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BRITISH RULE IN EASTERN ASIA

BRITISH RULE IN EASTERN ASIA

A STUDY OF CONTEMPORARY GOVERNMENT AND ECONOMIC DEVELOPMENT IN BRITISH MALAYA AND HONG KONG

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MALAYA

HONG KONG, MACAO AND CANTON

PREFACE

This book is an attempt to make a comparative study of the contemporary political and economic situation in Hong Kong and British Malaya. I have tried to set forth the aims and methods of British colonial policy, and to give some account of economic development and of the effect of Western rule upon the local populations. American experience in the Philippines and Dutch in the Netherlands East Indies have been drawn upon for comparisons and contrasts. Their problems have many similarities to those of the British, but the policies adopted are often different. Little has been written about Malaya and the Hong Kong of the last thirty years so that it is often very difficult to obtain information of recent developments. The Netherlands East Indies and the Philippines have been more fortunate; and there seemed no point in writing another book about dependencies which have been described so thoroughly by Dutch, American, and British authors. For this reason I have referred to them only when their problems and methods shed light upon a similar situation in the British possessions.

The book is the result of a year's travel and study in Great Britain and the dependencies in 1936–7, and a subsequent visit to Great Britain in 1939 to discuss the manuscript and bring it up to date. It is based to some extent on government reports and newspapers, but for the most part on interviews. My special thanks are due to the British Colonial and Foreign Offices for the very generous facilities which they placed at my disposal, and to the Department of State at Washington. It is fatally easy for the traveller in the tropics to misunderstand what is before his eyes, and in each dependency I questioned as wide and varied an assortment of officials and unofficials as would submit to my importunities. My very grateful thanks are due to the many British, Dutch, and American, Chinese, Malay, and Filipino officials, business men and others, who spared hours of their time to give me the help without which this book could not have been written. I have a vivid memory of one interview which began at noon and lasted till seven, with interludes when conversation was combined with lunch and tea! Having taken so

many cross-bearings I can only hope that I have plotted my points with approximate accuracy.

It seems to be customary for a writer to assure his readers that the book would never have been written without the assistance of his wife, frequently in the form of reading the proofs. I would like to follow this precedent but with a difference. Without my wife's help I could never have examined the annual reports of the Malayan and Hong Kong Governments from 1918 onwards in the time at my disposal. In depression years they shrank to a mere 800 folio pages, but in the lush days of the 'twenties they burgeoned into 1,500. I am indebted to Mr. Evans Lewin and the Library of the Royal Empire Society for placing at my disposal certain trade returns which were unobtainable in the Colonial Office Library. I would like to thank Miss Alice Mayes for leaving her garden at Wendover to summarise some documents which I had not time to examine before I left England.

Parts of the manuscript were criticised by my friend Professor Coupland of Oxford University and by several civil servants in London who prefer to remain anonymous. They gave up many hours of their leisure to read an account of administration in the tropics of which they knew far more than the writer, and they were equally generous with their time in discussing it with me. I still feel guilty when I remember one civil servant who spent so long in talking over a chapter that he suddenly discovered he must combine lunch and tea. It is hardly necessary to add that my critics made no attempt to influence my conclusions, and examined my manuscript solely to verify its accuracy in statements of fact. The views and opinions expressed are entirely my own.

Finally I would like to acknowledge my indebtedness to the Rhodes Scholarship Trust, the Guggenheim Memorial Foundation, the Social Science Research Council, and the University of Minnesota. Their generous financial assistance made my journeys possible. I have also to express my gratitude to the Institute of Pacific Relations. Though the book is being issued under the auspices of the Secretariat of the Institute as a report in its international research series, it should be emphasized that neither the Secretariat nor any of the Institute's national councils is responsible for the facts or for the opinions expressed.

LENNOX A. MILLS

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1941

PART ONE: BRITISH MALAYA

CHAPTER I

INTRODUCTION

The British attitude towards the tropical Empire has usually been one of lack of interest varied by spasmodic attention when one of the colonies forced itself upon public notice. To call this indifference would be going too far: rather it is a case of taking the Empire for granted. What active interest has existed during the past twenty years has very largely been confined to Central Africa. The older and more important dependency of British Malaya has been overlooked, and about all the average man knows of it is that it produces tin and rubber and has a strong naval base. This does rather less than justice to the wealthiest and, strategically and economically, the most important possession of Great Britain in the tropics.

