

Factory	1899	1911	1931	1940
A. Export-Base Industry				
1. Rice Mills	81	165	589	673
2. Saw Mills	46	88	141	166
3. Cotton Ginneries	1	2	31	54
4. Petroleum Refinery	2	5	9	10
5. Metal Ore Treatment	-	-	2	7
6. Metal Smelting	-	1	2	2
B. Auxiliary Service Industries.				
7. Dockyards	1	2	8	9
8. Railway Workshops	1	1	5	12
9. Other Workshops	1	3	10	10
10. Electrical Engineering	-	-	3	7
11. General Engineering	3	13	25	19
C. Residential Industries				
12. Vegetable Oil Mill	-	6	32	29
13. Flour Mill	1	2	5	3
14. Sugar Mill	-	-	1	5
15. Tobacco	-	1	1	1
16. Cotton Spinning and Weaving	--	-	1	1
17. Hosiery and Knitwear	-	-	2	2
18. Ice and Aerated Waters	2	5	11	7
19. Matches	-	-	6	5
20. Soap	-	-	1	1
21. Chemicals	-	1	1	1
22. Aluminium works	-	-	1	2
23. Cement and Potteries	-	-	1	3
24. Rope works	-	2	4	4
25. Rubber Goods	-	-	6	2
26. Printing Press	-	6	22	17
27. Others	2	4	26	27
Total	141	307	947	1027

Source : Reports on the Working of the Indian Factories Acts, of 1881, 1911 and 1934.

the ports during that year. But by the turn of the century steamship tonnage accounted for 90%. The replacement of sailing vessels by the steamers in the coastal shipping took place much quicker; even as early as in 1830 the tonnage cleared by the sailing vessels accounted for only about 9% of the total tonnage cleared. The steamships were not only quicker, but also were more regular in their service because they were less dependent on and influenced by the monsoon. A regular service between Burma and Europe was begun in 1872 and for a time two British shipping companies, namely the Bibby and the Henderson Lines dominated this route. Then with the increase in the direct export of rice to the European countries, more and more of the ships of those countries called at the ports of Burma. Then came the Japanese ships beginning from 1907. Consequently, the share of British shipping declined from 90% of the total tonnage cleared in 1897 to 40% in 1918. After the First World War the share of British shipping went up again to about 80%, and thereafter it varied between 60 and 70% until the end of the period of this study. Regular service began earlier in the coastal shipping than in the external shipping. The British Steam Navigation Company started its regular fortnightly service between Calcutta, Akyab, Rangoon and Moulmein in 1861.

Progress in steam shipping resulted in the continual decline in freight rates. The open charter freight rate of rice between Rangoon and Europe was halved between 1830 and 1892, and at the

beginning of the century it declined by another 30%.^{36/} This was one of the main factors which had greatly stimulated international trade. Between 1880 and 1950, the tonnage of foreign shipping increased by about three times and that of coastal shipping by six times, reflecting the greater importance of economic relationship between Burma and India than with the West. Bulk of seaborne trade went through Rangoon, which displaced Moulmein as the main port of the Province. The tonnage of shipping which went through Rangoon rose very rapidly, rising from 66 thousand tons in 1855 to 314 thousand tons in 1870. Despite the rapid growth of shipping, facilities at the port remained extremely poor until the beginning of the century. Thus "in 1896 the commercial interests (in Rangoon) had represented that the port was then lacking in adequate accommodation for sea-going steamers, appliances for handling cargoes, and proper storage accommodation."^{37/} Although considerable improvements were effected after the re-organisation of the Rangoon port administration in 1901, the other chief ports, viz. Moulmein, Bassein and Alayab, remained in primitive condition till the end of the period of this study. In 1942, the Rangoon port had more than 4000 feet of quayage for the sea-borne trade, enough shedding accommodation for several ship-loads, cranes and railway sidings. But with other ports Alayab was the only port where large vessels

^{36/} M. Shein, *op.cit.*, p : 200. His index of open charter freight rates per ton of rice from Rangoon to Europe fell from 181 in 1880 to 87 in 1892, and it averages a little over 60 at the beginning of the century. Cf. C.P. Kindleberger, the Terms of Trade, A European Case Study. (M.I.T., 1956), pp : 19 and 157.

^{37/} B.R. Peam, A History of Rangoon, (Rangoon, 1939), pp : 205-6

could anchor along the docks. In Moulmein and Bassein, lighters were used for loading and unloading.

Inland navigation was developed earlier than other means of transportation inside the country. The multitude of rivulets and streams that crossed the deltaic area, which was the main centre of economic expansion, and the main artery of the Irrawaddy itself served as natural routes for the transportation of bulky cargo of paddy and timber, the two main export staples of the country. To a certain extent, inland waterways made up the deficiency in the development of other types of transportation. The Irrawaddy Flotilla Company, whose predecessor started as the Government contractor for riverine mails with a subsidy in 1862, grew into a giant company owning more than 260 powered vessels and 380 dunnage vessels and handling nearly one and a half millions tons of freight per year during 1930s. Nevertheless, this tonnage was estimated to be less than half of the total inland water freight because in addition to many small shipping companies, the large export firms had their own flotilla to carry paddy, timber and petroleum.

The development of other types of transportation was also conditioned by the needs of an export economy. Roads and railways converged on the private city of Rangoon, which was also the main export point. The first railway lines were constructed from Rangoon to Prose in 1874, the second lines from Rangoon to Toungoo in 1885 and it was extended to Mandalay in 1889. Then in 1898 it was further extended to Myittha and to Lashio in 1902. In the

same year Bassein was connected with Rangoon by rails. When the Moulmein-Rangoon line was opened in 1907, the main trunk lines of the country had been completed. At that time the total mileage was about 1500 miles and further extension of branches raised the total mileage to about 2000 miles by 1940.

Being conditioned by the same factors of foreign trade and topography, development of road system assumed the same pattern as that of the railways. In fact, the trunk roads and the railway trunk lines run more or less parallel; furthermore the total mileage of surfaced roads in 1935 was also about 2000 miles although there were over 7000 miles of unsurfaced but all weather vehicular roads. Development of roads was very slow and extremely unsatisfactory in spite of the immense enthusiasm shown by the British administrators who wanted to build not only a net work of roads inside Burma but also to link it up with the neighbouring countries, especially western China. However, this dream was realised only towards the end of the period of British Rule by the military needs of the Second World War. There was also great deficiency in the feeder roads. Almost all the villages were landlocked during the cultivating season and at that time, excepting the villages on the banks of rivers or streams, the only link for them with the outside world was a narrow footpath or mud road along the bunds of the fields. After the harvest the carts used the improvised roads to carry paddy to the buying depots. Consequently, improvement in transportation, though it had a great indirect impact on the economy as a whole, had very little effect on the daily life of the great majority of the rural population.

5. Changes in the foreign trade sector.

We have described the trends of economic growth in a number of sectors of the economy of Burma between 1870 and 1940. These changes were reflected in the pattern of her foreign trade and of her international economic relationship in a number of ways. Firstly, before the turn of the century rice and teak were the only two important export products of Burma. The growth of rice export outstripped that of teak with the result that the share of rice export in the total value of export increased to as much as 73%^{38/} during the quinquennium ending 1895. This trend of increasing dependence on a single crop was reversed by the development of petroleum industry towards the end of the 19th. century and later of other mineral resources. In spite of this tendency towards diversification, rice remained the single most important export staple throughout this period of study. These changes in the commodity composition of exports are shown in Table No. 9.

Secondly, the development of petroleum and other mineral industries had increased the degree of dependence on export for Burma. It was because a large proportion of the output of these industries was exported. For instance, in 1926 about 83% of Burma's output of kerosene and petrol was exported to India,^{39/} and for all the chief metals of Burma exports were approximately equal to production.^{39/} We have mentioned above that even in 1860s the Province

^{38/} Government of Burma, Report of the Capitation and Thathameda Taxes Enquiry Committee, 1926-27, (Rangoon, 1927).

^{39/} See J.R. Andrus, op.cit., p : 130.

Table No. 9

Growth and Commodity Composition of Exports of Burma, 1870-1940.

(Value in millions of rupees).
(Quinquennial averages)

Quinquen- nium ending	All Rice Products	Forest Product	Petroleum Product	Other Minerals	Total Exports	Rice Products as % of Total exports
1875	28	7	-	-	45	62
1880	46	9	-	-	66	69
1885	53	13	-	-	77	68
1890	50	10	-	-	80	66
1895	86	14	2	0	118	73
1900	115	17	4	0.2	162	71
1905	152	15	20	0.3	209	73
1910	212	17	34	1.3	302	70
1915	246	22	47	5.6	355	69
1920	233	28	74	15.8	441	53
1925	375	43	109	27.6	653	57
1930	428	45	115	45.9	705	61
1935	235	29	159	38.8	481	49
1940	227	40	148	46.7	518	44

Source : U Chit Hsang, unpublished mimeograph on Foreign Trade of Burma in Materials for Studying the Social and Economic History of Burma, (Rangoon, 1957).

of Pegu was exporting about 30% of her paddy output and at the beginning of the present century, before the petroleum industry was fully developed, the value of exports was also about 30% of the net domestic product. This percentage rose as high as nearly ^{38%} 50% in 1936.

This increasing dependence of Burma on exports can be seen from Table No.10.

Thirdly, the value of consumers goods imports varied between 60 to 70% of the total value of imports throughout the period, where-

Table No. 10

Ratio of Value of Exports to Net Domestic Product of Burma,

1901 - 1938.

Year	Value of exports (In millions of Rs.)	Net Domestic Product ^{a/} (In millions of Rs.)	Value of exports as % of NDP. %
1901-02	174	575	30
1906-07	267	631	42
1911-12	335	826	41
1916-17	374	1067	35
1921-22	616	1320	47
1926-27	654	1804	36
1931-32	441	1107	40
1936-37	555	1115	50
1938-39	478	1003	48

^{a/} See Appendix (A) Table V. Usually the ratio between the value of exports and gross domestic product rather than net domestic product is used to indicate the degree of dependence of an economy on exports. However, the substitution of gross domestic product in place of net domestic product will not alter the above results ^{plus} significantly.

as that of producers goods, especially that of machinery and equipment, remained relatively insignificant. These were the reflections of the nature of economic development and of the foreign capital that flowed into Burma. We have earlier noted that the bulk of foreign capital was short term capital to finance agriculture and trade. The only important fixed capital in the rice trade was rice mills. As the agricultural expansion was not based on technological improvement, only simple and low value tools of hoes and ploughs had to be imported. Therefore the financing of agricultural expansion consisted mainly of

circulating capital to finance the import of consumers goods needed by the cultivators. Similarly, in the case of forestry very little mechanical power was used and the only important fixed capital was saw mills. By the time when the relatively more capital-intensive industries, such as petroleum and other mining industries were developed, the expansion in the agricultural production and of its exports had reached such a level that the relative share of the import of machinery and equipment in the total value of imports did not rise appreciably. Growth and the commodity composition of imports are shown in Table No. 11.

Fourthly, the high degree of specialisation in the production of a single export product led to the import not only of manufactured goods but also of a considerable amount of simple and staple foodstuffs such as salt, salted and unsalted-fish, cooking oil and dried meat, all of which are the essential elements in the diets of Burmans, both of the rich and the poor. Moreover, the increasing number of immigrants was another factor causing an increasing level of food import of the kinds they were used to. Thus import of foodstuffs expanded pari passu with the growth of export of foodstuffs and its share in the total value of imports was continually rising. For instance, in 1870, food imports accounted for about 25% of total consumers goods import as compared with 61% of clothing imports. By the turn of the century food imports became as important as clothing imports each accounting for about 40% of total consumers good imports. Then during the last decade of the period its share varied between 45

Table No. 11

Growth and Commodity Composition of Imports of Burma,
1870 - 1940.

(Value in millions of rupees)
(Quinquennial averages)

Quinquen- nium ending	I M P O R T O F			Other Production Goods	Total Import	Consumption goods as % of total Imports.
	Consumption goods	Machinery and Equipment 1/				
1875	23	6		12	34	67
1880	35	9		16	49	71
1885	42	10		18	61	70
1890	36	12		22	85	43
1895	62	14		25	89	70
1900	68	15		29	97	70
1905	91	18		44	137	67
1910	120	20		63	185	65
1915	142	22		66	212	67
1920	175	37		104	282	62
1925	211	41		137	365	61
1930	231	32		100	367	63
1935	128	18		68	201	64
1940	136	21		87	229	59

Source : U Chit Hnang, op.cit..

1/ Includes factories, millworks, machineries, belting and parts, railway plants and rolling stocks, ships, vehicles, chassis and parts, tele-communication equipment.

to 52% whereas that of clothing import remained about 40%. Thus from the beginning of the century the import of foodstuffs was as important, if not more, as that of clothing import which was usually regarded as the most important import of agricultural countries when they were opened-up to international trade.

Fifthly, the course of economic development affected the direction of trade. We have noted that the early stimulus to the

expansion of rice export was given by the demand from the Western markets. After the turn of the century the economic development of the Eastern countries made these countries more important customers of Burma rice than the Western countries. The development of the railways in India and consequent increase in the demand for timber also made the Eastern markets more important than the West in timber export. Then came the development of the petroleum industry which exported its most important product exclusively to India and thus the economic importance of India to Burma was increased. Therefore India's share of our exports rose from 25% in 1870 to 39% in 1913, and then rose further to 60% in 1940. On the other hand the share of the United Kingdom declined from 65% in 1870 to about 9% in 1913, recovering slightly to about 13% in 1940.

If there was growing importance in the position of India in the export trade of Burma her position in the import trade had not undergone similar changes. Her share in the import trade of Burma fluctuated about 50% of the total value of imports.^{40/} However, the share of the United Kingdom in the import trade followed more or less the same trend as that of her share in the export trade of Burma. It declined from about 40% in 1870 to 20% during 1930s. This change was due to the competition from other European countries as well as from Japan and India, particularly in textiles trade.

40/ Actually her share of import trade was less than 50% because a considerable amount of goods of Western origin were imported into Burma through India and these were recorded as imports from India. Beginning from 1901 such imports were shown separately in the trade returns as import of foreign merchandise from India and at that time these accounted for about 7% of the total value of imports from India.

Sixthly, these secular changes in the direction and commodity pattern of foreign trade had important bearing on the movement of terms of trade of Burma. The emergence of India as the main market for Burma's rice at the beginning of the century made up for the decline in the demand of the Western market and therefore the external demand for rice was sustained. Consequently, the trend of the export prices of rice and rice products was rising^{41/} until 1922, whence these declined from the peak of the post-war boom and further depressed later by the Great Depression. Similarly, as a result of economic expansion, particularly in India, there had been continual growth in the demand for timber and petroleum products. Thus, the unit value index of exports of Burma rose steadily until 1922, whence it declined with a sharp drop in 1932.^{42/} On the other hand, the unit value index of imports had remained fairly constant until the First World War with the result that there was a secular improvement in Burma's terms of trade during that period. Then the import prices rose more sharply than the export prices during the War, turning the terms of trade against Burma. Again it moved in favour of Burma in the post-war period until 1931 when the sharp decline in the export prices resulted in the deterioration of her terms of trade. In short, with the exceptions of

^{41/} Other contributory factors to the rising export prices of rice and rice products were (i) changes in the composition of rice and rice products exported, e.g. replacement of cargo rice by white rice, (ii) possibility of direct sale to the European consumers by the Rangoon exporters, (iii) the decline in the freight rates, (iv) and the depreciation of Rupee between 1870 and 1914.

^{42/} See Appendix B Table I.

abnormal periods, such as war time and world-wide depression, Burma had not suffered from the adverse terms of trade effect on economic growth, as is supposed to be the rule for the exporters of primary products, especially of foodgrains.^{43/}

Lastly, but not the least important, is the effect of the pattern of economic expansion on the balance of trade, which is shown in Table No.12. It shows that with the exception of the quinquennium ending 1890, during which the British Government annexed Upper Burma, there was export surplus throughout this period. Moreover, this export surplus increased, both in absolute and relative terms, as time went on, and after 1920 it became as much as half the value of export. We have referred earlier to the existence and a possible explanation of export surplus in Burma from the very beginning of the opening-up of the country to external trade. We will now consider the rising ratio of export surplus

^{43/} It has been argued that what is more relevant is "internal" terms of trade rather than "external" terms of trade. The former is the ratio between the prices received by the farmers for their products and the "up-country" prices of goods they bought. Myint has argued that in the long run the two indices would move, with possible time lag, in a parallel way. H. Myint, *op.cit.*, pp : 132-133. For the purpose of calculating the internal terms of trade, statistical data are available for the prices received by the farmers in the form of harvest prices, but the data on the retail prices of consumers goods paid by the farmers are not available. As a substitute we use the import prices of certain consumers goods. It is reasonable to assume that the behavior of import prices of these goods and their up-country retail prices was similar. The results of our calculation is shown in Table II of Appendix B, which shows that the trends of the "external" and "internal" terms of trade are very similar, but the amplitude of the variations of the latter is much greater than that of the former, indicating the weak bargaining position of the farmers vis-a-vis the monopolistic exporters.

Table No. 12

Values of Exports and Imports of Burma, 1876-1940.

(a)	(b)	(c)	(d)	(In millions of rupees)		(g)%
				(Quinquennial averages)		
1875	45	34	11	7.5	3.5	8
1880	66	49	17	11.9	5.1	8
1885	77	61	16	8.8	7.2	9
1890	88	85	3	5.8	- 2.8	-
1895	118	89	29	7.7	21.3	18
1900	162	97	65	9.7	55.3	34
1905	209	137	72	8.6	63.4	30
1910	302	185	117	7.6	109.4	36
1915	355	212	143	6.2	136.8	39
1920	441	282	159	- 5.6	164.6	37
1925	653	364	289	- 7.9	256.9	46
1930	705	367	338	- 7.2	345.2	49
1935	481	201	280	-12.4	252.4	61
1940	518	229	289	- 9.2	250.2	58

Explanations : (a) = Quinquennium ending in the year shown.
 (b) = Value of exports.
 (c) = Value of imports.
 (d) = Merchandise export surplus.
 (e) = Net private import of treasures.
 (f) = Import surplus including net private import of treasures.
 (g) = (f) as per cent of value of export.

Source : Annual Statements of Seaborne Trade and Navigation of Burma.

to the value of exports. For this purpose, we may divide the period of this study into two parts, taking 1900 roughly as the line of demarcation between them. During the first period, economic growth was mainly due to increase in paddy production, which was mainly the result of the efforts of Burmans and for which imports were necessary to provide incentives for increased production. Therefore, the value of exports and imports grew more or less proportionately. Although

agriculture continued to expand in the second period, its relative importance declined with the development of the petroleum and other mining industries. In the development of these industries, as we have mentioned earlier, Burmese entrepreneurs, labour and capital were mostly replaced by foreign factors. Very few Burmese people were employed in these industries. For instance, in 1911 the total number of Buddhist people, which may be taken roughly as equivalent to Burmese people, employed in the mines, oilfields and petroleum refineries was only 2800, which was about 20% of workers engaged in these industries but only about 0.04%^{44/} of the total working population in Burma. Even in 1930s, after a decade of deliberate Burmanisation, the average number of Burmese labourers employed in the oilfields was barely 3000, which was only about 0.1%^{45/} of the working population. Consequently, in these industries a large part or almost the whole of incomes, both of profits and wages, was accrued to the "income remitting foreign factors"^{46/}. In other words, the rising trend of export surplus was a result of the nature and pattern of economic development that had taken place particularly in the period after 1900.

However, there are indications that the net income payments abroad alone would not be sufficient to account for the enormous

^{44/} See CIB, 1911, Vol. IX, Part I - Report, p : 321 and Part II
Imperials, Tables, Table XV-D, p : 240

^{45/} See Report of the Oilfields Labour Enquiry Committee, (Rangoon, 1941, p : 13).