Malaya perhaps has itself to blame for this situation. It has not risen to the dignity of a Problem, like Africa or the West Indies. Politically it has been an oasis of unnatural calm, innocent of the racial friction and self-conscious nationalism which have periodically focussed attention upon India. Its wealth has been founded upon tin and rubber, those twin high explosives of international trade. Their ups and downs have been as sudden and incalculable as those of such a temperamental commodity as TNT; but in spite of booms and slumps Malaya has been remarkably prosperous. Its revenue and its accumulated surpluses have been like the widow's cruse, and its social services particularly in the medical field have made of it a show colony. It therefore attracted no attention, since, unlike the West Indies, it had no urgent needs which required the help of the British taxpayer and aroused his strong feeling of trusteeship. Moreover the governments and peoples of Malaya have developed a faculty of settling their own problems with a maximum of discussion and grumbling and a minimum of real friction. Save in one of two isolated instances no attempt was made to enlist popular support in Great Britain after the fashion of the Indian National Congress Party. Malaya was rarely news, and the British public took its existence for granted and let it go at that.

The essential facts about the dependency can be quickly told, and even their bald recital cannot quite conceal the fascination which underlies them. The Malay Peninsula has been visited by traders for over 1,200 years; but although great cities flourished on the coast the interior was almost unknown until seventy years ago. The area of the country is 53,240 square miles, or a little larger than England without Wales. Yet it is divided into no less than ten separate governments ranging from Singapore, which is British territory and one of the dozen principal sea-ports of the world, to the protected Malay State of Trengganu, where less than thirty years ago conditions were more similar to those of feudal France or Germany than to anything in the twentieth century world. The problems of administration, economic development, labour, health, and education are similar throughout the Peninsula, yet British rule has been able to combine essential uniformity with the preservation of the legal rights of the separate Malay governments. Economically the country is a unit, divided by seven separate customs barriers. Yet there is general agreement that this situation is less harmful to commerce than either a uniform high tariff or free trade. The population of the Peninsula is as mixed as its forms of government. During the past two generations Chinese and Indian immigration has taken place on such a large scale under British encouragement that it has upset the racial balance. A population which was overwhelmingly Malay has become 58 per cent. of immigrant origin. Yet until a few years ago there was no sign of the friction which a far smaller immigration created in Palestine. The growth of the tin mines and rubber plantations created on an immense scale the problem of immigrant coolie labour. The possibilities of exploitation were immense, but the Malayan governments and employers in collaboration evolved a code of regulations which is as outstanding in its own field as the better known work in medicine and public health. The condition of the agricultural labourer in the Dutch colonies is on the whole almost as good; and in both Malaya and the Netherlands East Indies he is in a far better position than in the Philippines. British Malaya is a strange blend of ancient and ultra-modern. There are Sultans and Communist agitators; the largest hospital in Eastern Asia and cures by charms and incantations; the latest scientific methods in mining and plantations; and side by side with these the traditional forms of Malay agriculture, tin mines worked by hand labour and Heath Robinson creations of bamboo.

The Governments of Malaya

Malaya is one of the few parts of Asia where the demand for democratic government hardly exists. The Straits Settlements are a Crown Colony of the traditional type, with a Governor who has final authority in administration, legislation and finance, and Executive and Legislative Councils with an official majority which must vote as he dictates. This means that he is a benevolent despot in theory and a limited monarch in practice. He is also a constitutional Aunt Sally, for, as in other dependencies, the good old nineteenth century tradition persists that it is always open season for Governors. When he first arrives he is popular, and his first actions are usually greeted with approval. This phase soon passes, and whatever he does or does not do, he can be quite certain that the press and a goodly part of the vocal minority will convict him of wrong-headedness, extravagance, parsimony, tyranny, and weakness. The good deeds of his predecessors are paraded by way of contrast, though a perusal of the newspaper files of a few years earlier would show that pretty much the same charges were levelled against them. Last stage of all, in his retirement he can look forward to joining the ranks of the demi-gods who governed the colony in the good old days. There is more light than heat to this fire: what the critics are really saying is that they object to some particular proposal of Government. At bottom very few of them wish to change the Crown Colony system. At the same time the British and a few of the English-educated Asiatics feel that the whole idea of a benevolent despotism is inconsistent with the British ideal of democracy, and that the Legislative Council should be a miniature House of Commons instead of an advisory body which the Governor can overrule when he considers it necessary.

The average Governor is anxious to promote the well-being of his Colony, but he also wants a quiet life. Local criticism he expects as part of the Crown Colony system; but what he prays to escape is that the tumult and the shouting should attract attention in Great Britain. This may lead to articles in the press and questions in the House of Commons, and this in turn means that the Colonial Office must interrupt its work to find out what has happened and deal with the situation. It can be depended upon to do so, but dislikes the necessity. So the normal Governor walks delicately like Agag, trying to avert serious opposition by compromising with the enemy before he even reaches the gate, much less begins to batter upon it. In other words, most legislative and financial measures are not

decided by formal debates in the Legislative Council, but in committees and semi-official meetings. By the time a bill reaches the debate stage it is usually an agreed compromise, and determined and unanimous opposition by the European and Chinese unofficial members is rare. As so often in the British Empire the forms of government have no necessary relation to their reality. A century ago the Governor of a Crown Colony was far more prone to use his legal powers and frequently was a benevolent despot. The spirit though not the forms changed to suit the changing temper of society: as early as the eighteen eighties the Colonial Office noted that Governors were becoming markedly reluctant to oppose strong popular pressure in their colonies. Since then the transformation has gone on apace, and to-day a Governor rarely overrides the wishes of the people unless on the orders of the Imperial Government. Occasionally, of course, a Governor with an *idée fixe* cannot be deflected from it; but the exception is so rare as merely to illustrate the general rule.

The adaptability of the Crown Colony system is one reason for its survival; and during the present war the peoples of the Dependent Empire have given overwhelming evidence that they are very well satisfied with it. Chinese rickshaw coolies in Singapore and Malay fishermen would not have subscribed to Spitfire funds if they had disapproved of their government. A mere handful of Europeans and Straits-born Chinese have advocated some changes in the direction of democracy, and they represent no one but themselves. The vast majority feel that the Government has been impartial, honest, considerate of their interests, and reasonably efficient. The Malays are a conservative people with a strong aristocratic tradition: they like to be consulted but they have shown no desire to govern themselves. The bulk of the Chinese and Indians are equally uninterested in politics; they or their ancestors came to Malaya to make money and they do not want to be diverted from this aim by extraneous trifles. If ever the question of self-government should become a live issue—and there are a few faint signs that it may—it will be extraordinarily difficult to find a satisfactory electorate. Apart from the indifference of the mass of the population, the majority of the Chinese and Indians are migrants who eventually return home and do not look upon Malaya as their native country. The largest group of the permanently settled population in the Straits Settlements are the Malays, who are supremely uninterested in politics and are jealous of the Chinese. Probably the only solution would be communal

electorates, and a strong measure of British control to harmonize the interests of the various Asiatic races.

The nine Malay States are protectorates and not British territory, and control of their governments is based upon treaties with the Sultans which bind them to govern in accordance with the advice of their British Residents or Advisers. The administrations follow the Crown Colony model, and, broadly speaking, all nine Sultans are juridically independent and politically dependent. This is especially true in the four States of Perak, Selangor, Negri Sembilan, and Pahang, which were the first to come under British control and together form the Federated Malay States.

In the five Unfederated Malay States the Sultans have retained a considerably greater degree of authority, and the Advisers exercise their powers of control through advice and persuasion instead of by direct orders as in the Federation. If the Sultan is obdurate the advice is not insisted upon unless the matter is of paramount importance. Malay officials have played an important rôle in the modernization and development of these States under British supervision and tutelage. The Sultans prize their larger measure of independence very highly and would strongly oppose any attempt to diminish it. The Unfederated States provide the closest Malayan parallel to the system of indirect rule in the Emirates of Nigeria.

The evolution of the Federated States has been very different, and by the 'twenties federation had become amalgamation. The four Sultans were dignified figureheads and indirect rule was little more than a façade. The Chief Secretary, the principal British official, had become an uncrowned ruler who paid little more attention to his nominal head, the Governor and High Commissioner at Singapore, than to the four legal rulers. This situation had neither been expected nor desired by the Government of Great Britain, which had an unhappy feeling that the Sultans had been reduced to a position which had never been intended when the Federation was established in 1896. The whole development had been so inevitable and gradual that the result was hardly appreciated until it was a *fait accompli*. Reform was extraordinarily difficult owing to the need for uniformity which had created the excessive centralization, and because of the complex economic and racial interests which had grown up as a result of British policy. For the past twenty years the problem of state rights versus federal control has been the chief political question of the Federated Malay States.