^{46/} J.V. Levin, the Export Economies, their Pattern of Development in Historical Perspective, (Harvard, 1960), p : 7.

amount of export surplus, especially after 1920. U Tun Wai has shown that during the second half of 1930s the commercial banks in Burma transferred part of their resources from Burma to India for investment in the latter. ^{47/} Even before the First World War

Table No. 13

Balance of Trade and Balance of Payments on Current Account
of Burma, 1930-39.

Payments	Rs. millions	Receipts	Rs. millions
1. Imports (c.i.f.)		3. Exports (f.o.b.)	
(a) Consumers goods		(a) Rice	223
(i) Food and Drink	45	(b) Timber	34
(ii) Textiles	54	(c) Minerals	57
(iii) Other	43	(d) Other	171
Total	142		
(b) Materials for manufacture	47		
(c) Capital Goods			
(i) Building materials	3		
(ii) Machinery	17		
(iii) Vehicles	6		
Total	26		
2. Total Merchandise Imports	215	4. Total Merchandise Exports	485
5. Balance of Trade	270		
6. Investment Income to Burma (net)	- 85		
7. Donations to Burma			
Private (net)	- 10		
Public (net)	...		
8. Other Payments (net)	- 18		
9. Balance on Current Transactions.	157		

Source : Government of the Union of Burma, the National
Income of Burma, (Rangoon, 1951), p : 10.

^{47/} U Tun Wai, Burma's Currency and Credit, (Calcutta, 1953),
p : 124 - 146.

some foreign firms were already "utilising part of their profits to make investment elsewhere"^{48/}. But to show that there had in fact been a net export of capital from Burma it will be necessary to compute the balance of payments of Burma, for which there is very little information. The first attempt to compute the balance of payments for a pre-war year was made by Miss Ady as part of her work in estimating the national income of Burma for the year 1938-39. It was only the current account of the balance of payments statement, which is reproduced in Table No. 13.

Miss Ady took Rs.157 millions of the balance on current transactions as net lending abroad of Burma in 1938-39. Making use of whatever fragmentary information available we have checked Miss Ady's estimates of (i) net investment income payment, (ii) net private donations and (iii) other payments (net). We have found that all her three estimates are on the low side. Our estimates for them are Rs.140 million⁴

48/ J.S. Furnivall, A Study of the Social and Economic History of Burma Part IVa, p : 45. See also H.G. Callis, op.cit., pp : 89 and 93, and R.H. Macaulay, op.cit., pp : 32-33, 49-50.

49/ Callis gives an estimate of the average annual transfer of commercial profits by all foreign companies" at £10 to £12 millions (Rs.133 to Rs.160 millions) for the total business investment of £50 millions, giving an average transfer of 20 to 25% of their investment. This appears to be high (see Andrus, op.cit., p : 186) and we estimate the business transfers as follows.

Company	Investment in £ millions	Assumed rate of transfer	Estimated amount of transfer in £ millions
Oil companies	16	20%	3.20
Other mining companies	15	15%	2.25
Other companies	16.2	10%	1.62
		Total	7.07 =
			Rs.94 millions.

To this we add the Chettyars' transfer of Rs.50 millions i.e. 10% of their capital of Rs.500 millions, giving a total income payments of Rs.144 millions. We take Rs.140 millions as the estimated net income payments abroad.

Rs.75 millions ^{50/} and Rs.25 millions ^{51/} respectively. However, it may be mentioned that our estimates are not for any particular year, but these are annual averages for the quinquennium ending 1940. The average annual export surplus for the same period was Rs.297 millions, giving an average annual net foreign lending of Rs.60 millions. Thus towards the end of a long period of economic expansion in Burma, increased savings were flowing out of the country instead of spilling over into investment in "residential industries" ^{52/} to provide the much needed stimulus to the stagnant agricultural economy.

^{50/} This amount is the sum of the estimated amount of Indian remittances at Rs.40 millions, that of the Chinese at Rs.8 millions and that of the Europeans at Rs.30 millions. The estimate for the remittances of Indians is based on the family budget data of Bonnisson, collected in 1927; 760 budgets of the Indian families selected in the sample give an average remittance of Rs.101 per annum. See J.J. Bonnisson, Report of an Enquiry into the Standard and Cost of Living of the Working Classes in Rangoon, (Rangoon, 1928), pp 152-171. This amount was adjusted for changes in the value of total external trade and multiplied by the number of Indian workers in 1940. The estimated amount of Rs.40 millions as Indian remittances during quinquennium ending 1940 may be compared with the average annual amount of money order of Rs.30 millions sent to India from Burma. This may also be compared with Rs.40 millions, given by the Reserve Bank of India, as the remittances of Indian labourers in Burma. See Reserve Bank of India Bulletin, (November, 1953), p : 894.

^{51/} In Other Payments we include payments of interest and repayments of debts by the Government, superannuation allowances, pensions and salaries paid abroad, and some other minor payments. The main sources of information are the Burma Provincial Estimates for the year 1936-37 and the Annual Financial Statement of the Government of Burma, for the year 1939-40.

^{52/} See D.C. Heath, "Location Theory and Regional Economic Growth", Journal of Political Economy (June, 1955).

6. SUMMARY.

We have given an analytical account of the transformation of the economy of Burma from a subsistence to an export economy and the growth of the various sectors between 1870 and 1942. We begin with an explanation of the rapid expansion of paddy area in Lower Burma from the second half of 1870s. We have pointed out that the preceding decade of 1860s was the "warming-up" period during which the economy was responding, though slowly, to the new economic and political environments and that during that period Lower Burma had already become an export economy, exporting about 30% of her paddy production. What was more important was the fact that the volume of paddy export was rising, and this led to the development of rice milling industry which in turn provided the necessary secure market to the paddy cultivators for the rapid expansion of paddy cultivation. This process was accelerated by the opening of the Suez Canal in 1869. One particularly important effect of the Canal was the economic expansion of the East, which had sustained the external demand for Burma's rice and thereby its feverish agricultural expansion, which lasted for more than half a century. Between 1870 and 1900 paddy acreage was growing at an average rate of 3.5% per annum as compared with 2.4% of population growth per annum. After 1900 the former declined to a lower level than the latter, at 0.9% and 1.1% respectively.

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and other minerals at a later period. The development of these industries had increased the extent of dependence of Burma on foreign trade, although these had sustained the growth rate of output at a level higher than that of the growth of population. Between 1901 and 1931, the average annual growth rate of the net domestic product was 1.9^{53/} whereas that of the population growth was 1.1%. In short, between 1870 and 1931 the average rate of growth of net product had remained above the growth rate of population. Nor had Burma suffered from the adverse effect in the movement of the terms of trade during the greater part of the period.

And yet at the end of this fairly long period of economic expansion, Burma had remained an underdeveloped country, possessing almost all the import features of such an economy. Her per capita net product in 1938 was only Rs.62, which was about one-twentieth of that of the United Kingdom.^{54/} She remained an exporter of primary products, with 63% of her net domestic product originated in the agricultural, forestry and mining sectors as compared with 69% at the beginning of the century.^{55/} In 1931 about 73% of her labour force was directly engaged in primary production whereas in 1811

^{53/} See Appendix A, Table VI.

^{54/} In 1938 per capita net product of the United Kingdom was £97 (or Rs.1292), which is obtained by dividing £ 4610 millions, the net product at factor cost, by the estimated population of 47.5 millions. See National Income and Expenditure of the United Kingdom, 1930-1945, Table I, (cmd : 6784) and the U.N. Demographic Yearbook, 1960, Table 4.

^{55/} See Appendix A, Table VI.

it was only 61%.^{56/} In other words, economic expansion in Burma during the period of this study was almost exclusively in primary production. This was one of the results of development with foreign capital, which, under condition of free trade, followed the traditional pattern of starting with investment in trade, followed by investment in processing industry and in other primary production such as plantation or mining. And when such investment opportunities were exhausted, savings of these foreign enterprises flowed out of the country, seeking profitable investments elsewhere either in primary production in similar countries or in manufacturing industry in their own countries, thereby depriving the country in which such savings originated of the spill-over effect for sustained economic growth. Thus towards the end of the period of this study when readily available land had been exhausted the leading sector of the economy relapsed into a state of stagnation. This was the outcome of economic growth in Burma inspite of the absence of population explosion and continually improving terms of trade, and, above all, in active contact with the more advanced countries through international trade. In recent years, it has increasingly been recognised that the failure of the foreign enclave to produce the

^{56/} In this respect Burma presents an interesting case of underdeveloped countries; the proportion of population engaged in primary production increased with economic development. To explain such phenomenon Kindleberger has pointed out that Fisher-Clark thesis of correlation between income level and employment in the secondary and tertiary industries should be qualified for an open-economy, where primary products may be exchanged for manufactures in foreign trade with the result that allocation of resources by sectors does not reflect the state of demand of a developing economy. See C.P. Kindleberger, Economic Development, (New York, 1958), p : 117.

spread effect from the export sector to the rest of the economy is one of the main reasons why the underdeveloped countries have failed to capitalise on their economic expansion. But the more interesting question is why foreign capital, having come all the way from the advanced countries to the underdeveloped countries, had not sought to invest, to any significant extent, outside the export sector of primary production in these countries. This is one of the main questions which we propose to consider in this study, especially in Part II of this thesis. It is there suggested that the circumstances arising from free trade policy had a profound effect on the nature of capital accumulation, contrary to some prevalent opinions on the subject. The case of Burma provides an excellent example illustrating this theoretical position, because every aspect of economic development in Burma during the period studied here may be traced to the profound impact of the growth of her foreign trade, which in turn determined the main lines of her economic development. But there were also some attendant circumstances, which reinforce the tendency to weak incentive to invest in the country. We therefore discuss some further historical data on these other aspects of economic development, in the following two chapters, before going on to the theoretical investigations of Part II.

Chapter II : Trends in Distribution of Income, 1870-1940.

1. Introduction.

The trends in economic growth in the various sectors of the economy of Burma have been traced in Chapter I for the period from 1870 to 1940. The general picture that emerges from this study of economic development of Burma is that of a long-drawn out boom, at the end of which there resulted an underdeveloped and stagnant economy. It is one of the puzzling features of this history that all this development, without population explosion and adverse movement in the terms of trade, failed to establish self-sustained economic growth in Burma. An attempt at the theoretical explanation is made in Part II of this thesis and it will be shown there that a contributory cause was the trends in income distribution between indigenous and foreign sections of the people. In this chapter, some aspects of these trends will be briefly discussed.

2. Labour and Wages.

We shall first consider the trends in wages. It has been mentioned above that before 1880 Burma was a labour scarce country and therefore it might be expected that rapid economic development would lead to a rise in wages. Money wage rate had in fact risen between 1870 and 1890 as can be seen from Table No.14. It rose gradually during the first half of 1870s, when the average annual increase in paddy area was about 40 thousand acres. The acreage increase doubled, tripled and quadrupled in the following three

Table No. 14

Trend of Wage Rate of Unskilled Labour in Lower Burma and
Indian Immigration, 1870-1940.

Year	Index of Money Wage Rate	Index of Paddy Price	Deflated Index of Wage Rate ^{a/}	Average annual Indian immigrants (in thousands)
1870	100	100	100	n.a.
1875	101	93	109	n.a.
1880	113	131	86	16
1885	119	115	103	61
1890	128	128	100	94
1895	122	132	92	135
1900	115	138	83	147
1905	114	138	83	178
1910	127	166	77	362
1915	112	179	63	337
1920	125	196	64	274
1925	160	271	59	367
1930	136	213	64	405
1935	107	115	93	299
1940	86	154	56	260

Sources : RAB, Reports on the Working of the Indian Factory Acts,
RSOs, J. Baxter, Report on Indian Immigration, (Rangoon, 1941)

^{a/} Index of Money Wage Rate as per cent of Index of Paddy Price.

^{1/} quinquennial periods, resulting in a sharp rise in money wages, which began to attract a large number of Indian labourers. ^{2/} The influx of

^{1/} See Table No.1, p : 6 above.

^{2/} The economic forces had achieved what previously the Government failed to do through its State Immigration Scheme of 1874, under which the Government tried to import Indian coolies by offering advances to the potential immigrants in India. When this failed to attract sufficient number of Indian immigrants, the Government turned, in 1881, to the method of offering subsidy to the shipping companies to induce them to carry more deck passengers to Burma, and at the same time attempts were made to solve the problem of labour shortages by mechanisation of agriculture. The Government bought some American reaping machines to be hired out from village to village; improved ploughs and threshing machines were also introduced. When the influx of cheap Indian labour took place subsidy to the shipping companies was abolished in 1884, as it was deemed to be unnecessary and also the annual Administration Reports thereafter did not mention any more of mechanisation of agriculture. In fact, the method of cultivation became more labour intensive through the substitution of transplanting of seedlings in place of broadcasting of seeds.

Indian immigrants caused a decline in the money wage rate during 1890s. However, the volume of Indian immigration continued to grow because of the continued expansion of agricultural production and the development of other sectors of the economy. Consequently, despite the continued influx of cheap labourers from India, money wage rate rose again after 1905, reaching a peak during the post-war boom of 1920s. Although the trend of money wage rate was rising, the increase in money wages lagged behind that of paddy price with the result that the "real wages" relative to paddy price^{3/} remained below the level of 1870 for most part of the period of this study; and in particular their trend was in the downward direction beginning from 1890.^{4/}

However, it may be mentioned that in Burma wage labourers, in the ordinary sense of the words, were not important, because agriculture, the leading sector of the economy, was organised on the

3/ We have deflated the money wage rate index with the index of paddy price partly because cost of living index was not available for the period before 1914, and partly because paddy (rice) is the most important single item of wage-goods as well as the chief product of most of the labourers. According to Bennison's estimates, expenditure on rice accounted for about 20% of the total consumption expenditures of all races, excepting the Hindustanis, of working class families in Rangoon in 1927. J.J. Bennison, *op. cit.* Regarding the rural consumption pattern, data on cost of living of agriculturists given in the Settlement Reports vary considerably from district to district; the reports on the RSO in the Tharrawaddy and Insein Districts during 1912 to 1915 show that expenditures on foodgrains, which are mainly rice, was generally more than 30% of total consumption expenditures.

4/ A.J. Page has compared the earnings of rice mill labourers between 1914 and 1928. The average earnings of such labourers in Rangoon increased by 40% whereas cost of living index, also for Rangoon working class families, rose by 45%. See A.J. Page, Report on Wages in Rice Mills in Burma, (Rangoon, 1931), pp : 4-5, and see also E.J.L. Andrew, *op.cit.*

basis of small peasant farms and therefore most of the farmers were self-employed persons. Although seasonal labourers were employed by these farmers, it was only towards the later part of the period covered by this study that agricultural labourers became a significant social class.^{5/} Similarly, labourers engaged in small scale manufacturing and business were mostly self-employed persons, being owners and their dependents. We therefore will also consider the wages of agricultural labourers and the average income of the cultivators.

If the money wages of unskilled labourers relative to paddy prices were sticky, the wages of agricultural labourers, which were "largely fixed by custom and were paid in kind"^{6/} were extremely rigid.^{7/} In 1930, the Settlement Officer of the Hanthawaddy District observed that "the rate of wages paid for in paddy for the different agricultural

^{5/} Even in 1910 the Settlement Officer of the Syriam District observed that there was no sharp dividing line between the (small) land owners, the tenants and the agricultural labourers and that there was "a constant ebb and flow between these classes". This prior to the 1911 Population Census, these three classes of people were not distinctly classified. In the 1911 Census an agricultural labourer was defined to include only those who were landless agriculturists, resulting in a large decline in their number from 4.3 millions in 1901 to 1.6 millions in 1911. Even this latter figure was believed to be too large. See RSO, Hanthawaddy District, 1907-10, p : 17 and CIB - 1911, Part I - Report, p : 315.

^{6/} RAB, 1901-2, p : 28, RSO, Bassoon District, Season, 1912-14, p : 23.
^{7/} We have selected the wages prevailing in the Hanthawaddy District for analysis because it is not only an important paddy growing area but also close to Rangoon. Indian labourers were extensively used as seasonal agricultural labourers in this district and after the harvest these Indian labourers worked in the rice mills, at the ports etc. Moreover, conditions relating to the wages of agricultural labourers were more or less the same in all other districts of Lower Burma.

operations are much the same as corresponding wages at the time of last settlement,"^{8/} which was carried out in 1907-10 by Arbuthnot, who in turn stated that the then prevailing rates of wages were "much the same as the corresponding wages paid at the time of first settlement"^{9/} in 1879-1880. In short, the rates of wages of agricultural labourers paid in kind for the various agricultural operations remained more or less unchanged between 1879 and 1933. However, the conditions of agricultural labourers were seriously affected by the influx of cheap Indian labourers, who made it possible for the employers to hire agricultural labourers on seasonal basis, different labourers for different operations, instead of employing them for the whole year, resulting in a decline in the earnings of agricultural labourers. Before 1890, it was customary to hire them on annual basis, that is to say for a period of about ten months during which the hired labourers were fed by their employers. Then it was found that it was cheaper^{10/} to hire the labourers on seasonal basis, and usually different labourers were hired for different operations such as ploughing, transplanting, reaping and threshing. It was possible to hire labourers on seasonal basis partly because the regular monsoon made it possible to divide the agricultural operations

8/ RSO in the Hanthawaddy District, 1930-33, p : 25.

9/ RSO in the Hanthawaddy District, 1907-10, p : 8.

10/ In 1879 McKerran enquired into the relative costs of employing labourers on annual basis and on seasonal basis; the average costs were found to be Rs.5.42 and Rs.5.36 per acre respectively. However, according to the calculations of Binns the gains by employing the second method could be as much as 20% of the cost of the first method. RSO in the Hanthawaddy District, 1897-98, pp : 9-10; and B.O. Binns, Agricultural Economy in Burma, (Rangoon, 1948), p : 72.

into a number of distinct stages that could be operated by different groups and partly because of the availability of seasonal labour from Upper Burma and India. It was cheaper because the employers did not have to feed the labourers throughout the season, and the seasonal labourers could accept lower wages because they worked in other places after the agricultural work. For instance, the Indian labourers came into Burma some time before the harvest to work in the fields and after that they worked in the rice mills and took up other urban employment. After 1890 this method of hiring agricultural labourers on seasonal basis was increasingly used and by the turn of the century it became the standard method.^{11/} The result was a reduction in the average earnings^{12/} of the agricultural labourers in Lower Burma and a large number of them were left "without work, wages or maintenance for the greater part of the year."^{13/} Thus for their subsistence during the season they had to borrow at ruinous rates of interest resulting in further reduction in their net earnings, which became so low that they eked out by odd work, not to speak of being able to save in order to elevate themselves to the status of tenant cultivators.^{14/} But the possibilities of finding odd work were also "very limited"^{15/} so that by 1930 most of them were living from hand to mouth.^{16/}

^{11/} RSO for the Hanthawaddy District, 1907-10, pp : 7-8.

^{12/} Furnivall estimated that by 1930 the average earnings of agricultural labourers had fallen by 20% as compared with the level in 1870. See J.R. Amis, op.cit., p : 73.

^{13/} J.S. Furnivall, Colonial Policy and Practice, (Cambridge, 1948) p : 91.

^{14/} RSO, Insein District, 1933-35, p : 5.

^{15/} B.O. Binns, op.cit., p : 73.

^{16/} RSO, Hanthawaddy District, 1930-33, p : 25.