The present situation is very largely the result of two develop-

ments which have now been in operation for over sixty years. They are the economic transformation of the country by British and Chinese enterprise and capital, and the influx of Chinese and Indian immigrants which made the Malays a minority in their own country. In 1874 the Malay States were sparsely inhabited by Malay peasant cultivators and fishermen, and the political organization had a good many resemblances to those of feudal France or Germany at their worst. Chinese settlers were few, owing to Malay hostility and the prevailing insecurity of life and property. The result of the *pax Britannica* was the very rapid development of tin and rubber and the entrance of hundreds of thousands of Chinese and Indian miners, estate workers, and traders. The Malays were not interested in economic development and benefited only to a minor degree from the immense creation of wealth. From the economic point of view the Federated Malay States became a single unit of tin mines and rubber plantations, connected with the ports by an elaborate system of roads and railways, and with similar problems of communications, labour, health, agriculture, and education. Efficient government and a high degree of uniformity in the policies of the four States were essential to promote and maintain the new economic structure. The rapidity of the transformation left no time for delays and leisurely action: Government action had to be swift if it were to keep pace with the urgent needs of the new order. The Sultans and their people were mediæval in their political and economic ideas, and in thirty years they were hurtled from the thirteenth century into the twentieth. Rulers who could remember the days when war and piracy were the only professions for a gentleman, were confronted with the problems of Western twentieth century civilization. Their training and point of view belonged to another world, and no amount of explanation and advice from their Residents could have enabled them to hold their place in the breakneck scramble towards modernity. The only way in which it might perhaps have been done would have been deliberately to retard economic development until the Malays had had time at least partially to readjust themselves to the impact of Western civilization. This solution occurred to no one, and, as the only alternative, British officers took the control of government more and more into their own hands. Direct orders took the place of advice; and so far as one can determine, most Sultans seem to have had no objection to their loss of power, since their rank was assured and they enjoyed far larger incomes than they had ever before known. The final and perfectly logical result

was that control became centralized in the federal department heads and the Chief Secretary at Kuala Lumpur, while the four State Residents joined their Sultans as the non-essentials of the Federated Malay States.

The more the mines and plantations developed the greater became the difficulty of reversing the trend of half a century and increasing the power of the state governments. The federal machine was the acme of efficiency, uniformity, and financial stability, and the Chinese and British unofficial communities insisted that any change would endanger the scores of millions of pounds sterling which they had invested in tin and rubber. Malays had never been noted for efficiency, uniformity, and careful finance, and in addition they had had no training in handling the administration of the Federated Malay States. The Chinese who had settled there permanently also feared that their interests would suffer if a predominantly Malay government were set up.

The problem has been to reconcile the legitimate interests of foreign capital and the immigrant races with the equally valid claim of the Malays to a larger share in the government of their own country. An added difficulty was that the Malays were quite incapable of safeguarding their own interests so that the British must act as trustees on their behalf. This is the purpose of the policy of decentralization which is now in process of introduction. It involves the gradual transfer of administrative, legislative, and financial powers from the federal to the four state governments, and at the same time the retention of enough central control to ensure the necessary degree of uniformity and financial stability in a country which is politically four and economically one. The Chief Secretaryship was abolished, and the immediate result has been to increase the powers of the four Residents and the High Commissioner of the Malay States at Singapore. This was inevitable, since with few exceptions the Sultans and the leading Malays were too inexperienced to exercise the increased powers conferred upon the state governments. The change however does give them an opportunity to increase their share in the government, and the British policy is to help them to take advantage of it. The transfer of much of the power of the former Chief Secretary to the High Commissioner involves the risk that a new centralization may gradually arise at Singapore to replace the old one at Kuala Lumpur. The Colonial Office however does not propose to assist such a reincarnation: its intention is that decentralization shall make possible a larger Malay share in the

government of the States. British and Chinese interests have been safeguarded by such measures as increased representation in the state legislatures. The rate of progress is necessarily slow and cautious and many years must elapse before the policy of decentralization by instalments is completed.

The future of the Malays is an enigma. It could be said with a good deal of truth that the Peninsula is governed by the British, developed by the British and Chinese, and inhabited by the Malays. They are very conservative and lacking in self-assertiveness, and there has never been a race which was less politically minded and less interested in economic development. At the same time they feel strongly that they are the people of the country, and a minority are beginning to resent the strong economic position which the Chinese have acquired. The Malays are almost the only element in the population which has what might be called a Malayan patriotism, for the majority of the Chinese and Indians remain merely temporarily in the country. Only a minority of those who have permanently settled in Malaya have transferred their allegiance to their new home. The National Government of China has made strenuous efforts through the Chinese schools and in other ways to ensure that even those who have lived for several generations in Malaya shall consider themselves citizens of China. Any development of democratic government at the present time would lead to the political submergence of the Malays by the more advanced and aggressive races. Decentralization and the encouragement of indirect rule are probably the greatest safeguards against this. The British Government feels that it is under an obligation to the Malays, whose ancestors invited it to enter their country, to do its utmost to make the new policy succeed. It is too early to say whether the attempt will be a success, though there are some encouraging signs.

The Social Services and Public Works

The building of roads, railways, and harbour works followed hard upon the establishment of British control, and by 1914 remarkable progress had been made in the Federated Malay States. The work in curative and preventive medicine and research was also outstanding; but the adequacy of the other social services left a good deal to be desired. Nothing could be done until the end of the war, but during the past twenty years there has been remarkable expansion, particularly in public health, slum clearance, education, agriculture. irrigation, and the formation of co-operative societies. Road

and railway building have also continued on a large scale; and today British Malaya has a better system of communications relative to the size of the population than any other Western dependency in Eastern Asia.

The emphasis upon the basic importance of means of communication is typical of British colonial policy. It is a legitimate blend of trusteeship and the furtherance of Western interests. When British protection was established in the Peninsula there were no roads, and rivers were practically the only means of communication. Each local community was compelled to be almost self-sufficient owing to the impossibility of transporting bulky commodities. The same circumstance made impossible the development of tin mining and plantation agriculture on a large scale. The opening up of the country benefited the Malays as well as the Chinese and British miners and planters. The former were enabled to produce for a world instead of a local market, and this led to the production of copra and rubber by the small peasant cultivators. At the present time they provide almost all of Malaya's crop of copra, and about 32 per cent. of its rubber; and this has made an appreciable difference in their standard of living. If estates owned by Asiatics are included, 49 per cent. of the rubber is of native production. Indirectly, too, the prosperity of the mines and rubber estates contributed very greatly to the betterment of the Malays. Seventy years ago the Peninsula was one of the most unhealthy parts of the tropics, the rice grower got a poor return for his labour owing to his use of antiquated methods, and education was virtually non-existent. Malaya was like most tropical dependencies in that it was potentially rich but undeveloped, with an almost unlimited need for social services and very little money to pay for them. The absence of medical and other departments was one principal reason for the unsatisfactory material condition of the Malays, but since their capacity to pay taxes was quite insufficient to support the heavy cost of improvement the rate of progress had to be painfully slow. Insufficient revenue meant inadequate social services, which in turn would perpetuate the low taxable capacity of the people. There was in fact a vicious circle; and the only way to break it was to attract British and Chinese miners and planters and impose taxes upon their output. Foreign capital would refuse to invest unless there were roads and railways to bring produce to the ports, and so the construction of public works became the essential preliminary to any costly superstructure of medical, educational, and other departments. The result of the policy was the

spectacular economic development of the Malay States and the creation of extensive social services. They are maintained very largely by the direct and indirect taxes imposed on mining and agriculture such as the tin and rubber export taxes and the import duties.

Rural hygiene, infant welfare, slum clearance, and nutrition are the outstanding health problems of Malaya at the present time. A very great deal has been done during the past fifteen or twenty years, and the advance made has been decidedly greater than in some of the other Western dependencies in Eastern Asia. Medical appropriations have been generous, but other departments must also be considered; and, as in other parts of the tropics, the need far exceeds the available revenue. The strong conservatism and insanitary habits of a large part of the Asiatic population also retard progress, since a great deal of time and money have to be diverted to propaganda and enforcement of health regulations. One of the principal urban defects is the overcrowded and insanitary condition of the houses in the poorer quarters; but the slum clearance programme has been dealing with this evil as fast as its quite generous financial resources permit. Maternity and infant welfare work need extension particularly in the kampongs or villages. The improvement of health conditions generally in the villages is the most serious need in Malaya as it is in the Philippines and the Netherlands East Indies. In all three, rural has lagged behind urban hygiene, since with insufficient funds for all requirements greater benefit could be secured by expenditure where the bulk of the population was concentrated. Now that the most pressing needs of the towns have been met, more attention is being paid to the improvement of the villages.

The medical is only one phase of the rural problem. The typical Malay cultivator could receive more than he does for his rice, rubber, or copra if for example he used high-yielding seed and abandoned careless or outworn methods. Very frequently too he is heavily in debt to the Chinese or Indian moneylender. The general result is that while he is by tradition and preference a cultivator he does not find agriculture very profitable, especially if his crop is rice. There has been a tendency in some districts to supplant it by the more lucrative and less laborious rubber, which means that the grower is dependent upon the vagaries of the world market and suffers considerably when the price falls. The growing demand for English education with a clerkship as its goal has been partly

due to the desire to escape from rural life. Another aspect of the agricultural problem which is particularly important at the present time is the dependence of Malaya upon imported foodstuffs. Nearly two-thirds of the rice, the staple food, are imported from French Indo-China, Siam, and Burma, and the same is true of the greater part of the meat and vegetables. For years, some of the civil servants have pointed out that this dependence upon foreign sources of supply might be a danger if war should break out. The advance of the Japanese in Indo-China underlines the warning; if they obtain control of Indo-China and if Siam also should come under their influence they could bring serious economic pressure to bear upon Malaya. Fortunately there would remain the third great source of supply, Burma. The improvement of rural conditions is far from easy, and there is no one key to its solution. During the past twenty years it has been attacked by the Department of Agriculture, the Veterinary and Irrigation Departments, and the Co-operative Credit Societies, with as much success as could have been anticipated considering the very great difficulties they have had to face. One could wish that the governments of Malaya had found it possible to increase the appropriations for departments of such vital importance. The Malay vernacular schools also have their part to play, since the Malay cultivator who is literate and able to do simple accounts is less likely to fall a victim to the Chinese shopkeeper-cum-moneylender who is one of the chief hindrances to rural betterment.