If the position of agricultural labourers deteriorated with economic growth, the conditions of most of their employers were not better. We have described how the semi-empty space of the Irrawaddy Delta was "colonised" by small peasant settlers who were found to be generally solvent in 1880.^{17/} Then the rapid agricultural expansion made it necessary for them to borrow money to expand their own area as quickly as possible so that they would not be left behind in the scramble for land which had taken place after 1880. Although there were cases in which the farmers began with borrowed money and had accumulated wealth and properties, the majority of the new settlers, who borrowed money to expand their area of cultivation, found it difficult to pay the interest, leave alone capital. And the debt swelled from year to year and when the land was brought to its full productivity, they found themselves heavily burdened with accumulated debts so that there was nothing to do but to surrender the land to the money lenders. Again although there were cases of extravagance and abuse of credit, the general causes were high interest rate on the one hand, and a high degree of risk, inspite of regularity of monsoon, of agricultural undertaking on the other hand. The cultivators were constantly faced with a thousand and one vicissitudes such as "the risks of drought, floods, pests, illness, bad prices and a thousand and one other things"^{18/}. And there were practically no facilities for

^{17/} RSO, Hanthawaddy District, 1879-80, p : 10.

^{18/} HBBC, p : 58.

insurance against those risks.^{19/} Their meagre resources would not enable them to withstand even a temporary misfortune and if any misfortune should happen to a cultivator the difficulties would accumulate very rapidly. Firstly, there was the heavy interest charges which were calculated on compound interest basis and therefore his debt would accumulate rapidly. Secondly, if he failed to repay the loans he would have to surrender his land to the money lender and if he wanted to remain in agriculture he would have to hire the land back at high rent.^{20/} Therefore his net income from a given area of cultivation would be smaller than before. To maintain the previous level of money income it would be necessary for him to work a larger area, which required a larger amount of working capital and therefore of loans. Since he had become a landless cultivator he might have to borrow under more adverse terms than before. Also he might perhaps become a subtenant because he could not rent land directly from the landowners, paying a higher rent than before. In such circumstances, after subtracting rent, debt charges and costs of cultivation, the balance would be "insufficient to provide the tenant and his family until the next

^{19/} The only insurance facility available to the cultivators was the cattle insurance co-operatives which were introduced in 1910. However, its coverage was extremely limited; even in its heyday of development in 1918 there were only about 6500 members out of a total of 4.6 million workers with agriculture as the principal occupation.

^{20/} In area where customary rent prevailed, the rent was 10% of the gross produce. But in most districts of Lower Burma customary rent was never in use. Usually the rents were fixed in terms of paddy or cash, which averaged 30% of the gross produce. Then with the increasing number of landless cultivators rents increased continuously and in 1930 a rent of 40% of gross produce was fairly common.

harvest with a bare subsistence." ^{21/} There was thus continual encroachment into his share of the produce. As an example of the "pitiable state" of the tenants the Land and Agriculture Committee of 1938 quoted the balance sheet of a tenant from the Settlement Report of the Insein District. The balance sheet is reproduced below and it can be seen that the share of money lenders and the land owner was 50% of the gross value of the produce, whereas the share of the tenant cultivator was only 16%.

Table No. 15

Balance sheet of a Tenant Cultivator in the Insein District 1933-35.

	Rs.	%
Gross Value of produce of 33 acres at 41 baskets per acre, at a price of Rs.110 per 100 baskets.	1483	100
Deduct		
(i) Cost of cultivation paid in kind at Rs.14.48 per acre	478	32
(ii) Advance from landlord of Rs.150 with interest at 2% per mensem for eight months.	174	12
(iii) Repayment of "Sabapo" loan.	55	4
(iv) Rent at Rs.15.51 per acre.	512	34
(v) Seed grain not sown for next season 3/4 at a basket per acre.	27	2
	Total	84
	Balance	16

(a) "Sabapo" loan is an unsecured loan in cash repayable in produce.

The family which was taken as an example consisted of six persons and therefore per capita net income was Rs.40 which was about 60% of the per capita net domestic product for the year 1936-37. But what was more significant was the fact that the balance, which represents the total value of produce left in his hands for his own needs, would not be sufficient to cover even the "cost of feeding" his family and that was estimated at Rs.318.^{22/} By 1950s this was the sort of "pitiable state" in which a large number of farmers had found themselves resulting in widespread indebtedness and increasing alienation of land to the non-cultivating owners. Thus Furnivall found it difficult to resist the conclusion that "over Lower Burma as a whole a great mass of the people were steadily growing poorer" and that "despite the rising price of paddy, the people were earning less money."^{23/} Economic growth in the agricultural sector in Lower Burma is a good example of impoverishing growth for the indigenous population. Thus the open-door policy of attracting cheap labourers from the immense reservoir of India depressed the wages of unskilled labourers, reduced the incomes of the agricultural labourers and kept the productivity and income of the agriculturists low because cheap labour supply made the method of cultivation more labour-intensive

^{22/} Ibid, p : 12. Bins also has computed balance sheets of cultivators, both of owner-cultivators and tenants, for a few districts, using the data of the latest Settlement Reports of the pre-war days. In eight out of nine balance sheets of the tenants living in Lower Burma the balance (i.e. the share accrued to the tenants) was in deficit. In the remaining balance sheet the balance was only 1.8% of the value of gross output. B.O. Bins, op.cit., Appendix J.

^{23/} J.S. Furnivall, op.cit., p : 103.

and had discouraged" the introduction of machinery.^{24/} However, Myint has argued that prevalence of labour-intensive method of cultivation in the underdeveloped countries cannot be explained by low level of wages alone, because even if these are low, labour efficiency is lower still and therefore labour is expensive.^{25/} But the question is not whether labour in terms of efficiency unit is more expensive or not as compared with labour in the more developed countries; the relevant consideration is the relative costs of labour and capital to the agriculturists in the underdeveloped countries. It may be that the interest rates on agricultural credit was so high that even the inefficient labour remained relatively cheap. We will therefore turn to consider the trends of interest rates in Burma.

3. Capital and Interest.

We have mentioned above that the Western capital flowed into Burma to finance trade and processing industry, to exploit the forest and mineral resources, whereas agricultural credit was mainly supplied by the Chettiars, who borrowed from the banks^{26/}

^{24/} Furnivall even went to the extent of suggesting that low wages was the main cause of the economic difficulties in Burma, because "they hinder economic progress and destroy welfare. They destroy welfare because they leave the labourer to margin for maintaining his family at home, and thereby contribute in no small measure to the disorganization of social life; they hinder economic progress because they are too low for physical efficiency and discourage the introduction of machinery".
Ibid, p : 352.

^{25/} H. Myint, *op.cit.*, p : 136.

^{26/} The first bank organised on Western lines was opened in Burma in 1861 and in 1941 there were 18 scheduled banks.

during the busy season to augment their own resources. In other words, the Chettiers were the main suppliers of credit at the retail level to the numerous small borrowers spread over a fairly wide area in the unorganised money market, where the cost of operation for a Western bank would have been so high that it would not be profitable. Consequently, there was no tendency for the Western banks to enter this retail business in agricultural credit.^{27/} Of necessity, the retail price of credit was higher than that of the wholesale price, and therefore different levels of interest rates continued to exist side by side in the organised and unorganised money markets.^{28/} In Burma the unorganised money market was mainly concerned with the agricultural credit and financing of the part of trade which the Western banks did not deal with. Furthermore, agricultural credit in Burma, at least in the early stage, was commonly provided on the security of land in the form of land mortgage and, because very often it resulted in the foreclosure and transfer of land to the money lenders, agricultural credit was closely associated with land investment. We will therefore consider both the trends of

^{27/} The only exception to this general statement was the Dawsons Bank Ltd., which was started as an agricultural loan company in the Pyapon District. But in 1928, only about 35 to 40% of its advances were given as crop loans (RBHC, p : 44), and its "position was similar to the one occupied by the Chettiers in the Burmese economy", meaning that it also borrowed from the exchange banks during the busy season to supplement its resources and that its interest rates at 9 to 21% were as high as those of Chettiers at 9 to 24% per annum. See U Tun Wai, op.cit., pp : 81 and 148.

^{28/} For a comprehensive enumeration of factors responsible for the difference in the interest rates in the two markets see U Tun Wai, "Interest Rates Outside the Organised Money Markets of Underdeveloped Countries", I.I.F. Staff Papers, (November, 1957), pp : 107-113. See also P.F. Bauer and B.S. Yarey, the Economics of Underdeveloped Countries, (Chicago, 1957), pp : 116-117.

interest rates on agricultural loans and the rate of returns on land investment.

Active investment in land by the non-agriculturists began at about the same time as scramble for land by the agriculturists and by the speculators beginning from 1880. Furnivall thinks that "most land in the rice tract has been held by absentee money lenders since its first reclamation."^{29/} The investors came from all social classes such as government officials, clerks, lawyers, doctors, school teachers, shopkeepers, traders, brokers etc. To some of them, such as rice traders and brokers, the ownership of land, to a large extent, was part of their trade because they bought land to control the supplies of paddy. But others they bought land because, with continually rising paddy price, it was the most secure and profitable investment opened to them in those days. In fact, after the turn of the century the continued expansion of occupied area in Lower Burma was said to be prompted mainly by the non-cultivating landowners, and therefore between 1905 and 1940, increase in the area owned by non-cultivating owners was about the same as increase in the total occupied area. Table No.16 shows the trends of land ownership between 1905 and 1940.

Land boom in Lower Burma may be compared with railways boom in England and it drew the savings of almost all social classes.

^{29/} See J.S. Furnivall, *op.cit.*, p : 87. His contention was based on the fact that the money-lenders, to whom land was mortgaged, appeared in the revenue records as mortgagees rather than the owners until they foreclose the land. Thus it is suggested that the sudden increase in the number of non-cultivating owners in 1930s was statistical rather than actual.

Table No. 16

Land Ownership : Area Owned by Cultivating and
Non-Cultivating Owners in Lower Burma,
1905 - 1940.

(Area : 000 acres)

Quinquennium ending in the year	Total Occupied Area	Area owned by Cultivating Owners	Area owned by Non-cultivating Owners	Area owned by Absentee owners as % of area owned by non- cultivating owners
1905	7450	6059	1391	64
1910	8530	6665	1865	67
1915	9261	7266	1995	67
1920	9561	7202	2299	74
1925	10069	7393	2676	75
1930	10654	7524	3130	75
1935	10866	6127	4739	81
1940	11265	5915	5350	82

Source : Reports on Land Revenue Administration of Burma.

Competition for land by the non-agriculturists was as keen, if not more, as the competition among the landless cultivators to rent land from the non-cultivating land owners, with the result that the rise in land value outstripped that of rent, leading to a secular decline of the returns on land investment. Table No. 17 shows some data on this tendency, which operated to reduce the return on investment in land.

Similarly, interest rates on agricultural loans, the bulk of which was short term loans, declined continually during the period. In the early 1880s, when the chettiers began to lend on any considerable scale, the "usual" rates of interest were 4 to 5% per mensem or 40 to 60% per annum. At that time an interest rate of 36% per annum was

^{30/} See RSO in the Northwaddy District, 1879-80, p : 11, and RSO in the Bassein and Kyaukpadaung Districts, 1883-84, p : 7.

Table No. 17

Trend of Returns on Investment in Agricultural Land.

Year	Average value per acre in Rs. of sale value	of rent	Rent as per cent of sale value
1889-90	13.63	5.39	39.4
1890-95	17.32	6.88	39.7
1900-01	24.53	7.74	31.6
1905-06	42.39	9.87	23.3
1910-11	46.53	11.75	25.3
1915-16	61.50	12.29	20.0
1920-21	67.69	19.55	28.9

Source : Reports on Land Revenue Administration, Burma.

referred to as a low rate.^{31/} But by the turn of the century 36% became the usual rate and it was used by the Settlement Officers as the line of demarcation between high and low interest rates for the analysis of the interest rates that the cultivators had to pay. In 1901 the Settlement officer of the Tharrawaddy District noted that "the rate of interest appears to have fallen since settlement (in 1801-04).^{32/} Over by far larger part of the area money can be borrowed on mortgage at less than 36%, whereas at settlement 50% appears to have been the prevailing rate, even on gold security."^{32/} Similarly, in Bassein District loans borrowed at interest rates of 36% or less accounted for 38 per cent of total loans in 1899 and by 1912, it rose to 95%.^{33/} Then by 1928 the usual range of interest rates was Rs.2.5 per mensem or 24 to 30% per annum.^{34/} For loans of

^{31/} RSO in the Bassein and Hanzada Districts, 1884-85, p : 8.

^{32/} RSO, Tharrawaddy District, 1900-1901, p : 7.

^{33/} RSO, Bassein District, 1912-14, p : 16.

^{34/} RSDC, p : 79.

amounts from Rs.100 to Rs.500 the rates of interest were lower still, the range being between 18 to 24%. Thus the average rate of interest on agricultural loans with satisfactory security declined over the period of this study.

However, it may be mentioned that even after a decline of about 50% in the level of interest rates between 1880s and 1920s the Burma Provincial Banking Enquiry Committee of 1929-30 noted that the then "ordinary rates of Burma were the exceptionally high rates of ^{35/}India." Moreover, these "ordinary" rates, which were charged on secured loans, were at the lower end of the range of interest rates in Burma. For unsecured loans the interest rates were much higher. For example, the Banking Enquiry Committee gave the average rate of interest on loans lent on personal security, which are known as sabape loans, at 14 1/2% ^{36/} per annum. ~~But~~ According to U Tun Wai the ^{37/} interest rates on such loans were usually between 200 and 300%. But what was more important was the fact that as time went on borrowing on personal security became the main form because "the vast majority of the cultivators (72 per cent in 1920s) were without ^{38/}land to offer as security". As early as 1910 borrowing on ^{39/}personal security was found to be the dominant form in Insein District. In other words, the secular decline in the interest rates on secured loans, which may be taken as a rough indication of the trend of the pure interest rates, was offset by increased risk premium so that

^{35/} Ibid, p : 63.

^{36/} Ibid, p : 80.

^{37/} U Tun Wai, Burma's Currency and Credit, p : 96.

^{38/} BSO, Insein District, 1937-35, p : 6.

^{39/} BSO, Insein District, 1910-12, p : 24.

the costs of borrowing for the majority of the farmers remained extremely high even towards the end of the period of this study.

The decline in the interest rates of secured agricultural loans was accompanied by declined in the interest rates for non-agricultural credit of the unorganised money market, in which the borrowers were the local brokers, traders and millers who did not have access to the Western banks. In this market the main suppliers of credit were again the Chettiars, whose interest rates averaged 12% per annum at the beginning of the century. It declined to about 9% by 1920 and then to 7.5% by 1930^{40/}. Thus interest rates on secured loans in the unorganised money market decline over the period of this study. We have shown above that the returns on land investment had also undergone a secular decline.

The organised money market in Burma was very much integrated with the international money market for the exchange banks, the suppliers of credit in this market, were branches of banks of the more advanced countries on the one hand, and some of the important customers, the large European firms, had "access to the London money market"^{41/} on the other hand. It was not only in matter of borrowing but also in connection with the use of its surpluses that the foreign enclave was closely integrated with money market in England and in India, an excellent example of greater mobility of capital between foreign enclave and their mother countries than the former

^{40/} U Tun Wai, *op.cit.*, p : 15.
^{41/} RBIC, p : 129.

and the native sector of the country. And the rates of interest in this market was lower than those of the unorganised money market. For example, between 1935 and 1942 the average rates of interest in this market was 4 to 6% as compared with 9 to 12% of the Chettians credit and 200% and above on "Sabape" loans.^{42/} However, the profits of the large European firms remained at a high level. For example, the Bombay Burmah Trading Corporation was able to pay dividends averaging 20% for a few decades beginning from 1880,^{43/} the dividends of the Burmah Oil Company on ordinary stock averaged 22% between 1928 and 1938,^{44/} and the dividends of the Steel Brothers averaged 30% during 1920s.^{45/} They were able to maintain their profits at a high level largely because they were either in a monopolistic position or oligopolistic. The few large European rice exporters combined from time to time in order to strengthen their position vis-a-vis the paddy cultivators and other rice exporters. The usual method was that they combined to follow a common price policy in the purchase of paddy. The first rice ring was formed in 1882 and the last one was the notorious Bullenger Pool of 1921, comprising of the Steel Brothers, Bullock Brothers, Ellerman's Arakan Rice and Trading Company and the Anglo-Burma Rice Company. Their success in the manipulation of paddy price in their favour was shown by the fact compared with the position in 1890-92, the Unit Value Index of Rice Exports was relatively higher than the Index of Paddy Prices between 1890 and 1940, with only a few exceptions.^{46/} Another indication was the growing export

^{42/} U Tun Wai, *op.cit.*, p : 148.

^{43/} R.H. Macaulay, *op.cit.*,

^{44/} G.E. Harvey, *op.cit.*, p : 61.

^{45/} J.R. Angus, *op.cit.*, p : 186.

^{46/} See Appendix B, Table II below.

surpluses, both in absolute and relative terms, which has been noted in Chapter I.

4. Three Economic Systems Clash in Burma.^{47/}

Thus during the process of economic expansion, incomes of the monopolistic foreign enterprises were maintained at high levels, whereas the returns on land investment and interest rates on secured loans in the unorganised money market declined, wages may be said to have remained at subsistence level.^{48/} When the condition of agriculturists deteriorated, the Burmese people, who had been concentrating on agricultural production, tried to reverse their role of specialisation. But they were faced with almost insurmountable difficulties in their attempts to move into non-agricultural occupations, which had been dominated by foreigners. Foreigners economic domination, especially in the non-agricultural sector, is one of the most important factors influencing the course of economic development in Burma, especially through its effect on the income distribution between the indigenous people and the alien

^{47/} J.R. Andrus, "Three Economic Systems Clash in Burma", Review of Economic Studies, Vol. III, (1935-36), pp : 140-146.

^{48/} With certain modifications, the trends of factor incomes we have described above fit in very well in the Ricardian model of a growing economy. The factor with inelastic supply in our case was not land, the supply of which was increasing until the last decade of the study, but the monopolistic foreign enterprises. Therefore, monopoly rent remained at a high level, with wages fluctuating about the subsistence level and the returns on land investment and interest rates in unorganised money market, which may be regarded as profits, declining over the period. Yet at the end of the periods rates of interest in the native sector in general, on agricultural credit in particular, were still high compared with those prevailing in the export enclave or in the advanced countries. Thus capital remained a scarce factor in the native sector.

^{49/} groups. We will therefore consider the causes and pattern of occupational specialisation along racial lines in Burma.

Foreigners' domination of non-agricultural sectors came about for two distinct but related reasons. Firstly, the opening-up of the country led to the replacement of indigenous enterprises by foreign enterprises in several fields. For example, before 1890 the European timber firms bought logs from the wealthy Burmese and Karen contractors. Then they learned to dispense, to a large extent, with the contractors and after 1890 timber industry was dominated by five big European firms. Similarly, the growth of the European oil companies in Rangoon drove the Burmese refineries in Prome out of business. The numerous Burmese catch traders almost disappeared when the catch trade was monopolised by the Bombay Burmah Trading Corporation. Cotton trade was monopolised by foreigners through the gimeries in Myingyan. Before 1880 the transportation of paddy in the deltaic area was largely in the hands of boatmen, who were largely Burmans and by 1890 it passed almost entirely into the hands of steamship companies. And foreign imports caused decline in several important local industries. Thus Furnivall observed that during the decades of 1880 and 1890, there was "rapid economic development of Burma, ^{50/} but not of Burmans," for whom rapid

^{49/} Myint has pointed out that the fundamental problem of the under-developed countries" is not merely that of low or unequal distribution of final incomes but also that of unequal participation in the process of economic development". H. Myint, "An Interpretation of Economic Backwardness", Oxford Economic Papers, (June, 1954), p : 140.

^{50/} J.S. Furnivall, A Study of the Social and Economic History of Burma, Part V, pp : 40-42.

economic expansion had steadily narrowed the fields of economic opportunities.

Secondly, almost all these Western enterprises were based mainly on unmarried Indian labourers, and, to a certain extent, Chinese labourers. For example, the Irrawaddy Flotilla Company employed only Indians on their vessels and Indians displaced Burmans in stevedoring work in foreign trade by 1890. Even as late as 1931 about 89% of the unskilled and semi-skilled workers in Rangoon, where most of the large European firms were situated, were Indians. In the petroleum refineries more than 90% of the workers were Indians. This was usually explained by the fact that during the period of rapid agricultural expansion Burmans did not care to work in these jobs, which demanded a higher degree of discipline than agricultural occupations, and conditions involved relatively low wages. Therefore, during the process of rapid agricultural expansion there took place "two definite and distinct tendencies. The first was a slow but continuous transfer of a portion of indigenous population from the towns to the available uncultivated area of the province. The second was a complementary invasion of towns by the members of the alien

^{51/} races." Thus there emerged the most significant feature of the economic development of Burma viz. occupational specialization along racial lines. Table C. 13 shows the occupational distribution of workers in Burma according to races in 1921. It may be mentioned that prior to the 1921 Census population was classified only on the

^{51/} IB, 1921 Part I- Report, p : 24.

Table No. 18
Occupation and Race in Burma, 1921.

Races	Distribution of workers per 1000 workers of each racial group in				
	Agriculture Proper	Industry and Commerce	Professions and Liberal Arts	Public Service	All Occupations.
Indigenous Races	623	155	24	7	1000
Indian born in Burma	603	219	16	13	1000
Indian born outside Burma	155	487	11	51	1000
Chinese	44	469	10	5	1000
European and Allied races	2	303	172	298	1000

Source : CIB, 1921, Part II - Imperial Tables, Table XX, Part I.

basis of religion and caste, which were important factors in the case of India although devoid of any meaning in Burma. However, the occupational distribution of workers in 1921 was not different to any significant extent from that of the past few decades although there was some increase in the participation of the indigenous races in industry and commerce. The occupational specialisation along racial lines can clearly be seen in Table No. 18.

It may also be mentioned that the large proportion (603 per 1000) of Burma-born Indians engaged in "Agriculture Proper" was mainly due to the peculiar characteristics of these people in Myab

District, where most of the Indians were not only permanent residents but also agriculturists. Therefore, if the population of Akyab District is excluded from the above calculation, this proportion would have fallen considerably. But data is not available for the purpose of such calculation for the year 1921. This fact was noted in the Report of 1931 Census and there it was shown that when the population of Akyab District was excluded from calculation the proportion of Burma - born Indians engaged in "Cultivation" fell from 630 to 430 per thousand of Burma - born Indians in 1931.^{52/} Finally, it may be mentioned that the relatively large proportion of indigenous races engaged in Industry and Commerce gives an exaggerated impression of their role in these sectors. Numerically they were large because of the numerous small traders and workers in small scale industries. As a matter of fact, large scale trading and overseas trade fell very largely into the hands of foreigners. In particular, in the case of import trades "Burmans had no share in them in any of their several stages, except to some extent in the retailing of imports."^{53/} Similarly, in large rice mills, saw mills and factories most of the employees were foreigners.^{54/}

Foreigners' domination was found not only in the private industrial and commercial enterprises, but also in several Government Departments. The most notorious ones in this respect were the Public

^{52/} CIB, 1931, Part I - Report, p : 133.

^{53/} Government of Burma, Interim Report of the Riot Inquiry Committee (Rangoon, 1939), p : 20.

^{54/} J. Baxter, Report on Indian Immigration, (Rangoon, 1941), pp : 68-72.

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Works Department, the Medical Department and the Audit Department. Table No. 19 shows the extent of Burmese participation in some of these Departments. It was not only in the higher grades of services but also in the lower ranks that there was the predominance of foreigners in these Departments. For example, members of the staff of hospitals, from the medical officers down to the ward servants, were almost exclusively alien until 1920. Contractors working for the Public Works Department were almost exclusively Indians who employed Indian coolies. For this state of affairs the usual explanation was that Burmans were not suitable in these types of work partly because they were less efficient in work involving heavy manual labour and partly because they were less susceptible to control and discipline. Against this sort of explanation Farnivall had pointed out that before the influx of Indian labourers, Burmese labourers worked at the ports and that they were employed in building embankments along the bank of the Irrawaddy River.^{55/} He contended that the above belief was created after the construction of the first railway lines for which the famine victims from Bengal were imported and after the completion of the construction, the operation was dominated by Indians. This belief was proved to be not true in the case of Upper Burma, where Burmese labourers

^{55/} J.S. Farnivall, op.cit., Part IV, p : 14. Similarly, in 1940 the General Manager of the Burmah Oil Company stated that although Burmans were less efficient than Oriyas, a South Indian race, at earth work, they were not inferior to Indians who came from the United Provinces or Chittagong. Baxter also has mentioned the evidence given by large employers of labour saying that it was not true to say that Burmese labourers were not manageable. J. Baxter, op.cit., pp : 83-87.

Table No. 19
 Burmans in Some Government Departments in
 1900, 1920 and 1940.

	1900		1920		1940	
	T	B	T	B	T	B
1. Public Works Departments:						
(a) Superintending Engineer and above.	7	nil	10	nil	13	2
(b) Executive and Assistant Engineer.	57	1	82	5	105	22
2. Post and Telegraph Department :						
(a) Post Master and above.	30	5	37	5	33	10
(b) Assistant Telegraph Engineer and above.	21	nil	26	nil	29	nil
3. Medical Department :						
(a) Civil Surgeon and above.	34	nil	42	1	51	7
(b) Assistant Surgeon.	19	4	54	4	99	30

Source : Burma Civil List for 1900, 1920 and 1940.

had always formed a considerable proportion of non-agricultural labour force. For example, in 1921 about 80% of the oilfield workers were born in Burma whereas in the petroleum refineries of Lower Burma more than 90% of the unskilled workers were Indians. Similarly, in the cotton mills of Upper Burma Burmese labourers predominated. Even in the case of casual labourers and sweepers, the two occupations monopolised by Indians in Lower Burma, Burmans survived the competition of Indians in Upper Burma. But in Lower Burma Burmans were excluded from most occupations appertaining to the modern world.

When the agricultural sector was expanding rapidly the various races were, by and large, complementary or even necessary to make it possible for the economy to expand at such a high rate that had taken place in Burma. The indigenous people tilled the land with the finance largely of the Chettians and assisted in a certain way by the seasonal Indian labourers. Their produce, as well as the commodities they needed, were processed, transported and distributed for them by foreigners. The economy was expanding so fast that there was room for everybody. But this harmony of interests of the different races came to an end with the deteriorating condition in agriculture as a result of increasing rural indebtedness, aggravated by the large increase, beginning from 1920, in the indigenous population of young age group,^{56/} exhaustion of readily available land for expansion, world wide depression of 1930s, growth of nationalism and changing political situation. Had agriculture remained prosperous and as a relatively attractive occupation with land still available for expansion, these young men might have followed the profession of their parents and taken up cultivation. But, as it was, most of them were "forced to look for openings in the industrial labour market,"^{57/} and offered themselves for "types of work and wages that would not have attracted them in earlier decades"^{58/} However, because of little development of industries

^{56/} This large increase in the indigenous population of age group from 15 to 30 years was due to the particular age structure of the population. This possibility was foreseen by the superintendent of the 1921 Census. See CIB, 1921, Part I - Report, p : 136 and H. Bernardelli, "Population Waves", Journal of the Burma Research Society, (April, 1941).

^{57/} Ibid., pp : 2-4.

^{58/} J. Paxter, op.cit., p : 107.

new employment opportunities were extremely limited.^{59/} Whatever openings there were they found it extremely difficult to compete with the Indians who had the very important advantage of having their countrymen being in positions to help them.

Moreover, there were allegations that foreigners had deliberately obstructed the entry of Burmese entrepreneurs and Burmese labourers into industrial and commercial fields.^{60/} For example, it was often alleged that the Indian traders systematically combined among themselves to oust Burmese traders and that foreign banks practised discrimination against Burmese entrepreneurs.^{61/}

It was alleged that the Bullenger Pool had used various means to compete out small rice millers, most of whom were Burmese,^{62/}

^{59/} It may be argued that even if the industrial sector was expanding the employers might draw on the human reservoir of India for additional labour supply partly because Indian labourers were relatively cheaper than Burmese labourers and partly because the latter were not suitable for industrial employment. We have shown above that the second reason was not true. Regarding the first reason, cheap labourers might continue to be recruited from India if the open-door policy continued to prevail. But it is doubtful whether the Government could continue to follow this policy after the communal riots of 1930s.

^{60/} Cf Hagen's hypothesis that the limited participation of the Burmese people in the economic life of Burma was due to their psychological reactions, which he calls "retreatism", against alien rule. See E. E. Hagen, On the Theory of Social Change, (M.I.T., 1962), pp : 484-492.

^{61/} U Kyaw Min, Preliminary Report on New Industries for Burma, (Rangoon, 1947), p : 23 and RRBC, p : 40.

^{62/} Wealthy Burmese were not slow in responding to the opportunity of investment in rice milling industry. As early as 1880 there were two rice mills owned by Burmese. But the number of Burmese-owned rice mills increased rapidly only after the First World War, during which many Burmese rice traders had accumulated wealth. It rose from 57 in 1911 to 224 in 1921. However, most of these mills were small ones, employing in 1936 an average of 38 employees per mill as compared with that of more than 400 workers in the large European rice mills.

from rice trade. ^{63/} Whether such allegations have any foundation or not the fact remained that the conflict of interests of different races was brought to the fore during the last two decades of the period of this study, that the role of Burmese people in other sectors than agriculture, though increasing gradually, ^{64/} remained extremely limited, ^{65/} and that the process of structural adjustment to the changing economic condition was very much related to the

^{63/} The alleged methods used by the Pool to this end were (a) the manipulation of prices of paddy and rice, (b) the abuse of their power of control over seas shipping lines, (c) and the use of their influence over the Burma Railways to revise the freight rates in favour of paddy and against rice in order to deprive the small rice millers of their locational advantage of being in the rice producing area whereas the large European rice mills were at the ports. Government of Burma, Interim Report of the Committee Appointed to Enquire Rice and Paddy Trade, 1929, (Rangoon, 1932) especially chapter II and the Minutes of Dissent of Tharravaddy U Pa, pp : 39-43.

^{64/} We have already noted the increase in the number of Burmese owned rice mills. Table No. 19 shows increase in the numbers of Burmese officers in the Government Departments, which had long been dominated by foreigners. Even in Burma Railways the number of Burmese workers increased from 2600 in 1921 to 4700 in 1931. Between 1934 and 1939 the number of Burmese workers in the industrial establishments in Burma increased by 14 thousands (32%) as compared with an increase of 11 thousands (10%) of Indian industrial workers. In 1940 the General Managers of the Burmah Oil Company and the Steel Brothers reported that the Burmese was steadily replacing the Indian over a wide range of occupations. J. Baxter, op.cit., pp : 64 and 86.

^{65/} We have noted the fact that the Burmese owned rice mills were largely small ones, and that most of the Burmese rice mill labourers were employed in these small mills whereas in the large Europeans owned rice mills Indian labourers remained the dominant group. This was also true with other industries and trade. Burmese workers were mainly engaged or employed in small scale domestic industries and retail trading. The wholesale trade and foreign trade were almost exclusively in the hands of foreigners. ~~Thus~~ In Rangoon, where most of the large industrial and commercial enterprises were situated, even in 1931, 89% of the unskilled and semi-skilled workers and 70% of traders and shop-assistants were Indians. Thus Burmese were still in the periphery of modern industry and commerce in 1931.

occupational specialisation along racial lines that had taken place before. Thus the economic problem of adjustment became a serious social and racial problem, reflected in a series of social disturbances in the form of communal riots during the last decade of the period of this study.^{66/}

5. Summary.

Thus the last decade of British Rule in Burma itself provided a picture of contrasts to the effects of economic growth induced by expansion of external trade. The leading sector of the economy was then in a depressed condition, pervaded with serious economic difficulties. Its stagnant condition was reflected in the virtual cessation of the growth of paddy acreage beginning from 1930; the volume of Indian immigration dwindled to a low level with the decline in the economic activities. Burmans themselves tried to move out of the stagnant agricultural sector and the economy itself was beginning to move in the direction of the next stage of development of an export economy through the development of a few "residential" industries, producing consumers goods for the local market. However, the progress of the last two mentioned tendencies was extremely slow. In spite of the increasing participation, which has been noted above, of Burmans in the non-agricultural activities they remained, by and large, outside the sphere of modern industry and trade till the end of the period of the study. Even in the

^{66/} The Riot Inquiry Committee of 1938 believed that one of the fundamental causes of the racial riots was economic in nature and therefore it hurriedly submitted an interim report, in which the Committee devoted two of its six chapters on the examination of the economic factors. It also made the same emphasis in its final report. See Government of Burma, the Interim Report and the Final Report of the Riot Inquiry Committee, (Rangoon, 1939).

oldest industries of rice and saw milling, the Burmese owned mills were small ones and the external trade and wholesale trade were largely in the hands of foreigners.

Similarly, the progress of industrialisation was extremely slow. It has been noted in chapter I above that as late as 1931 the industrial labour force, excluding the rice and saw mill labourers, was only 0.6% of the total number of workers. One of the most important contributory factors to this slow progress in industrial development in Burma was the trend in income distribution in favour of "foreign (income-remitting) factors"^{67/}, particularly the European firms, most of which were both exporters and importers. Under conditions of free trade and a high mobility of capital between the foreign enclave and its mother countries, there was neither necessity nor incentive to invest in the manufacturing industries in Burma. Consequently, there was very little spill over^{of} the gains from agricultural expansion in Burma. This aspect is further considered in Part II.

This tended to make the situation of capital shortage in the native sector to persist. This tendency combined with the policy of open-door to the large reservoir of cheap labour in India had preserved the labour-intensive method in agricultural production. The constant technology and the diminishing returns produced a declining trend in the incomes of the agriculturists and their labourers, who also had to face constant competition for a larger share of the produce of the land from the money lenders and traders. The result

^{67/} J.V. Levin, op.cit., p : 7.

was a cumulative deterioration in the position of the agriculturists. The situation came to a head with the unfortunate coincidence of the exhaustion of land that could readily be brought under cultivation, a large increase in the young labour force and the onset of economic depression transmitted from abroad. The subsequent attempt of Burmans to move out of the stagnant and depressed agriculture was made difficult by the occupational specialisation along the racial line and the little development of industries. Thus social disorganisation followed.

This outcome was all the more tragic because it was foreseen by the local administrators from the very beginning of the opening up of the country. However, complete faith on *laissez faire*, free trade and open door policies entertained by the remote authorities, who had the power to make final decisions, had prevented from taking any determined action by the "local" Government to hold the tide of social disintegration in Burma, with the exception of a few pieces of legislation enacted during the last few years of this period. At the same time, there was no positive policy to develop the economic overhead facilities and human resources in an adequate way to provide the basis foundations that were necessary for progressive development and a sustained economic growth. In other words the course of development that we have described was to a great extent influenced by the nature of public policy. We therefore turn to examine the influences of public policy and public finance on the course and pattern of economic development in the next chapter.

Chapter III - Public Finance and Public Policy in Burma.

1. Introduction.

In the preceding two chapters we have described the trends of economic growth and income distribution in Burma between 1870 and 1940. We have noted in Chapter I that the economic expansion took place in certain favourable conditions such as absence of restrictive customs and traditions, a high degree of geographic mobility of labour, continual improvement in both the external and internal terms of trade, and absence of population explosion with economic growth. Despite these favourable factors Burma had failed to capitalise on this economic expansion to achieve a sustained growth. At the end of the period of nearly three quarters of a century of economic growth Burma remained an underdeveloped economy. Towards the end of the period the leading sector of the economy was in a state of depressed condition, with the majority of the agriculturists in serious economic troubles. They were either unable or uninterested in making significant investment to improve the agricultural productivity. Nor was there significant investment in other sectors, excepting in the mining industry, to provide outlets for making the necessary adjustments to the changing condition in agriculture. Instead of a tendency to correct this deficiency of investment in Burma, there was in fact an outflow of capital for investment elsewhere.

We have suggested that this pattern of economic development was a result of applying the laissez faire, free trade and open-door

policies to a situation where such economic policies worked in a different way from that was experienced in British^{Asia} itself. Some of the local British administrators had foreseen, at an early stage, the impending dangers of the particular course of economic and social development in Burma. However, until 1937 the seat of the authority with the power to make the final decisions on legislation and financial matters was located in India and in England. This remoteness of the ultimate authority made it ignorant of the actual conditions and prevented the "local" administration from taking any effective action to prevent the dangerous outcomes of economic stagnation and social disintegration, reflected in a series of racial riots and open rebellion against the Government towards the end of the period. It is usual, but not sufficient to explain the failure of Burma, and other underdeveloped countries which had undergone similar experience of underdevelopment after a fairly long period of economic expansion and active contact with the more developed countries, as an effect of colonialism. It is necessary to study it in more detail. In this chapter we therefore propose to consider the public policy and public finance in Burma during the period of this study.

2. Public Finance : (a) Revenue.

As has been mentioned in chapter I, with the exception of ten years from 1924 to 1934 during which the administration in North Burma was controlled from Penang, Burma under British Rule

was governed as a province of British India until 1937, when it was politically separated from India. During that period Burma had very little provincial autonomy. The Government of India exercised a high degree of control over the administrative, legislative and financial matters of Burma.^{1/} But the Government of India itself was directed and controlled by the Secretary of State for India from England. This relationship between the "local" government in Burma, the Central Government in India and the British Government had far reaching economic consequences. The local government which was in touch with local conditions and which knew the local problems and the needs of the area did not have the power to introduce the necessary legislation;^{2/} nor could it raise the necessary financial resources, either through taxes or loans, to develop the needed services and social capital. The level of taxation and changes therein were determined by the central Government in India, which in turn had only limited financial autonomy.^{3/} The general directive of

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- 1/ See J.S. Furnivall, Colonial Policy and Practice, and F.B. Leach, the Future of Burma, (Rangoon, 1937).
- 2/ In 1897 Burma was given a legislative council with nominated members only and extremely limited legislative power to pass act, with the sanction of the Governor-General, dealing with local affairs only. It was not until 1923 that the election system was introduced in the form of Dyarchy. Nevertheless, the subjects handed to the elected Ministers were only a small proportion of the whole sphere of Government activities, and the Viceroy of India continued to exercise a high degree of control over the Government of Burma. See F.B. Leach, op.cit., p : 40.
- 3/ Up to 1909 the budget estimates of India had to be presented to the British Parliament, and new expenditures of any importance required the sanction of the Secretary of State for India. See V. Anstey, The Economic Development of India, (London, 1957), pp : 267-68, and N.K. Chose, Public Administration in India, (Calcutta, 1930), pp : 25-29.

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2/ In 1897 Burma was given a legislative council with nominated members only and extremely limited legislative power to pass act, with the sanction of the Governor-General, dealing with local affairs only. It was not until 1923 that the election system was introduced in the form of Dyarchy. Nevertheless, the subjects handed to the elected Ministers were only a small proportion of the whole sphere of Government activities, and the Viceroy of India continued to exercise a high degree of control over the Government of Burma. See F.B. Leach, op.cit., p : 40.