Education has received larger appropriations than any other social service with the sole exception of medicine and public health. The department has been transformed and very greatly enlarged in the last twenty years. A strong feature is its system of Malay vernacular education, for the British, like the Dutch, have insisted that training in the vernacular is the essential preliminary to more advanced studies in the European language. This is in sharp contrast to the American policy in the Philippines, which has ignored the vernaculars altogether and concentrated upon English education of a predominantly literary type. Most of the Chinese vernacular schools in Malaya are privately owned, and in the past they have received less financial help than was advisable, although this policy has been in process of change since 1935. They also present a political problem which has occupied the attention of the Malayan governments for some twenty years past. They have been used by the National Government of China to foster Chinese nationalism among the children and train them to regard themselves as citizens of China and not of Malaya,

even though their families may have been permanently settled there for a generation or more. The purpose is to strengthen the hold of the Kuomintang Party upon the immigrant Chinese, and to defeat the hope of the Malayan governments that the Chinese who have decided to live permanently in the Peninsula will eventually come to regard themselves as belonging to the country of their adoption. The Kuomintang policy also tends to perpetuate the racial and religious schism between Chinese and Malays which may become one of the problems of the future.

Malayan education in English was formerly of the literary type familiar to students in India. That, until the Great Depression, it did not produce a surplus of unemployed clerks, was because the remarkable economic expansion of the country absorbed the output of the schools. A small intellectual proletariat has now appeared, but so far it has no political significance. The governments have realized that the overproduction of sedentary workers must be prevented. They have established trade and agricultural schools and are giving a vocational bias to the curriculum of several English literary schools. In these ways they hope to divert part of the pupils from preparing for a career in which there is a growing uncertainty of employment. There are some encouraging signs that the Chinese and Malays are beginning to realize the futility of crowding into the English literary schools. As yet, however, it cannot be said that the problem has been solved, any more than it has been in the other Western dependencies in Asia.

Tin, Rubber, and Trade

British Malaya is a good example of how the development of modern industry can revolutionize the position of a country in international affairs. Seventy years ago it made little difference to the world at large whether the Peninsula came under the control of Great Britain or some other power. The British Government itself regarded the establishment of a protectorate as desirable for reasons of local convenience, but not essential, so long as it retained the island of Singapore. The same consideration would have applied to the Netherlands East Indies and French Indo-China: their control was a matter of local and not of international importance. The United States would certainly have been profoundly uninterested in their ownership until her industrial development made her vitally dependent upon their exports. The transformation has been due primarily to the development of the motor industry and the

creation in Malaya and the Netherlands East Indies of estates and small holdings which supply about three-quarters of the world's rubber. The other main factor has been the increased need of tin as a commercial and military raw material.

The total export of rubber from Malaya in 1938 was 526,911 long tons valued at $272,980,376.* Of this, 345,301 tons, was of Malayan origin while the remainder was sent to Penang and Singapore from the Netherlands East Indies and other adjacent countries for transshipment overseas. The principal market was the United States, which in 1938 took 214,651 tons or 40 per cent. of the total exports, in addition to a large part of the production of the Netherlands East Indies. In the same year the export from the Netherlands East Indies was 297,936 tons, so that Malaya and the Dutch Empire together produced about three-quarters of the world's rubber. Even this does not make clear the full extent of the dependence upon South Eastern Asia for this essential commodity, since most of the remainder came from Indo-China, Siam, British North Borneo, and Sarawak. The other rubber growing countries, of which the principal are Ceylon, Central Africa, and Brazil, produced between them only 92,300 tons or about 10 per cent. of the world's supply. Of this, 27,500 tons came from South America and Africa. The United States is by far the largest buyer, her imports in 1938 being 445,000 tons out of the total world export of 887,892 tons. American companies have opened plantations in Brazil and Liberia; and there has been discussion of the feasibility of increasing production so as to render the United States independent of Asiatic rubber. Theoretically there is no reason why large plantations could not be established in Brazil, the original home of jungle rubber, or in tropical Africa. The experience of the American companies shows however that the immense expansion in acreage is not practicable. One reason is that it has not proved possible to secure an adequate and dependable supply of labour. What is far more important in the present crisis is that the trees do not come into bearing until they are between five and six years old. So that even if all the other difficulties could be overcome, the United States could not escape from its present dependence upon South Eastern Asia for one of the most essential military raw materials during the duration of the present war.