3/ Up to 1909 the budget estimates of India had to be presented to the British Parliament, and new expenditures of any importance required the sanction of the Secretary of State for India. See V. Anstey, The Economic Development of India, (London, 1957), pp : 267-68, and A.K. Ghose, Public Administration in India, (Calcutta, 1930), pp : 25-29.

taxation, in accordance with the *laissez faire* policy, was "not to impose more taxes than was necessary for the maintenance of law and order."^{4/} Changes in the rates of taxes were made with reference to this general policy and to the needs of the Central Government in India. For example, free trade policy requires absence of customs duties and therefore in 1882 these were abolished with the exception of duties on arms and liquor.^{5/} On the other hand, the need to retain this source of finance to develop the much needed social overhead facilities and welfare services did not get sufficient attention. When these were re-imposed in 1894 it was because of the financial difficulties of the Central Government arising out of the fall in the value of rupee from 2sh. to the rupee to 1sh.2d. in 1892 as this decline greatly increased the burden of "home charges".^{6/} At the same time to safeguard the interest of the Lancashire cotton manufacturers a

4/ J.S. Furnivall, *op.cit.*, p : 49.

5/ The complete abolition of customs duties in 1882 was preceded by the gradual lowering of their rates. Before 1864 there was a general charge of 10% on all imports. In that year it was reduced to 7.5% and then again in 1875 to 5%. On the other hand the rate of Land Revenue was rising during the same period. Under the Burmese kings the customary rate of assessment of land tax was one-tenth of the value of the gross produce. The British administration raised it to one-fifth, and then in 1880 the Government prescribed a rate of one-half of net produce, which was approximately equal to one-third of gross produce. But this rate was found to be so high that in practice the prescribed rate of assessment was one-fourth of net produce. See Government of Burma, Report on the Land Revenue System of Burma, Vol. I (Rangoon, 1922), pp : 16-20.

6/ See A. Ireland, the Province of Burma, Vol. II, (Boston, 1907), pp : 522-3, and I.M. Kapoor, the Indian Currency, (Allahabad, 1959), p : 3.

countervailing Excise Duty of 5%, subsequently reduced to 3½%, was imposed on the domestic textiles manufactured in factories. The general rate of customs duties on imports remained ^{at} a relatively low level of 5% ad valorem until 1916, when it was raised to 7½%, again because of the increased budget deficit of the Central Government during the First World War. The financial difficulties and the minor depression of 1920 led to the doubling of the general rate from 7½% to 15% in 1922. But by that time, imports were divided into six classes for the purpose of customs assessment, classified on the basis of different degrees of necessities and luxuries, and also the principle of protection had been accepted. ^{1/}

Similarly, Income Tax was introduced in Burma in 1861 in connection with the financial difficulties of the Central Government at the time of the Indian Mutiny. But it was abolished in 1865. In 1867 a license tax on professions and traders was introduced, which was transformed again into an Income-tax in 1869. Again, it was abolished in 1873 and re-introduced in 1878. However, the rates of Income-tax were fixed at an extremely low level with a maximum rate of 2½% on income exceeding Rs.25,000 per annum. It was not until 1916 that the principle of progressive Income-tax was adopted. Even then the maximum rate

^{1/} J.S. Farnivall, A Study of the Social and Economic History of Burma, Part VIII, pp : 84-89, and also V. Anatey, : op.cit., pp : 346-359.

was only 6 $\frac{1}{2}$ % on incomes over Rs.25,000 whereas the average rate of Land Revenue at that time was 25% of net produce.

On the other hand, the repeated request of the rice exporters from Burma to abolish the export duty on rice to enable them to compete more favourably with the exporters of the neighbouring countries fell on deaf ears. By the end of the 19th. century export duty on rice was the only remaining export duty in India. Only when the danger of foreign competition became very serious and the rice trade was in difficulty during the Great Depression of 1930s the export duty was reduced from 3 annas to 2 annas 2 pies per mowal. Similarly, when the salt boiling industry, one of the most important industries in Burma before 1870, was threatened by foreign competition, neither the Excise Duty nor the Customs Duty on salt were revised to save the industry from ruin. The decision was based explicitly on a firm belief in the principle of free trade. The effects of these changes on the various tax revenues and their relative importance is shown in Table No. 20.

But the more important fact was that out of the limited amount of taxes that the Government of Burma was permitted to collect, a considerable proportion of it was not available for use in Burma. Between 1862 and 1872, the decade following the formation of the Province of British Burma and preceding the provincialisation of revenue, the average annual gross revenue

Table No. 20

g/
Tax Revenue of the Government of Burma, 1868 to 1941.
(Rupees in millions)

Year	Land ^{b/} Revenue	Customs Duties	Excise Duties	Income Tax	Forest	Others	Total	Land Revenue as % of Total
1868-9	6.0	2.9	1.2	0.10	1.1	1.1	12.3	48
1872-3	6.8	4.6	1.1	0.05	1.1	0.8	14.4	47
1882-3	11.0	6.6	2.3	-	2.2	2.0	24.1	48
1892-3	22.1	7.3	4.9	0.69	5.7	3.4	44.0	50
1902-3	34.5	14.5	3.1	1.22	6.7	8.4	68.5	50
1907-8	39.4	15.1	8.8	1.73	8.8	8.4	82.3	48
1912-3	44.9	20.8	8.9	1.07	11.6	10.1	98.2	46
1917-8	48.9	19.0	12.0	4.78	12.7	3.1	100.5	49
1922-3	51.4	55.6	14.4	15.41	18.3	16.9	172.0	30
1927-8	52.2	72.4	12.4	21.36	20.8	37.3	216.4	24
1932-3	40.3	94.7	8.5	16.97	9.2	45.2	214.9	19
1937-8	41.2	42.0	9.6	15.94	16.0	34.1	158.9	26
1941-2	47.4	58.2	12.2	29.59	16.4	59.3	223.1	21

Source : J.S. Furnivall : Material for Studying the Social and Economic History of Burma, Statistical Appendices : (mimeographed).

a/ Up to 1882-3 for Lower Burma only.

b/ Land Revenue includes ordinary Land Revenue, Capitation Tax, Phathameda Tax, Fisheries Licence fees and Land Rate.

was £1008 thousands but the gross provincial charges were £631 thousands, giving an average annual surplus of £457 thousands (about 43% of the gross revenue) which were available to meet the military expenditures, posts and telegraphic expenses in Burma, and the balance went into the Imperial treasury. After the provincialisation of revenue the "drain"^{g/} continued in the form of Imperial or Central

g/ Indians themselves had put forward the "Drain" thesis based on the large amount of "Home Charges", which India had had to send to England. Anstey has given a short account of the debate on this matter. See Anstey, op.cit., pp : 559-601.

Table No. 21

Gross Revenue Receipts of Burma 1872 to 1936.
(Rupees in millions)
(Annual Averages)

Year	Imperial	Provincial	Local	Total	(1) as % of (4)
	(1)	(2)	(3)	(4)	(5)
1872 - 1877	14.5	0.4	1.5	16.4	88.6
1878 - 1882	13.2	8.5	3.0	24.7	53.3
1883 - 1887	14.1	12.8	4.1	30.9	45.4
1888 - 1892	26.3	15.1	5.8	47.1	55.6
1893 - 1897	34.0	20.9	6.6	61.5	51.5
1898 - 1902	38.6	34.7	9.5	78.9	48.9
1903 - 1907	45.5	39.8	17.0	102.3	44.4
1908 - 1912	38.7	47.3	24.0	110.0	35.1
1913 - 1917	39.4	57.4	25.3	122.0	32.3
1918 - 1922	58.2	71.2	30.6	150.1	36.3
1923 - 1927	88.2	98.5	32.1	218.8	40.3
1928 - 1932	98.0	114.4	41.3	253.7	38.6
1933 - 1936	116.8	97.8	42.3	256.9	45.4

Source : J.S. Furnivall : Materials for Studying the Social and Economic History of Burma, Statistical Appendices (mimeographed).

revenue; the extent of the drain is shown in Table No. 21.

It has been pointed out by Sir Herbert White, who was the Lieutenant-Governor of Burma from 1905 to 1910, that being a province of British India it was "fair and right" that Burma should contribute to Imperial needs. But what was unfair was the fact

^{9/} Sir Herbert Thirkell White, A Civil Servant in Burma, (London, 1913), p : 290.

that inspite of her relatively backward state of public works as compared with other provinces of India Burma was required to make a contribution "greater in proportion to its population than that of any Province" and that from Burma alone the annual subvention tends to increase^{10/}. Thus the allegation that Burma was made a milk cow of India was frequently made^{11/}.

This "drain" in the form of Imperial Revenue generated secondary round of "drain" in the form of interest payments for loans which had to be borrowed for whatever "small increases in the capital equipment of the country such as irrigation works, Government dockyards" etc.^{12/} The total amount of capital outlays on the major irrigation works between 1896 and 1913 was Rs. 19 millions^{13/}, which was about 2.7% of the total amount of Imperial Revenue during the said period. Similarly, the cumulative total capital expenditures on railway construction between 1877 and 1890, when the main trunk lines had been completed, was Rs. 92.5 millions, which was only about 2% of the total Imperial Revenue of the same period. Thus even if only some portion of Imperial Revenue were available for these expenditures the heavy burden

10/ Ibid., p : 290.

11/ See J. Hisset, Burma Under British Rule and Before, Vol. I. (London, 1901), p : 260, and M. Shahn, op.cit., pp : 151-152.

12/ SIRRE, p : 13.

13/ Government of Burma, Descriptive Account of Irrigation Works in Burma, (Rangoon, 1914).

of interest charges would have been avoided. These amounted to about Rs.5 millions (Rs.4 millions for the railways and Rs.1 million for irrigation works), which were approximately equal to the amount of the Provincial expenditures on Education during the quinquennium ending 1924. And these loans became a debt of Burma owed to India when they were separated and therefore when Burma was to start on its own she had to begin with a heavy burden of debt. The Fiscal Committee of 1938 believed that because of this heavy debt burden Burma would lag "behind other more favourably situated countries in her educational, health and economic development in so far as advancement depends on government credits."^{14/}

2. (b) Public Expenditures.

If taxation and changes therein in Burma were made primarily with reference to the needs of the Central Government in India and within the framework of the general policies of laissez faire and free trade, the distribution of Government expenditures in Burma "among the various services was faulty"^{15/} in the sense that a disproportionately large amount was expended on general administration as it can be seen from Table No. 22, which shows that the expenditures on general administration was comparatively large. If we conclude the charges of revenue

^{14/} SERFC, p : 14.
^{15/} Ibid. p. 19

Table No. 22

Expenditures of the Government of Burma.

(Annual Average)

Expenditures	1901 to 1904		1920 to 1924		1937 to 1939	
	Rs.(000)	%	Rs.(000)	%	Rs.(000)	%
Law and Order	17,253	39.6	37,092	35.2	48,498	38.9
Revenue Collection	9,672	22.1	18,193	17.2	19,240	15.4
Education ^{a/}	1,139	2.6	5,840	5.5	9,411	7.6
Medical and Public Health ^{b/}	899	2.0	4,187	4.0	5,706	4.6
Agriculture and Veterinary	N.A	N.A	1,495	1.4	1,693	1.4
Industry	N.A	N.A	247	0.2	212	0.2
Irrigation	1,676	3.8	2,584	2.5	204 ^{c/}	0.2
Civil Public Works	10,289	23.6	21,604	20.5	12,516	10.1
Others	2,577	6.3	14,006	13.5	27,016	21.6
Total Expenditures	43,505^{d/}	100.0	105,245^{d/}	100.0	124,516^{e/}	100.0

Sources : RAB, Annual Financial Statements of the Government of Burma, 1939-40.

Notes :

- (a) Includes expenditures out of Provincial Funds only. Other sources of educational finance were Municipal Funds, Cess Funds and other sources, which consisted of expenditures incurred by private persons and bodies. Between 1900 and 1940 contributions from the Provincial Funds averaged 70% of Public Funds (i.e. Provincial Funds, Municipal Funds and Cess Funds) and a little below 50% of total educational expenditures from all sources. See U Kaung, "A Survey of the History of Education in Burma, Before the British Conquest and After", Journal of the Burma Research Society, (December 1963).
- (b) This also includes only Provincial expenditures. In this case local funds were more important sources of finance than the Provincial Funds e.g. during the quinquennium ending 1924 the average annual expenditures of the local bodies on public health was Rs.9.7 millions as compared with Rs.4.2 millions from the Provincial Funds.
- (c) Expenditures on construction only.
- (d) Excludes expenditures on railways.
- (e) Excludes expenditures on railways, defence, frontier forces, and currency adjustment with Federated Shan States.

collection as part of the expenses of general administration, it took about 60% of the total expenditures at the beginning of the century and it did not fall below 50% even in the later period. Moreover, Civil Public Works was mainly concerned with the construction and maintenance of court houses, police stations, jails etc. and therefore its expenditures should also be considered as part of administrative expenses. On that basis expenditures on general administration came to be more than 85% at the beginning of the century. On the other hand, expenditures on national building work such as those on education, public health, industry and irrigation were extremely meagre. It is true that political stability and security are the more important essential pre-requisites for economic development of any country^{16/} but the fact was that the expenditures on general administration were unduly high in Burma partly because of the wasteful expenditures^{17/} and partly because of the unduly high salary scale of civil servants, especially those of the superior services.^{18/} Against these points of view it has been argued that the British senior officers had "consistently set a tone and a standard of public duty in keeping with high

^{16/} Cf G.C. Allen and A.G. Dorritthorne : Western Enterprises in Indonesia and Malaya, p : 266, and see also J.R. Andrus, Burmese Economic Life, p : 323.

^{17/} B.O. Birms, op.cit., p : 105.

^{18/} SIRPC, Chapter II. It has also been pointed out that the high pay scale of senior officers produced a process of upward attraction of the pay of numerous intermediate services. See G.E. Harvey, op.cit., p : 33.

British conditions of state service.^{19/} However, if their efficiency and achievements were to be judged on the basis of crime in the country, the facts show that they had failed miserably. The incidence of murder in Burma had remained not only high but was also increasing during the period of this study; it rose ~~£~~ from 30 per million people in 1921-5 to 60 per million people during 1926-30.^{20/} It is possible to argue that if it were not for the highly paid British administrators the situation could have been much worse than they were. But it has also been argued that the high rate of crime was in fact "caused by British Rule,"^{21/} a result of particular economic policies followed by the Government, and for which the people of Burma was made to bear the burden of expensive administration which they could not afford. In any case, the fact remains that the expensive administration had left very little resources to the Government for infrastructure investment and for providing nation building services. Thus at the end of the period of this study Burma remained a capital deficient country,^{22/} in many ways. For example, in 1940 she had only 8 miles

19/ See J.L. Christian, Burma and the Japanese Invader, (Bombay, 1945), p : 99.

20/ G.H. Harvey, op.cit., p : 40.

21/ Ibid, pp : 38-40, and also see Parnivall, Colonial Policy and Practice, pp : 137-141.

22/ The phrase "low level of capital in the underdeveloped countries" is usually used to indicate a situation of low level of social capital such as roads etc., or at least the usual examples given for illustration were mainly in this form. See e.g. P.Y. Bauer and B.S. Murry, The Economics of Underdeveloped Countries. (Chicago, 1957), pp : 113-114.

of railways and 13 miles of metalled roads per 100 thousand persons.^{23/} Just to contrast the extreme deficiency of this form of social capital we may compare with the corresponding ratios of 134 miles of railroads and 2200 miles of roads per 100 thousand persons in the United States at that time.

Similarly, there was extreme deficiency of another form of social capital which is very important to an agricultural country like Burma viz the irrigation canals. In spite of the regularity of the monsoon Burma was in great need of a net work of irrigation system because the reliance on rains led to seasonal unemployment and uncertainty in agricultural production. For example, in 1924 it was estimated that in the ten districts of paddy area about 3 million acres out of 6.7 million acres of paddy land were liable to floods every year. Although serious crop failure due to wide spread floods and drought had never been a menace in Burma as in India, a slight variation in the amount

^{23/} Even these limited lengths of railways and roads were built not primarily to meet the economic needs of the country. For example, the first railway lines from Rangoon to Prome was built to provide relief work to the famine victims of Bengal. The second lines from Rangoon to Taungoo was constructed almost solely for military reason and then after the annexation of Upper Burma, the railway lines were hurriedly extended to the Chinese frontiers mainly for security reason. In the case of roads, between the occupation of Lower Burma and 1930 only about 2000 miles of metalled roads had been constructed; but in the following decade of 1930 and in spite of the economic depression more than 1000 miles of metalled roads were added. The main reason for this spurt of road construction activities during 1930s was military rather than economic, external factor rather than internal requirement of Burma for economic development.

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Handwritten notes in Burmese script, including the word 'ရေ' (water).

and the time of rain would make great difference to the output of the crop. Thus in 1925 the output from about 11.3 million acres of paddy land was 7.4 million tons but for approximately the same area in 1932, the output was only about 6 million tons, a decline of nearly 20% simply due to the failure of late rains. Furthermore, there was a large area of Dry Zone in Central Burma which was in dire need of water, not only for cultivation but also for domestic uses. But the Government canals supplied water to 0.1 million acres out of the total occupied area of 4 million acres in that area. For the province as a whole, the Government canals supplied water to 0.6 million acres out of a total occupied area of 19.5 million acres. This extremely limited facilities in irrigation was all the more surprising because returns on investment in irrigation were by no means poor. For example, between 1910 and 1920 the average annual net revenue of the Shwabo Canal was 8% of the capital outlays.^{24/} Now again one of the reasons for this state of affairs was the remoteness of the authority concerned because Irrigation was a Central subject until 1921 and the Central Government was frequently criticised for not spending more on irrigation.^{25/}

Other important forms of social outlays relate to education and to the provision of medical services and of sanitary facilities.

^{24/} Government of Burma, Administration Report of the Public Works Department, Burma (Irrigation Branch) for the year 1921-22, pp : 35-38.

^{25/} V. Anstey, *op.cit.*, p : 162. But she also has pointed out other limitations than the financial one regarding the promotion of irrigation facilities.

We will consider the Government activities in education together with its policy in a later section. Medical and public health facilities in Burma were extremely meagre although the needs for them became greater with economic growth. This was because at the early stage of economic development conditions of health tended to deteriorate. Some of the contributory causes to this tendency were the rise of urban concentration of population, the unhealthy conditions of work and of life of the low-income workers, the greater chances and speed of spreading of diseases, especially the diseases of poverty, as a result of improvement in the means of transportation. Particularly, in Rangoon the living condition of Indian labourers was atrocious ^{and} attracted frequent comments. ^{26/} Even towards the end of the period of this study the condition of mortality of the country was appalling, with an estimated death rate of 34 per thousand ^{27/} and an infant mortality rate of over 200 per thousand, which was one of the highest recorded figures in the

^{26/} Government of Burma, Report of the Rangoon Labour Housing Conference, (Rangoon, 1933), and E.J.L. Andrew, op.cit., chapters 19 and 20.

^{27/} The official vital statistics give the average death rates for the three decades beginning from 1900 as 24.6, 26.5 and 20.2 per thousand. But the public health officials themselves had admitted that these rates were grossly under-estimated. We therefore use the method of stable population as developed by the demographers of the United Nations (U.N. Population Studies No.26, (New York, 1956), pp : 23-27) to make an estimate of the death rate in Burma. We confine our calculation to the indigenous population as the sex and age composition of foreigners in Burma was abnormal. The successive censuses following that of 1901 show a remarkable stability in the age structure of the indigenous population with about 40% of the population in the age group from 0 to 14 years. The average annual growth of indigenous population between 1901 and 1931 was 1.2%. A stable population with these characteristics, according to this method of calculation, will show a birth rate of 48 per thousand and a death rate of 34 per thousand and the latter is a plausible one because it is consistent with an infant mortality rate of 200 per thousand.

world. What was more important was the fact that the infant mortality rate was not only high, but also it did not show any sign of decline between 1900 and 1940.^{28/} Despite these alarming health conditions, the extent of the medical and public health services provided by the Government was extremely limited and was increasing very slowly. At the beginning of the century there was only one Government doctor to 54 thousand persons and this ratio remained more or less the same in 1940. In 1937 there were 495 Government doctors out of a total of 1565 registered medical practitioners in Burma.^{29/}

On matters relating to public health and sanitary facilities "the Government had repeatedly insisted that people should pay for their municipal requirements,"^{30/} and that "funds could not be spared from the Imperial and Provincial revenues, and the care for sanitation devolved on local funds which could do little more than maintaining the existing arrangements for conservancy"^{31/}. Thus as late as in 1931 piped-water supplies were available only in 16 towns out of a total of 58 towns with municipalities, and only in some parts of Rangoon there was water-carriage sewage system. Although some good work had been done in preventive medicine, especially in vaccination against small pox and the control of

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- 28/ Government of Burma, Report on the State of Public Health in Burma during 1947, (Rangoon, 1950), Vital Statistics, Chart I.
- 29/ Government of Burma, Notes and Statistics on the Hospitals and Dispensaries in Burma and Reports on Hospitals and Dispensaries in Burma.
- 30/ J.S. Furnivall, A Study of the Social and Economic Development of Burma, Part III, p : 21.
- 31/ Ibid, Part V, p : 64.

^{32/} malaria, sanitary systems even in the urban area were extremely inadequate and backward, ^{33/} whereas in the rural area, where local self-government was introduced only in 1923 in the form of District Councils, even such backward amenities were absent.

The inadequacy of the social overhead facilities provided by the Government was generally recognised. Thus in 1869 the then Chief Commissioner of Burma complained to the Government of India that "beyond the mere fact of our military possession of the country..... there is hardly anything in the length and breadth of the Province to testify the presence of any rule superior to the one from which it has been wrested..... Of barracks, of jails, of court houses we have not a few, but as for Public Works, in the true sense of the word, they are only now being called in existence."^{34/} But the action taken to bring the Public Works into existence continued to be so restricted that Furnivall contended that in 1923 the same complaint could be made without much exaggeration.^{35/} The limited state activities in these matters were usually attributed to the financial stringency and to the limited taxable capacity of the people. But we have seen that a fairly large proportion of the

^{32/} The average death rate of cholera declined from 2 per 1000 in 1880s to 0.25 per 1000 during 1930s, the average death rate of small pox declined 0.5 per 1000 during the second half of 1890s to about 0.05 during the second half of 1930s; and the plague which broke out in 1905 had an average death rate of about 0.75 was reduced to less than 0.2 in 1930s. The combined death rate of these epidemic diseases was taken as the Epidemic Index by the Public Health Department, and it declined from 1.85 in 1905 to 0.48 in 1921 and further to a still lower to 0.21 in 1931. Government of Burma, Reports on the Public Health Administration of Burma.

^{33/} Government of Burma, Sanitary Organisation and Development in Burma, (Rangoon, 1915).

^{34/} EAB, 1868-69, p : ix.

^{35/} J.S. Furnivall, Colonial Policy and Practice, p : 202.

total revenue was not available for use in Burma.

2. (c) Incidence of Taxation.

The large amount of contributions annually paid to the Central Government in India and the expensive administration in Burma naturally imposed a heavy burden of taxation on the people in Burma inspite of the general directive to keep the level of taxation low in accordance with the laissez faire policy. Furnivall contended that the incidence of taxation in Burma was double that of any British possession in the East.^{36/} Among the provinces of India Burma ranked very high in respect of burden of taxation. In 1923-24 per capita incidence of taxation in Burma was Rs.14-10 annas which was the second highest among the provinces of India, and it was about eight times that of the Province of Bihar^{37/} and 2.3 times that of the whole British India.^{38/} Table No. 23 shows the proportion of tax revenue to national income of British India and of Burma for selected years between 1901 and 1938.

And up to 1920 the greater part of this heavy burden of taxation fell directly on the agricultural sector in the form of Land Revenue^{39/} which includes Capitation Tax and Thathameda Tax, which were not only regressive but also inequitable and obnoxious.

^{36/} Ibid, p : 52.

^{37/} Government of Burma, Report of the Capitation and Thathameda Taxes Enquiry Committee, 1926-27, (Rangoon, 1927), p : 5.

^{38/} Per capita incidence of taxation in Bihar was Rs.1-12 annas. Per capita incidence of taxation for British India in 1923-24 was Rs.6-4 annas, Statistical Abstract for British India, Sixty-fourth Number. Cmd 4109 (London, 1932).

^{39/} There was a controversy whether land revenue was a tax or rent which was paid to the Government as the owner of land. See Anstey, op.cit., 376.

Table No. 23

Proportion of Tax Revenue to National Income of British
India and Burma.
(Revenue and National Income in millions of rupees)

Year	British India		Total Revenue as % of National Income	Burma	
	Total Revenue a/	National Income		Total Revenue a/	Total Revenue as % of Net Domestic Product.
1901-02	620	6703	9.2	75	13.0
1906-07				103	16.2
1911-12	874	19420	4.5	115	13.9
1916-17				118	11.2
1921-22	1486	25980	5.7	178	13.5
1926-27				231	12.8
1931-32	1589	16891	9.4	251	22.6
1936-37				242	21.7
1938-39	-	-	-	190	18.9

Source : RAB, Statistical Abstract for British India, G.F. Shirras, the Science of Public Finance, (London, 1925), V.K.R.V. Rao, National Income of British India, 1931-32.

a/ Includes Central, Provincial and Local Revenues.

*
Land Revenue was regressive because the rate of tax fixed per acre did not vary with the level of agricultural income and there was no exemption level. Moreover, the incidence of Land Revenue in Burma was heavier than in other provinces of India. For example, at the beginning of the century the Land Revenue rate in the Punjab and Berer provinces was 7% of the average value of produce, which was about 10% of the net produce ^{40/} as compared with 25% in Burma. Burma was also often quoted as a province of high per capita incidence of

40/ 20% of the average value of the produce is approximately equal to 20% of gross produce, one third of gross produce is approximately equal to one half of net produce and therefore 7% of the average value is approximately equal to 10% of the net produce. See Government of India, Land Revenue Policy of the India Government, (Calcutta, 1902), p : 21.

^{41/} Land Revenue. In addition to the Land Revenue proper there was a 10% Cess on Land Revenue as local rate for the local bodies and its incidence was also higher than the rates then prevailing in other provinces. ^{42/}

The two minor taxes classified under the main Head of Land Revenue, viz. Capitation Tax and Thathameda Tax, also fell mainly on the rural population. The former was a poll tax assessed in Lower Burma only and the latter was a household tax assessed in Upper Burma in lieu of the Capitation Tax. Because of the obnoxious nature of these taxes and the difficulties in collecting them the Government of Burma made frequent representation to the Central Government in India to abolish the capitation tax. Instead of complete abolition, exemption was given to the peoples of certain towns, which added insult to the injury because a great proportion of urban population was foreigners.

On the other hand, the burden of taxation falling on the foreigners and the foreign enclave was relatively light. For instance, the rates of Customs Duties on the imports of luxuries, which were mainly consumed in the urban areas, were not higher than those on necessities until 1914. Similarly, the principle of progression was introduced in the Income Tax only in 1916; even then the maximum rate was only 6.25% of the taxable income. The Bombay Burmah Trading Corporation paid only "a ridiculously low rate of royalty" for

^{41/} See V. Anstey, *op.cit.*, p : 374; she gives a quotation from Mr. Pillaisaya's Economic Condition in India, to the effect that incidence of per head of Land Revenue in Bengal was 11 annas as compared with Rs.5-6 annas in Lower Burma.

^{42/} Land Revenue Policy of the Indian Government, pp : 29-30.

their timber extraction. ^{43/} The average rate of royalty was 12% of the value of the produce which may be compared with 25% of the net produce in the case of Land Revenue. Similarly, Burma's mineral production, which also was dominated by the British firms, was said to have not been "taxed heavily". ^{44/} And it was also generally be-
^{45/} lieved that some of the foreign firms escaped taxation lightly.

In other words, although the burden of taxation in Burma was comparatively heavier than most of the other provinces of India, there was still some scope for increasing the much needed revenue of ^{46/} the Government for nation building work through increased taxation with more progressive Income Tax, on luxury consumption, on urban population and on the foreign enclave. This was not done not only because finance was a reserved subject of the Central Government, but also because of the fact that the officials in Burma were not responsible to the electorate and therefore there was no pressure

^{43/} J. Misbet, op.cit., Vol. II, p : 79.

^{44/} J.R. Andrus, op.cit., p : 131.

^{45/} G.E. Harvey, op.cit., p : 59.

^{46/} Although the usefulness of the concept of taxable capacity has been questioned, particularly because of its neglect of the effects of public expenditures, the ratio of taxes to national income is a convenient rough indicator of scope for taxation. Table No. 23 on page 104 above shows that until the last decade of 1930 the proportion of tax revenue to national income of Burma was well below 25%, which was regarded as the "critical limit" of taxation by Colin Clark. The percentages given in the above mentioned table may also be compared with the overall burden of taxation in Japan, a country with extensive state activities in her economic development, between 10% to 15% of national income during the inter-war period. Lockwood believes that this ratio was higher in the earlier years. For the year 1913-14, Shirras put it at 18.2%. See Colin Clark, "Public Finance and Changes in the Value of Money", Economic Journal, (December, 1945), p : 376, R.A. Musgrave, the Theory of Public Finance, (New York, 1959), pp : 51-57, W.W. Lockwood, the Economic Development of Japan, (Princeton, 1954), pp : 525-526, and G.F. Shirras, op.cit., p : 677.

on them to seek additional financial resources for developmental work, resulting in a tendency to shelve nation building projects on plea of financial stringency.^{47/}

3. Public Policy : (a) Agriculture.

So far we are mainly concerned with the short comings of such Government activities as the provision of social overhead facilities, which were accepted, even under a policy of laissez faire, as the responsibility of the Government in an underdeveloped country. But this basic economic policy underwent some changes towards the end of the century reflecting the changing attitude in England^{48/} on the role of the State in economic affairs and the changing economic situation in Burma. These changes involved increasing State intervention in economic affairs to correct the undesirable consequences, such as growing inequality between different social groups, arising from the working of the economic forces in a free enterprise system in the setting of a plural society. Consequently measures under the new Liberalism, as the new policy is often called, included, among another things, (a) to protect the weaker party, the majority of which happened to be Burmans, from undue economic disadvantages in the unequal struggle under conditions of economic freedom, and

^{47/} D.G.E. Hall, Burma, (London, 1950), pp : 151-152.

^{48/} Ashworth puts 1870s as the end of the era of laissez faire in England. For a few generations before that time there had been increasing interferences by the State in economic affairs. See W. Ashworth : An Economic History of England, 1870-1939 (London, 1960) p : 216. Similarly in Burma the policy of laissez faire was said to have given way to a policy increasing State intervention from the second half of 1890. See Furnivall, op.cit., p : 71.

(b) to give them financial and technical assistance to promote economic efficiency. In anticipation of our general conclusion we may mention that in these matters, as in the case of the previous state activities, the action of the Government was extremely inadequate and ineffective. The main reasons for the limited and ineffectual action of the Government can be attributed to the same reasons viz the lack of a popular government, of provincial autonomy, the remoteness of the centre of control, and above all the particular pattern of economic development.

Since agriculture remained as the main sector of the economy throughout the period of this study, we begin our considerations of public policies with those relating to agriculture. The policy of the Government was to create peasant proprietorship in Burma, but as early as 1830, only a decade after the opening of the Suez Canal and the beginning of the rapid colonisation of the Delta, the tendency of land alienation from the agriculturists to the non-agriculturists became apparent. Being contradictory to the general policy and also because of other attendant consequences, this process was regarded as undesirable by the local administrators and therefore recommendations were made to the Central Government to stop this development by making the transfer of land to non-agriculturist more difficult. To this end the Burma Agriculturists Relief Bill was drafted and submitted to the Central Government in 1891. But the Government of India postponed the consideration of the bill as it was awaiting for a report on the working of a similar Act in another province in India. In the mean time the Burma Government made new suggestions in 1894 but no reply was received from

India. Then in 1906 a new draft bill was submitted to India. It was leisurely examined and in 1912 the Government of India decided to drop the bill on the ground of interfering with the right of property and on an administrative reason that a satisfactory working definition of "agriculturist" could not be made. This matter remained untouched until 1931, although there were surveys and discussions of this problem from time to time. In that year a bill on the lines of 1906 was again proposed and in spite of the serious agrarian unrest in certain parts of the country the bill was dropped in the name of "freedom of contract". In 1938 the Land and Agriculture Committee reported that "where bargaining power between two opposing classes is disproportionate, it is often in the interest of the country as a whole that the State should intervene by legislation to protect the weaker side.^{49/}" By that time Burma had been separated from India and a responsible Government had been elected. Thus the Land Alienation Act of 1939 was passed to prevent further permanent alienation of land from the agriculturists to the non-agriculturists. Also attempts were made to remedy the lack of action in the past through the enactment of the Burma Land Purchase Act of 1941, under which the Government was to purchase land for "allotment in small holdings to agriculturists", so as to restore their lost land to the agriculturists. Indeed, it took a long time to translate the policy of new Liberalism of protecting the weaker group from the stronger ones into practice.

^{49/} RIAC, Part II - Land Alienation, p : 57.

The above story of land alienation legislation could equally be used, *matatis mutandis*, to describe the history of tenancy legislation. The increase of non-cultivating land-owners resulted in the tenancy problems such as insecurity of tenancy, rack rent, neglect of land improvement, decline in the yields etc. The first tenancy bill was drafted in 1892, one year after the drafting of the first land alienation bill. It provided that tenants be given the option to buy land back from the non-cultivating land-owners. This measure was considered too extreme and the bill was dropped. Thereafter tenancy bills were drafted on three occasions, in 1896, 1900 and 1906. The last bill was placed before the Legislative Council in 1908 and it received strong opposition from the Council which mainly represented the capitalist interest. ^{50/} As in the case of land alienation bill, the Government considered the bill leisurely and half-heartedly until 1914 when it was decided to file it as a matter which did not require urgent consideration. ^{51/} Two more attempts were made in 1927 and 1937, and as in the case of land alienation it was only in 1929 that a Tenancy Act was successfully enacted. In short, inspite of the change in the basic policy of the Government from pure *laissez faire* to one of protecting the weaker group in an unequal struggle, not much really was done to protect the weak cultivators from the money lenders, traders and land-owners, until close towards the end of the

^{50/} There were nine members in the Legislative Council; five of them were officials and four non-officials, of which two Europeans were elected by the European business community; the third member was a former official of the Burmese King and the last one was the Sawbwa of Hsipaw. Burma Civil List, 1910, and see also Furnivall : op.cit., p : 63.

^{51/} RIAC Part I, Tenancy.

period of this study. The course of economic development in Burma might have been different if these measures had been adopted earlier.

The other aspect of agricultural policy relates to the rendering of assistance, both financial and technical, to the cultivators to strengthen their position. Here again the efforts of the Government were far from being adequate. For instance, being aware of the importance of availability of agricultural credit at reasonable rate of interest the Government was empowered as early as 1883 to provide agricultural credit to the cultivators under the Land Improvement Loans Act of that year; in the following year the Government was also given power to lend seasonal loans under the Agriculturists Loans Act, and then in 1904 co-operative credit societies were introduced into Burma. However, the basic idea of the Government in the provision of agricultural credit was to provide relief in time of distress and to "fill, in a very small degree, the gap due to the absence of a comprehensive system of credit institution,"^{52/} but not to supplant the private sources of credit. Thus even in 1920s the average amount of loans issued under the Agriculturists Loans Act was only about Rs. 2 millions a year whereas the estimated total requirement of seasonal loans was Rs. 200 millions.^{53/} There was very little use of the long term credit provided under the Land Improvement Loans Act. As for the co-operatives, they had some degree of success in Upper Burma until 1924, but in Lower Burma indebtedness of the agriculturists

52/ RIAC, Part III, Agricultural Finance, Colonisation and Land Purchase, p : 82.

53/ RBIC, p : 76.

continued to grow. And the money lenders were free to extract as high rate of interest as possible. It was not until 1940 that a draft bill to control the money lenders was drawn up but it did not become an act before the Second World War.

To provide technical services and information, the Department of Agriculture was organised in 1906.^{54/} However, in this field also the action of the Government was extremely limited. Up to 1920, after fifteen years of its inception and more than fifty years of rapid agricultural expansion in the country, the Department of Agriculture remained a "skelton department".^{55/} Even in 1930 there were only 68 Senior Agricultural Assistants, who were supposed to do the extension work of disseminating information and providing technical services. Moreover, about half of them were stationed in experimental farms and therefore only about 35 Senior Agricultural Assistants were available to do the work of assisting and guiding 2.6 million agricultural households living in more than 25,000 village tracts. Therefore there was only one extension officer to every 75,000 households or to 600 village tracts or 600,000 acres. This may be compared with the recommendation of the Rice Export Trade Enquiry Committee of 1937 for a ratio of 100,000 acres per

^{54/} See Government of Burma, Agriculture in Burma, (Rangoon, 1927), p : 28.

^{55/} Government of Burma, Report of the Rice Export-Trade Enquiry Committee, (Rangoon, 1937), p : 44.

Agricultural Assistant.^{56/} Therefore the Fiscal Committee of 1938 suggested that "the Government has no real interest in agricultural development."^{57/} The Department of Agriculture was not only extremely small in relation to its tasks, but also it was "starved of fund"^{58/}. Although the Department had done some good work such as the introduction of better strains of paddy, cotton and sugar cane agricultural production remained extremely backward. Nor had the condition of marketing improved by any significant extent. Some attributed these unsatisfactory results to the "easy-going and conservative" nature of the cultivators. Furnivall had argued that it was due to the social disintegration in Burma. He explained that in cases where the innovations, whether a new crop or an improved method, increased the gains on individual basis, these were readily adopted by the cultivators as in the case of groundnut and onion. But in cases where the gains could be reaped only through the collective or co-operative action, then the "atomisation of the native social life"^{59/} had made it difficult to get favourable results.

^{56/} Ibid. p : 48. However, it may be mentioned that the small number of agricultural officers might have been able to achieve significant improvements if more effective means were used to disseminate the technical information. For example, the publications of the Department of Agriculture were almost exclusively in English. Since very few cultivators could read English, these useful informations did not spread much beyond the few professional officials. In this connection the experience of Japan is interesting, where the publications of the Department of Agriculture were in Japanese and distributed to the farmers, with whom the Department established two-way channels of communication. See J. Dore, "Agricultural Improvement in Japan, 1870-1900", in Economic Development and Cultural Change, (October, 1960), pp : 73-74.

^{57/} SIRFC, 1938, p : 206.

^{58/} Ibid., pp : 206-207; see also B.O. Birms, op.cit., p : 61.

^{59/} J.S. Furnivall : op.cit., p : 326.

In view of the high degree of response of the Burmese cultivators to new economic opportunities as reflected in the rapid expansion of cultivation and the acceptance of new varieties of crops, it is difficult to accept such sociological explanation as adequate to account for the failure of the Department of Agriculture to raise agricultural productivity in Burma. Low productivity in agriculture was essentially due to the primitive nature of the method of cultivation, which was labour~~ing~~-intensive and in which there was very little use of artificial fertiliser. It has been shown in chapters I and II how the method of cultivation was influenced by the influx of cheap labourers and that the changes in the method of cultivation were, in fact, in the direction of labour-intensive cultivation. On the other hand, the relative abundant supply of land for the greater part of the period of this study and the high rate of interest in the agricultural sector made it uneconomic, as well as unnecessary, to make land-saving investment, such as the use of artificial fertiliser^{60/}. In other words, backwardness and low productivity in agricultural production were largely a reflection of factor proportions and relative factor prices^{61/}. It has also been shown that at first Burma was a labour-scarce country and it was converted into a labour-abundant country as a result of the open-door policy of the Government. We will therefore turn to consider this important matter of open-door policy.