The creation of an industry on a large scale for manufacturing synthetic rubber from mineral oil has been suggested as an alternative to the growing of rubber in South America. Various com-

* Malayan statistics are given in Straits dollars, which have a sterling value of 2*s.* 4*d.*

panies have experimented and have produced a rubber for which they make the claim that its durability compares very favourably with that of the genuine article. The price is very much higher, but the manufacturers hope that eventually it would be reduced to a level more nearly approaching that of plantation rubber. Absolute accuracy is impossible about a development which is in the experimental stage; but it has been estimated that to build the factories for the new industry would cost something like U.S. $1,250,000,000 and would take between five and six years. The time factor alone makes the proposal valueless at the present moment. In addition, however, it would seriously hamper the present rearmament programme, since so much labour would be required to build the factories that not enough would be left for the new armaments works which it is intended to construct. If the latter were given priority then the time needed to create the synthetic rubber industry would be still further extended. Whatever the future may have in store, at the present time synthetic rubber holds out no hope of escape from American dependence upon the Dutch and British plantations.

Tin is the other essential raw material of which a large part comes from Malaya and the Netherlands East Indies, though in this instance alternative sources of supply are much greater. In 1938 Malayan production was 43,137 long tons or 29 per cent. of the world's output of 147,434 tons. In the same year 21,001 tons or 14 per cent. came from the Netherlands East Indies. An additional 15,191 tons or about 10 per cent. was produced in Siam and French Indo-China, so that altogether 53 per cent. of the total supply of tin came from South Eastern Asia. The figures for Malaya do not reveal the full extent of its importance in the tin industry. The bulk of the world's tin is smelted in Malaya, England and Holland, minor centres being China, Japan, Germany, and Australia. The output of the Malayan smelters is greater than those of England and Holland combined, and since May, 1940, the ore from the Netherlands East Indies has been diverted to Singapore. The mines in Siam, Indo-China, Burma, and parts of Africa also send their ore to Singapore. This explains why the shipment of tin from Malaya in 1938 was 61,187 tons. Apart from China which provided 11,606 tons or 8 per cent. of the world total in 1938, Bolivia, Nigeria, and the Belgian Congo were the only important tin mining countries which were not in South Eastern Asia. Bolivian production in 1938 was 25,484 tons or 17 per cent. of the total, and the combined output

of the two African dependencies was 14,621 tons. Bolivian ore was sent to Europe for smelting, 73 per cent. to England and 26 per cent. to Germany and Holland.

The United States is by far the largest user of tin, her consumption in 1938 being 50,724 tons or 33 per cent. of the total. Of the imports 73.8 per cent. came from Malaya, 10.6 per cent. from Holland and the Netherlands East Indies, and the rest from China and the United Kingdom. American dependence upon South Eastern Asia is not so great as for rubber, since it is believed that the production of the Bolivian mines could be increased to the point where it would take the place of Malayan and East Indian tin. The Reconstruction Finance Corporation, a government agency, acting through its subsidiary the Metals Reserve Company, has made an agreement with the Bolivian mines to buy each year for the next five years tin ore at the price of fifty cents or more a pound in sufficient quantity to yield 18,000 tons of smelted tin. The British Government has been given the right to take enough of this Bolivian output to produce 6,000 tons which it will sell to the United States. The heavy British purchases of war materials must be financed by the sale of goods to the United States as well as by disposing of British securities, and in the past tin has vied with whisky as one of the most important sources of foreign exchange. A smelter with an output of 12,000 tons will be built by the Metals Reserve Company, or else it will make arrangements with private companies to undertake the work. It is uncertain whether the ore can be smelted as cheaply in the United States as abroad; but it is believed that the price fixed by the International Tin Committee is sufficiently high to cover any additional cost. The output of the smelter will be only about a quarter of the annual consumption, but it is believed that this will be enough for the requirements of the armament programme. Commercial users of tin will continue to be dependent upon imports, unless they employ more expensive substitutes, such as glass bottles, for tins. To build enough smelters to make the United States self-sufficient in tin production is impracticable at the present time, owing to the amount of labour which would be diverted from more essential construction.