^{60/} Wickizer and Bennett contend that one of the main reasons for low utilisation of fertiliser in Southeast Asia was the high rate of interest on agricultural credit, which were indispensable for the purchase of fertiliser if the farmers wanted to apply it. See V.D. Wickizer and M.K. Bennett, the Rice Economy of Monsoon Asia, (Stanford, 1941).

^{61/} Cf: Chi-Ming Hou, "Economic Dualism, the Case of China, 1840-1937", the Journal of Economic History, (September, 1963), pp : 290-292.

3. (b) Labour.

From the very beginning of the occupation of Burma the British administrators believed that it was in the interest of Burma for her economic development to increase labour supply,^{62/} and this belief was held throughout the period of this study.^{63/} Even in 1940 Baxter contends that the then population of Burma fell short of "the optimum density which would make possible the economic provision" of the various kinds of social capital and welfare facilities, and "the minimum requirements for the development of industry"^{64/} in Burma. However, he was also aware of the restrictive tendency on the economic opportunities for the Burmese people resulting from foreigners economic domination, especially in the non-agricultural sectors. This had been the main concern of the Burmese people and the question of Indian immigrants was brought to the forefront as early as 1916 when the idea of separation of Burma from India emerged,^{65/} its importance and interest in it grew with the growth of nationalism in Burma. Therefore, despite his general conclusion on the role of Indian labour for the economic development of Burma, Baxter recommended that steps be taken to control Indian immigration into Burma. But the Government of Burma was prevented from imposing any additional restrictions on Indian immigration for a period of three years from 1937, when Burma was separated from India, by an Order in Council (issued)

^{62/} See J.S. Furnivall, "the Fashioning of Leviathan, the Beginnings of British Rule in Burma," the Journal of the Burma Research Society, (April, 1939), p : 15.

^{63/} There was at least one exception to this general statement. For example Furnivall believed that low wages and plural society were the chief causes of social disintegration and the deterioration in the economic condition of Burma under British Rule.

^{64/} J. Baxter, op.cit., p : 95.

^{65/} Government of Burma, Interim Report of the Riot Inquiry Committee, p : 23.

issued under the Government of Burma Act of 1935^{66/}. At the end of the three year period in 1941 an agreement was reached between Burma and India on the matter of Indian immigration, but nothing of consequence was done before the Second World War. Therefore, the open-door policy ended just before the close of the period of our study.

The other aspect of labour policy was the protection of labour and the promotion of labour welfare. Since Burma was an agricultural country with very little development of industry, the majority of the population was self-employed cultivators and therefore they would not come under the definition of labour in the ordinary sense of the word. However, as it has been noted in chapter II, there was a considerable number of agricultural labourers employed either on seasonal or casual basis for particular agricultural operations, and their number increased with the growing rural indebtedness and increasing land alienation to the non-cultivating land-owners. They were underpaid and sometimes when crop failed they did not get their wages. Therefore, it had been suggested that the possibility of fixing minimum wage, of giving them a right, through legislation, to have a charge on the crop^{67/} and of assisting them to become land-owners should be considered.^{68/} But nothing had come out of these suggestions.

66/ The right of Burma to restrict the entry of foreigners, including the British subjects, was recognised under Section 44 of the Government of Burma Act of 1935, but a condition was imposed on the exercise of this right with special reference to Indian immigration by Section 138 of the same Act.

67/ The Payment of Wages Act of 1936 applies to the payment of wages to "persons employed in any factory and to persons employed upon any railway by a railway administration."

68/ F. Couper, Report of Inquiry Into the Condition of Agricultural Tenants and Labourers, (Rangoon, 1924), pp : 45-52.

Regarding the protection of industrial labour, a beginning was made with the Factories Act of 1881 which required the factories to provide certain measures relating to health and safety, prohibited the employment of children below the age of seven, fixed the number of working hours for workers between the age of 7 and 12 years at nine hours a day and made provisions for rest intervals and holidays. And the factories were inspected periodically in order to enforce these provisions. Subsequent amendments to the Act were made to extend the coverage of the Act, to tighten up the requirements of sanitary and health facilities, raising the minimum age of child labour, reducing the number of work hours etc. Workmen's compensation Act came only in 1923. There was also legislation for special categories of workers such as the workers in mines, dock labour etc. Until 1920, "apart from these infrequent legislative efforts, labour received little attention from the State"^{69/}. There was no Government department dealing with labour questions generally. This state of affairs began to change after the First World War; in 1924 a nominated seat was assigned to labour in the legislature. The Labour Statistics Bureau, the predecessor of the Department of Labour, was set up in 1926. Labour movement was recognised in 1927 by the Trade Union Act of 1927. It was followed by the setting up of conciliation and arbitration machinery for labour disputes. However, it was the employers who were responsible for the provision of welfare facilities and the role of the Government was to see, through periodical inspections, that the minimum requirements were maintained in these factories. Also it

^{69/} A.G. Clow, the State and Industry, (Calcutta, 1928) pp : 138.

was the employers, in some cases, who provided educational and training ⁶⁹ facilities to improve the skills of the workers. In some cases a good deal of work had been done. For instance the Burma Oil Company had two very well equipped hospitals and general dispensaries; housing for most of their employees, twenty schools for their children and dependents, evening classes in Manual Training Schools for the adult employees to improve their skills and position. ^{70/} However, the industrial labour force was only a small fraction of the total working population, concentrated only in urban area. As in India, these benefits had therefore touched the ^{71/} nearest fringe of the population.

3. (c) Commercial and Industrial Policies.

If open-door policy was one part of the foundation of economic liberalism applied by the British administration in Burma, free trade policy was the other part. In 1825 Mr. Maingy, the first Commissioner of the Province of Tavoy and Mergui, declared in his first proclamation that "the most free and unrestricted internal and external commerce will be established and promoted." ^{72/} As in the case of open-door policy it can be said that condition of free trade prevailed in Burma from that day to the end of the period of this study, inspite of the fact that customs duty was re-imposed in 1894 and that the principle of discriminatory tariff protection was adopted by the Government of India and applied to Burma during 1920s. This was because the rate of customs duty re-imposed in 1894

^{70/} Government of Burma, Report of the Oilfields Labour Enquiry Committee.

^{71/} Cf. V. Anstey, : op.cit., p : 328.

^{72/} Government of Burma, Selected Correspondence of Letters issued from and received in the office of the Commissioner, Tenasserim Division, (Rangoon, 1929), p : 1.

was relatively low and in the case of textiles, the single most important class of imports, there was the countervailing excise duty on domestic textiles. Similarly, inspite of the application of protective policy during 1920s Burma remained predominantly under condition of free trade, because imports from India, which accounted for about half the total value of imports of Burma, continued to come in free of duties,^{73/} enjoying the privilege of protection in the Burmese market and, at the same time, competing with many local products in Burma.^{74/} After the Separation, India continued to enjoyed this privilege until 1941 under the India and Burma (Trade Regulation) Order of 1937, which prohibited Burma, as well as India, from changing unilaterally the then prevailing tariff structure of the two countries for a period of three years beginning from 1937, at the end of which either party could give notice of termination of the operation of the Order. While this "inability to tax Burma's goods affected only a small proportion of the customs revenue of India, the corresponding disability on the part of Burma had a much greater proportionate effect on the customs revenue of that country".^{75/} On the other hand, the new national Government was faced with increasing demands on the side of expenditures, particularly for Defence and for the provision of social and nation building services. For this and other reasons, Burma gave notice to terminate the operation of the

^{73/} There were certain exceptions to this rule. On certain commodities there were countervailing customs duties to offset the local excise duties. These commodities were salt, sugar, kerosene, motor spirit, matches, silver, steel ingots and manufactures, mechanical lighters, beer, cigarettes and spirits.

^{74/} See Government of India, Memorandum on Trade Between India and Burma, (New Delhi, 1946).

^{75/} Ibid., 13.

Order in 1941 and in the same year the Indo-Burma Trade Agreement was signed. Then Burma introduced a three-decker tariff system, giving preferential tariff treatment for the goods of Indian origin over those of Britain and her colonies, which in turn were given preferential treatment over imports from other countries. Thus the "regime of free trade"^{76/} between Burma and India came to an end only in 1941. In other words, a high degree of free trade prevailed in Burma throughout the period of this study.^{77/}

Related to the commercial policy was that of the industry. Free trade implied a prescription of international division of labour according to the principle of comparative costs. Since Burma's comparative advantage was in agriculture, the British administrators were convinced that it was in her interest that she should specialise in agricultural production. For example, in 1869 the then Commissioner foresaw the possibility of local salt industry, which was one of the most important industries in Burma at that time, being competed out of existence by the imported salt as in the case of salt industry of Bengal. But he opined that if that should happen it would not be "a matter for regret, for although the salt manufacturers may be for a time distressed, they will soon find abundant means of utilising their labour in this sparsely populated country, and in the end perhaps, find the land a more profitable investment for their

^{76/} Ibid, p : 13.

^{77/} Even in Britain, the home of free traders, the era of free trade is said to have come to an end "in fact" in 1915 with McKenna duties. Tariff protection was made general by the Import Duties Act of 1932. See Sir J. Crombie, Her Majesty's Customs and Excise, (London, 1962), pp : 25 and 80.

toil than the sea."^{78/} This complete trust in the efficiency of laissez faire and free trade policies which were extended to India and Burma by the British Government after the assumption of direct rule by the Crown in India in 1858, was also the basis of industrial policy in which the view was that "for Government to regulate industry was pernicious, to assist it was futile, and to participate in it was to waste public money."^{79/} However, the hard facts of life in India forced the Government to deviate to a certain extent from this policy in practice. The Government took on as its responsibility to spread industrial information and to promote industrial and technical education, and to give encouragement to cottage industries, especially in the rural area. This was because of the fact that the root cause of much of the poverty of the people in India was believed to be the reliance on agriculture by the majority of the population as the sole occupation. This was more so in Burma where there was excessive reliance on a single crop paddy. Therefore, introduction of a variety of occupations, possibly through the spread of technical information and education and promotion of cottage industries, was regarded as a possible palliative for them. Another reason for the Government's interest in technical education was its dissatisfaction over the development of educational system, which suffered particularly from being predominantly literary. Therefore, before the First World War the Government of India went to the extent of accepting responsibility to provide and supervise industrial training, and to collect and disseminate industrial information, but not

^{78/} RAB, 1868-69, p : 113.

^{79/} A.G. Clow, op.cit., p : 1.

for giving active assistance to industries. ^{By} In other words, the limited actions of the Government in the field of industry were measures intended to alleviate the position of poverty stricken people, especially the agriculturists, rather than as part of a policy of industrialization of the country.

The War brought about a change in its industrial policy in India. During the War the Government found it necessary to procure supplies from local sources, but the response of the private industrialists were found to be extremely un-satisfactory. Therefore, the necessity to make India more self-contained in respect of men and material was recognised, but to bring about such a development it would need an active industrial policy on the part of the Government. Consequently, in 1916 the Indian Industrial Commission was appointed and it recommended, among other things, to give technical and financial aids to industries. Then came the Indian Fiscal Commission of 1921 which recommended a system of discriminatory tariff protection. These recommendations were accepted by the Government of India.

Although these new policies were applied also to Burma these produced little effect in stimulating industrial development in Burma. A Director of Industries was appointed in 1921, but the post was abolished in the following year. It was substituted by the post of Superintendent of Cottage Industries, which was a part

^{80/} There were, of course, certain exceptions. For example, in 1898 the Government of Madras gave a small grant to establish an aluminium plant. But this practice of establishing pioneer industries by the Government was put to a stop in 1910 by the then Secretary of State for India. Ibid., pp : 3-7, and V. Anstey, op.cit., p : 2.

time post held by the Joint Registrar of Co-operative Societies Department. This change implied that what Burma needed was not the promotion of industry, but that of cottage industries to provide subsidiary employment and income to the hard pressed and seasonally underemployed rural population. The work of the Superintendent was to provide training facilities for certain kinds of skills of local arts and crafts, such as weaving and lacquer-ware making. In other words, the pre-1914 industrial policy of India was continued to be applied in Burma. In spite of the recommendation of the Indian Industrial Commission in 1916, the State Aids to Industries Act was passed only in 1930^{81/}. The next step in this direction was taken in 1940 when the Weavers Loans Act was enacted. As in the case of other state actions, measures taken to promote industries came so late in the period that practically nothing of significance was done before the Second World War.

In the case of tariff protection, with the exception of the development of sugar and match industries, Burma did not experience industrial stimulation by this policy. It has been noted above that this was due to the continued existence of free trade condition between India and Burma. The net result was that Burma had suffered from protective policy of India. On the one hand, those industries for which Burma had obvious potentialities, such as textile, cigarette industries, could not develop because of

^{81/} However, it may be mentioned that in 1924 the Government of Burma lent one and a half million rupees to the Burma Spinning and Weaving Company, Ltd., to help it to overcome its financial difficulties.

Indian competition. On the other hand, tariff protection of iron and steel industry, for which Burma did not have known resources to develop, added a considerable burden onto the consumers in Burma without any off-setting gains. It was said that industrial expansion in India behind the tariff wall had been achieved at the expense of the cultivators.^{82/} Burma, being an agricultural area of India, was one of those which were made to bear this burden. But what was more important was the influence of the stage of industrial development on the educational system, which in turn had far reaching effects on the course of economic development in Burma.

3. (d) Education.

We therefore will turn to consider this important matter of educational policy. In 1864 the Secretary of State for India requested the Chief Commissioner of Burma to submit a report "upon a systematic plan for affording the means of education to the people of British Burma." In the same year Sir Arthur Playre, the then Chief Commissioner, submitted a scheme to impart "sound education" to the people throughout the Province generally^{83/} through the existing monastic schools, one of which at least could be found in almost every village in Burma.^{84/} He recommended that an attempt should be made to

^{82/} P.A. Wadia and K.T. Merchant, Our Economic Problem, (Bombay, 1959), p : 355. See Arthur

^{83/} Letter of Playre to the Home Secretary of the Government of India, dated the 26th. December, 1864, quoted from the Annual Report of Public Instruction, 1868-69, Appendix C, pp : lvi and lvii.

^{84/} The objective of Sir Arthur Playre for using the existing monastic schools for a system of "primary education among the masses" was not only for reason of economy but also to prevent possible antagonistic opposition and to achieve general acceptance by the people.

persuade and induce the buddhist monks to extent their instruction to include secular subjects such as geography, arithmetic, land-measuring and ancient history as known in Europe. But he also recommended that before the above mentioned recommendation could be carried out a few Central Anglo-Vernacular schools be established in the principal towns of the province, in which the medium of instruction was to be English whereas in the diffusion of primary general education the medium of instruction was to be Burmese.

The central schools were only to serve as a kind of model schools but not as "factories for producing clerks" as these turned out to be later on. Thus the main objective of his scheme was the improvement of the people through a wide diffusion of primary instruction. This may be compared with the then prevailing dual education objectives in India, where the humanitarian ideals as well as the practical considerations for the training of cheap Indian staff to meet the economic demand were the "aspirations for the spread of education."^{85/}

However, the progress of education in Burma followed more or less along the same lines as in India, originally ^{the} emphasis was placed on primary education for the masses but public instruction failed to reach the common people. Education came to be dominated by economic factor of demand for instruction in English to be qualified for the relatively well paid jobs of subordinate officers and clerks. Similar demand emerged in Burma with economic growth after

^{85/} J.S. Furnivall, Education Progress in Southeast Asia, (New York, 1943), pp : 22-23.

the opening of the Suez Canal. Since English was taught in the Anglo-Vernacular schools^{86/} the demand for Anglo-Vernacular education increased rapidly. But these schools were confined to the principal towns of the country and only the relatively well-to-do parents could afford to give such education to their children. On the other hand, primary and vernacular education fell to the background and remained stagnant. It failed to make any significant improvement in the general education standards of the masses. Very small proportion of children who went to school remained long enough to acquire "permanent literacy", resulting in the well known "wastages" in schools, especially in the primary vernacular schools. For example, as late as 1927 about 77% of the students registered in schools did not go beyond the Standard I and 88% failed to complete the Standard IV,^{87/} which was regarded as the minimum course of study that would qualify a person as literate "according to educational as

86/ In 1871 the Director of Public Instruction recommended that the teaching of English in the monastic schools be encouraged, but it was rejected by the then Chief Commissioner on the ground that English should be taught only by teachers with correct accent and perfect knowledge of the language, and this was impossible in the monastic schools. Furnivall contended that this decision was one of the most critical and unfortunate decisions in the history of Burma as it pushed the "monasteries back into the middle ages and condemned the national system of education to futile opposition against liberalising influence of western civilisation." J.S. Furnivall, A Study of the Social and Economic History of Burma, Part IV, p : 57.

87/ Government of Burma, Report of the Vernacular and Vocational Education Re-organisation Committee, 1936, (Rangoon, 1936), pp : 151-153.

distinguished from census standards"^{88/}. And a great majority of these children with only one or two years of schooling relapsed into illiteracy before they were grown up.

A few explanations have been put forward to account for this unsatisfactory progress in mass education. Some argued that one of the important factors was the failure to implement Phayre's scheme of secularising the curriculum of the monastic schools and of bringing them within the framework of the Government education system.^{89/} Contrary to this view there were those who believed that nothing short of compulsion will produce the desired result of getting education to the common people,^{90/} whilst there were others who pointed out the inadequate attention actually paid by the Government of Burma inspite of the declared policy of the Government of India to give "encouragement to elementary vernacular

^{88/} According to census a person is classified as literate "if he can write and read a letter to and from a friend." Because Burmese language is mono-syllabically spelt it does not take more than a year or two for a youngster to learn to spell every word in the language and therefore to write and read a letter. But children with one or two years of schooling soon forgot what they had learnt and when occasion arose they could with some effort remember sufficiently to write, with probably many mistakes in spelling, or read a letter. Such persons are not regarded as literate according to educational standard.

^{89/} Regarding this failure opinions were divided : some stressed the unfavourable attitude of the monks towards secular education and others blamed the Department of Education for its insistence on unreasonable departmental controls. See Government of Burma, Report of the Education Policy Enquiry Committee, Burma, 1946, (Rangoon, 1949).

^{90/} Ibid, chapter II and Report of the Vernacular and Vocational Education Reorganisation Committee, 1936, p : 134. Although the Government of India accepted the principle of compulsory education in 1919, a system of limited compulsory education based on the principle of local option was introduced in Burma only in 1940 with the enactment of the Primary Education Act of 1940.

education as the primary obligation" and to make it a leading charge on the provincial revenues.^{91/} But the rural vernacular schools were by and large left to make their own arrangement and were starved of funds and teachers whereas the Anglo-Vernacular schools of the towns were heavily subsidised.^{92/} Accepting these as contributory factors Furnivall contended the real "great obstacle was the lack of demand"^{93/} for vernacular education which ended in a blind alley, because the most that a pupil of vernacular school could expect was to become a teacher in a vernacular school and even this opportunity was a rather limited one and the work was extremely poorly paid. Therefore even in 1900 there were no students in the classes of vernacular high schools whereas the number of students in the Anglo-vernacular high school classes was more than 5000. He further contended that neither was it true to say that vernacular education would give the children of cultivators an advantage by helping them "to make more money or to escape the clutches of the money lender", by pointing out that in Burma the cultivators, with or without formal education, were always ready to adopt new crops and new methods as soon as they learnt that these were profitable and that the most literate districts in Burma were also the most heavily indebted.^{94/}

There is a more fundamental reason why vernacular education had little economic value to the agriculturists in Burma. As it has

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- 91/ J.S. Furnivall, Progress of Education in Southeast Asia, p : 52.
 92/ R.G. Brown, Burma As I Saw It, 1889-1917, (London, 1926) pp : 93-94.
 93/ J.S. Furnivall, op.cit., p : 37.
 94/ Ibid, p : 115, but Cf Report of the Vernacular and Vocational Education Reorganisation Committee, 1936, pp : 397-398.

been mentioned above cheap labour supply resulting from the open-door policy on the one hand, and relatively expensive agricultural credit on the other hand made agricultural technology labour-intensive and to remain primitive. The cultivators could not afford and would not be economic for them to apply capital-intensive innovations which usually require some knowledge of modern science. Therefore even if the content of vernacular education was not devoid of such knowledge there would have been little economic incentives for sending their children to school for a longer period. In other words, the failure of mass education program in Burma was a result of the particular pattern of economic development under the influences of liberal economic policy. Failing to reach the common people vernacular education system had not opened the modern world to the majority of population of Burma.

If vernacular education had failed to modernise Burma Anglo-vernacular education had not done better. As has been noted above, it got stimulus from the demand for subordinate officers and clerks for which kind of work proficiency in English was the basic requirement. For that purpose training in arts subjects was sufficient and, in fact, better than studying science subjects. Consequently, the curriculum of these schools tended to become literary and their graduates were fit for nothing but to do white-collar work. An identical development took place in higher education, the facilities for which took some time to come in Burma. The Rangoon High School was affiliated as a college of the Calcutta University in 1884 and it took another forty years for an independent university to come into existence in Rangoon. For the majority of the students

the motive for going to the University was the same as for going to the Anglo-Vernacular schools viz. to get a certificate, as quickly as possible, to enable them to get into administrative services or similar jobs. Consequently, the curriculum of the University also tended to be literary or at least the arts subjects were more popular with the students. Similarly, most of them were fit to do nothing but the white-collar work. Thus the education system had not been able to improve, to any significant extent, the skills of the people, a basic requirement for increase in labour productivity and for a sustained economic growth.^{95/}

But the course of development in education was conditioned by the pattern of economic development; the form of education system so developed may be looked upon as a kind of specialisation in the same way as the specialisation of the economic system itself. The development of the two systems were so closely related that the attempts to change one of them without corresponding changes in the other soon had to face insurmountable difficulties and had not at all been successful. For example, in 1913 a technical school was opened in Akyab but it had to be closed down in 1922 because "an industrial school education for a boy in Arakan is useless because

^{95/} In recent years economists have paid increasing attention to investment in human capital and have generally agreed that "human factor" as distinguished from simple manpower is as important, if not more, as labour and physical capital in the generation of economic growth. See e.g. R.M.L. Solow, "Technical Change and the Aggregate Production Function", Review of Economics and Statistics, (August, 1957), J. Vaizey, the Economics of Education, (London, 1962), Chapter III, T.W. Schultz, "Investment in Human Capital", American Economic Review, (March, 1961).

there are no industries" in the area.^{96/} Similarly, the Mandalay Agricultural College was opened in 1924 and it was closed in 1932 when the recruitment of the Department of Agriculture ceased and there was no other opportunity for the graduates. The technical and vocational education had made little progress and as in the case of vernacular education it was due to the lack of demand.^{97/} Most of the British educationists in Burma believed that the solution to this problem was to relate the provision of technical training facilities to the "needs of the province".^{98/} It was argued that it would be "useless to attempt to create industries by establishing technical schools".^{99/} In other words, the demand

96/ Report of the Vernacular and Vocational Education Re-organisation Committee, 1936, p : 393.

97/ Whatever little demand there was for technicians and engineers by the foreign firms and the Government it was more economic for the employers to meet it by importing trained technicians from India and the United Kingdom. Thus there were very few Burmans in industry and in the technical and professional services of the Government. Most of them flocked to the subordinate administrative services as it can be seen from the following data.

Burmans in Government Services in 1920.

1. Administrative Service	Number of Officers		
	Total	Burman	%
(a) Extra-Assistant Commissioner	132	75	56
(b) Subordinate Service	476	445	93
2. Public Works Department			
Assistant Engineers and upwards (including railways)	150	6	4
3. Medical Service			
(a) Civil Surgeon and upwards	42	1	2
(b) Assistant Surgeon	54	4	7

98/ Government of Burma, Report of the Committee on Technical and Vocational Education, 1927, (Rangoon, 1927) p : 26 and the Report of the Vernacular and Vocational Education Reorganisation Committee, 1936, p : 391.

99/ Government of Burma, Sixth Quinquennial Report on Public Instruction in Burma for the year 1917-18 to 1921-22, (Rangoon, 1923), p : 47.

for technical personnel was taken as exogenously given to the education system and it was for the supply to make adjustment in accordance with the demand. Again it was Funnivall who advocated an unconventional approach to this problem by suggesting that "instead of limiting supply there is the alternative of organising demand" and that in order to work out a solution along this line it would be necessary to educate, not the people, but those responsible for policy and for directing Western enterprises". This was because a change in economic environment would be necessary if a different system of education was to be introduced successfully, and this clearly was the "function, not of the schoolmaster, but of the statesman" ^{100/} and the directors of Western enterprises; the economic policies laid down by the former influenced the latter's investment decisions which determined the pattern of economic development. Low level of industrial development and consequent low demand for skilled labour was not favourable for the promotion of technical and industrial education and at the same time lack of an adequate supply of labour force of different levels of skill was an important factor responsible for the low level of industrial investment in ^{101/} Burma. Thus we have another kind of "vicious circles" which form serious impediments to the economic progress of the poor countries.

^{100/} J.S. Funnivall, *op.cit.*, pp : 124-126.

^{101/} Cf : Henry G. Aubrey, "Investment Decisions in Underdeveloped Countries," in *Capital Formation and Economic Growth*, National Bureau of Economic Research, (Princeton, 1955), p : 433 and G. Haberler, "An Assessment of the Current Relevance of the Theory of Comparative advantage to Agricultural Production and Trade", *International Journal of Agrarian Affairs*, (May, 1964), p : 142.

4. Summary.

We conclude this chapter on public finance and public policy in Burma under British rule with a brief evaluation. The advent of the British power in Burma opened up the country to the world thereby giving vent to surplus productive capacity of the country. Economic activity increased abundantly and so also the total output of goods and the total income of the country. But at the same time it was increasingly noticed that apart from the mere exploitation of hitherto little used resources, there was much need to develop further resources, particularly the human resources of the country. Looking back it seems that it would have been the ideal policy if the state have laid the expenses for such national development as a first charge on the growing prosperity of the country and that the whole structure of public finance and public policy had been designed to promote this object. In fact, however, this did not prove to be the case. In most of his work on Burmese economy, Furnivall had pointed out the unresolved conflict between the ideological commitment of the British Government, particularly in Burma, to a laissez faire policy and the practical understanding on the part of local administrators of the abundant need for active state intervention and participation in the economic development of the country.

To probe a little deeper into the causes of this failure, let us consider broadly how the British Government in Burma reacted to the three basic problems of public finance, namely (i) the level of Government's revenue and expenditure, (ii) the way in which the revenue demand was distributed among the various sectors and (iii) the

way in which the expenditure was allocated to different purposes. To take up the first question, it has been shown that round about 1930 the total revenue collection was of the order of Rs.250 millions which may be compared with a total national income of the order of Rs.1000 millions, representing a formidable tax burden on the total income of the people. This fact had been repeatedly recognised; Burma was in fact one of the most heavily taxed provinces of India. Be that as it may, we also have shown that, this entire revenue collection was not available to the Government in Burma to spend owing to the complex system of Imperial and Provincial and other allocation of revenue income. In fact, only about Rs.125 millions was budgeted for expenditure by the Burma Government. Despite of such a high burden of taxation, there was still scope to increase the Government revenue in order to finance investment in social capital to lay down foundations necessary for a sustained economic growth.

This brings us to the question of the distribution of the burden of taxation. The incidence of this heavy burden of taxation on the various sectors of the economy varied. A great part of it was levied on the agricultural sector for a long time; only in the later period did contribution from the customs duties become significant. Then these tariff duties were primarily meant for the revenue purpose. No important use was made of the tariff system to give protection to industries in Burma; the duty on many kinds of imports were carefully counter-balanced by corresponding excise duties on Burmese domestic manufactures. Similarly, after the

First World War, Income Tax contributed a substantial part of the revenue, but it was only mildly progressive. Moreover, the Government pursued a very lenient policy regarding taxation of wasting assets, such as forest and mineral resources of the country.

It is, however, the pattern of public expenditure that explains to a great extent the failure of British policy in Burma. The expenditure on law and order and on general administration constituted a heavy burden on public funds. We have referred to two opposing views on this matter : viz the view of the Fiscal Committee of 1938 that "the nation building services on which the well being and prosperity of the country in considerable measure depend have been and still are sacrificed to an undue extent in favour of purely administrative services," and the opposite view that "while it is easy to see that education or the building of a new road may make a permanent improvement in the nation, it is not so clear that general administration deserves less public esteem. Unless law and order are maintained and taxes fairly collected, it would seem fruitless to attempt to increase support to schools and other desirable public undertakings." ^{102/} It is true that maintenance of law and order and a stable government are among the most important pre-requisites for rapid economic development of a country. But the results were the failure of the expensive administrative machinery to prevent the crime rate from rising, and the social disintegration of Burmese society under the dominance of economic forces, unleashed by British Rule and its policy in Burma, involving the Government in the huge expenditure

^{102/} Andrus, op.cit., p : 323-

of public funds, which were so desperately needed elsewhere for nation building work and services. Thus there was extreme deficiency in social capital and at the same time lack of a positive policy in agriculture resulted in deteriorating economic condition for the majority of the population. As there was no compensatory economic growth in other sectors the economy lapsed into a state of stagnation. For these economic difficulties the education system was often blamed because it had failed to develop human resources in terms of skills, resulting in economic backwardness and poverty. Those who defended the educational policy of the Government pointed out that it had always been directed towards improving the educational standards of the masses with a view ^{to} raising their living standards, and that the deviation of actual progress from policy was due to the fact that the former was conditioned by economic environment over which the educationist had little control. Against these views it may be mentioned that inspite of its declared policy the actions of the Government had actually resulted in the strengthening of the existing economic structure and therefore of education system. We have noted that whatever relatively small amount of public fund that was spent on education a large proportion of it was spent in subsidising of the Anglo-vernacular schools in the towns whereas the vernacular schools in the rural area were left to themselves or to the care of local bodies, whose resources were extremely limited. The Government had frequently taken shelter behind the plea of financial stringency on the questions of introducing a system of compulsory primary education and of increased provision

of technical and vocational training facilities. Although the natural resources of the country had undergone a relatively high degree of development there was no corresponding development of human resources.^{103/} In other words in Burma there was a deficiency of capital in all its forms and at the same time there was no indication of tendency to correct it. In fact, there was a tendency for capital to flow out of the country and therefore "spread-effect" from the centre of economic expansion in export production to other sectors of the economy, especially through the development of industries in Burma. Thus at the end of three-quarters of a century of economic development Burma remained an underdeveloped country, with unbalanced economic structure and stagnation in the main sector of the economy.

^{103/} Cf. H. Myint, "An Interpretation of Economic Backwardness", Oxford Economic Papers, (June, 1954).

Table V

Net Domestic Product of Burma, 1901-1938.

(At Current Prices)

(Rs.000)

Year	S E C T O R S								Net Domestic Product
	Agriculture	Forestry	Mining	Other Industries and Services				Total	
	a/	b/	c/	0.2128 times Class A	0.21 times Class B	0.21 times Class C	2.26 times Class D	O.I.S.	
1901-02	365,426	27,369	3,125	65,501	5,747	656	106,792	178,696	574,616
1906-07	415,082	29,821	9,700	74,401	6,262	2,037	93,307	176,007	630,610
1911-12	530,643	36,530	14,550	95,115	7,671	3,056	138,228	244,070	825,973
1916-17	670,737	42,940	63,278	120,226	9,017	13,290	137,907	280,440	1,057,395
1921-22	724,471	75,430	109,603	133,034	15,840	23,017	220,327	392,268	1,319,772
1926-27	1,014,727	88,350	140,332	181,885	18,556	29,470	331,026	560,937	1,804,346
1931-32	469,853	46,908	77,757	89,059	9,851	16,329	370,056	485,295	1,106,813
1936-37	562,651	64,325	95,271	100,853	13,503	20,007	258,608	392,976	1,115,223
1938-39	475,882	48,371	96,176	35,300	10,158	20,197	267,106	382,761	1,003,190

Explanation : a/ 1.1872 times the incomes of Category A of Table I.

b/ Same as the incomes of Category B of Table I.

c/ Same as the income of Category C of Table I.

Rs. 124 (1938/9)

1225,551

Rs. 133 1/2

1098,002

Table VI

Net Domestic Product of Burma, 1901-1938.

(At Constant Prices)

(Rs.000)

Year	S E C T O R S			Other Industries and Services	Not Domestic Product	Per Capita N.D.P. Rs.
	Agriculture	Forestry	Mining			
1901-02	365,425	27,369	3,125	178,696	574,616	55
1906-07	324,282	24,245	8,661	144,266	501,456	44
1911-12	365,960	29,699	15,316	155,978	576,953	48
1916-17	528,139	29,411	64,569	194,750	816,869	65
1921-22	371,234	38,682	93,678	233,493	737,087	56
1926-27	453,003	41,479	114,091	280,469	889,042	64
1931-32	598,618	24,179	74,766	341,757	1,039,320	71
1936-37	562,651	38,289	79,736	354,032	1,033,708	66
1938-39	480,688	28,454	86,645	341,751	937,538	58

Table VII
 Sectoral Distribution of Net Domestic Product of Burma, 1901-1938.
 (Percentages)

Year	S E C T O R S			
	Agriculture	Forestry	Mining	Other Industries and Services
1901-02	63.6	4.8	0.5	31.1
1906-07	64.7	4.8	1.7	28.8
1911-12	63.4	5.1	2.7	28.8
1916-17	64.6	3.6	7.8	24.0
1921-22	50.4	5.2	12.7	31.7
1926-27	51.0	4.7	12.8	31.5
1931-32	57.6	2.3	7.2	32.9
1936-37	54.4	3.7	7.6	34.3
1938-39	51.3	3.0	9.2	36.5

APPENDIX B

Table I

Unit Value Indices of Exports and Imports, and Terms of Trade
(External) of Burma, 1870-1940.

(1890-1892 = 100)

Year	Unit Value Indices of Exports	Imports	Terms of Trade $\frac{a}{b}$ (External)
1870-71	68	118	68
1880-81	91	125	73
1890-91	96	99	97
1891-92	106	99	107
1892-93	114	101	113
1893-94	105	99	106
1894-95	101	93	109
1895-96	101	92	110
1896-97	111	91	122
1897-98	113	87	130
1898-99	107	84	127
1899-1900	106	85	125
1900-01	106	91	116
1901-02	102	88	116
1902-03	104	85	122
1903-04	114	87	131
1904-05	107	90	119
1905-06	116	93	125
1906-07	127	95	134
1907-08	141	97	145
1908-09	141	96	144
1909-10	132	97	136
1910-11	135	101	134
1911-12	146	102	145
1912-13	155	103	150
1913-14	139	105	132
1914-15	142	105	135

APPENDIX B

Table I (Continued)

Unit Value Indices of Exports and Imports, and Terms
of Trade (External) of Burma, 1870-1940.

(1890-1892 = 100)

Year	Unit Value Indices of Exports	Imports	Terms of Trade ^{a/} (External)
1915-16	149	108	130
1916-17	146	128	114
1917-18	136	154	88
1918-19	147	201	73
1919-20	208	203	102
1920-21	221	225	98
1921-22	230	193	119
1922-23	226	192	118
1923-24	205	182	113
1924-25	221	178	124
1925-26	213	169	126
1926-27	217	158	137
1927-28	209	148	141
1928-29	199	146	136
1929-30	181	141	132
1930-31	181	122	148
1931-32	152	104	146
1932-33	113	99	114
1933-34	106	94	120
1934-35	97	93	104
1935-36	98	94	104
1936-37	115	93	124
1937-38	117	98	119
1938-39	112	100	112
1939-40	119	100	119

Source : M. Shein, the Role of Transport and Foreign Trade in the Economic Development of Burma, 1885-1914, annual Statements of Seaborne Trade and Navigation of Burma.

a/ Terms of Trade (External) = Unit Value Index of Exports divided by the Unit Value Index of Imports and therefore an increase in the value of the terms of trade indicates an improvement and vice versa.

APPENDIX B

Table II

Internal Terms of Trade of Burma, and Ratios of Rice Export
Prices to Paddy Prices, 1890-1940.

(1890-92 = 100)

Year	Index Number of Paddy Price a/	Unit Value Consumers Goods Imports b/	Index of Rice Exports c/	Internal Terms of Trade	Ratio of Rice Export Price to Paddy Price
1890-92	100	100	100	100	1.00
1893-94	75	100	105	75	1.40
1894-95	100	93	101	108	1.01
1895-96	93	93	100	100	1.07
1896-97	111	91	111	122	1.00
1897-98	97	87	112	111	1.15
1898-99	98	84	104	117	1.06
1899-1900	97	79	103	123	1.06
1900-01	91	88	102	103	1.12
1901-02	85	86	97	99	1.14
1902-03	107	84	100	127	0.93
1903-04	94	87	111	108	1.18
1904-05	101	88	102	115	1.01
1905-06	107	93	111	115	1.04
1906-07	124	95	124	130	1.00
1907-08	138	98	141	141	1.02
1908-09	105	99	144	106	1.37
1909-10	100	99	129	101	1.29
1910-11	126	103	130	122	1.03
1911-12	158	101	148	156	0.94
1912-13	137	105	156	133	1.14
1913-14	132	106	136	125	1.03
1914-15	103	106	135	95	1.31
1915-16	111	110	132	100	1.19
1916-17	118	127	142	93	1.20
1917-18	102	144	127	71	1.25
1918-19	131	185	138	71	1.05
1919-20	189	226	210	94	1.11

APPENDIX B

Table II (Continued)

Internal Terms of Trade and Ratio of Rice Export Prices to Paddy Prices, 1890-1940.

(1890-92 = 100)

Year	Index Number of Paddy Price a/	Unit Value Consumers Goods Imports b/	Index of Rice Export c/	Internal Terms of Trade	Ratio of Rice Export Price to Paddy Price
1920-21	160	226	132	71	1.41
1921-22	195	191	142	102	1.22
1922-23	187	177	127	106	1.22
1923-24	202	188	138	107	1.01
1924-25	187	183	210	102	1.23
1925-26	195	172	225	113	1.08
1926-27	191	164	238	116	1.14
1927-28	178	151	228	118	1.16
1928-29	167	151	204	111	1.16
1929-30	145	142	230	102	1.23
1930-31	82	126	210	65	2.17
1931-32	105	104	218	101	1.41
1932-33	69	95	207	73	1.48
1933-34	57	90	193	63	1.82
1934-35	86	88	178	98	0.95
1935-36	92	90	178	102	0.91
1936-37	99	92	148	108	1.05
1937-38	89	94	102	95	1.17
1938-39	94	91	104	103	1.05
1939-40	120	94	82	128	0.93

Source : RSOs in the Henzada District, 1899-1900, in the Panthawaddy District, 1907-10 and 1930-33, in the Insein District, 1913-14 and 1933-35, in Myaungmya District, 1933-35, Season and Crop Reports, H. Shein, op.cit. and the annual Statements of Seaborne Trade and Navigation

- a/ Index number of wholesale harvest price of paddy at Rangoon.
 b/ Consumers Good Imports included in the index are (i) foodstuffs, (ii) tobacco, (iii) vegetable oil, (iv) sessamum, (v) salt, (vi) soap, (vii) grey, white and coloured cotton piece goods, (viii) silk and (ix) wollen piece goods.
 c/ Terms of Trade (Internal) = Index Number of Paddy Price divided by the Unit Value Index of Consumers Good Imports. An increase in the value of Trade indicates an improvement in favour of the farmers.

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