The importance of tin and rubber has tended to make one forget that Malaya's import trade is of great value. It includes both the internal trade of the Peninsula and also the re-export trade. The trade area has shrunk owing to the imposition of tariffs and quotas and the establishment of direct steamship communications with

Europe and the United States. Nevertheless, Singapore continues to be the natural centre for the commerce of a large part of South Eastern Asia, particularly Sumatra, Borneo, part of Java, and Siam. Their exports are sent to it for transhipment overseas, and from it they receive their imports of Western manufactures. Three-fifths of the imports into Malaya consist of foodstuffs, tin, rubber, copra, and other raw materials from the adjacent Asiatic countries, which are intended for local consumption or re-export. From the point of view of the Western industrialized world the important part of the import trade is the remaining two-fifths, the manufactured goods intended for Malayan consumption or for the entrepôt trade. Their value in 1938 was $246,507,000, of which 29.7 per cent. came from the United Kingdom and 13.6 per cent. from the British Empire. The share of the Netherlands East Indies, 27.3 per cent., seems surprisingly high for a non-industrialized area. The explanation is that the bulk of the import was mineral oil from Sumatra and Borneo which was sent to Singapore for re-export, Japan and Australia being the two principal markets. Imports from the United States were 5.7 per cent., and similar percentages were received from Japan and various nations of Western Europe. One of the most striking features of the inter-war period was the rapid growth of German commerce at the expense of British, particularly in the cheaper and less durable articles intended for the bazaar trade. This continued until in the 'thirties it was partially checked by the competition of still cheaper Japanese manufactures.

The growth of Japanese competition, particularly in textiles, has been one of the outstanding developments of the past decade. It drastically reduced not only the sales of Great Britain, Germany, and the other Western nations, but India, China, and Siam found themselves almost equally unable to hold their markets. The governments of Malaya were forced to adopt the same policy as those of the Philippines and the Netherlands East Indies: in 1934 a textile quota was imposed which limited imports from Japan to about double what they had been before the abnormal growth of sales in the early 'thirties. Great Britain did not try to regain as large a share of the textile trade as she had formerly possessed. Germany, Italy, and other countries whose imports had been almost wiped out by Japan received quotas corresponding to their former share of the trade, and were able to regain part of their lost markets. The effect of the quota may be illustrated by comparing the British and Japanese shares of the market for cotton piece goods in 1926 and 1936.

This was the last normal year, for since the outbreak of the Sino-Japanese War the Chinese boycott has reduced Japanese sales to much less than half their former dimensions. In 1926 the United Kingdom supplied 43 per cent. of the textile imports and Japan 11 per cent.; in 1936 the shares were 33.3 per cent. and 46.3 per cent.

Japan is justified in arguing that she must export in order to provide employment for her population. Great Britain, the United States, and Holland have also a right to a reasonable share of the trade of the dependencies for the cost of whose protection they are responsible. The situation is one for compromise between the older exporting nations and their new competitor; but every attempt of Great Britain to negotiate a settlement was baulked by the obstinate refusal of the Japanese to moderate their demands. It has become clear that the guarantee of an adequate and assured market is not Japan's real object: what her government really wants is to increase the power of Japan by controlling the rich territories of South Eastern Asia. Japan has a valid argument; but a real need of economic stability has been used as camouflage for a policy of aggression, until the apparent success of the Axis Powers seemed to show that the day of pretexts had passed.

The conquest of South Eastern Asia would transform the position of Japan. At the present time she is strategically strong but economically vulnerable. She is the only Great Power in the Western Pacific except Russia, which is probably stronger for defence than attack, apart from the fact that as long as Germany is a danger in the West, Stalin is no more anxious to attack the Japanese than they are at present to attack him. The lack of first-class naval bases within the radius of fleet action of Japan, combined with the strength of the Japanese fleet, make it virtually impossible for Great Britain or the United States to act effectively in Japanese waters. Japan's great weakness is her very high degree of dependence upon imported raw materials to supply her armament as well as her commercial needs. This makes it necessary to keep up her exports in order to obtain the foreign exchange necessary to pay for her imports. The United States has always been her principal market and source of supply, and the European war has intensified this dependence by depriving her of any alternative. Vulnerability to economic pressure has been her Achilles heel, and the great fear of Japanese governments has been that if their attacks on British and American interests in China provoked a boycott they might ultimately be worn down through slow strangulation.

Control of South Eastern Asia would not nullify the effect of a boycott but it would considerably weaken it. Japan would also be able to apply economic counter-pressure against Great Britain and the United States, which at present she is powerless to do. Malaya, the Netherlands East Indies, Indo-China, and Siam would together form a very valuable market for the sale of Japanese manufactures. The oil fields of Borneo and Sumatra would make her independent of American supplies, and their rubber, tin, and vegetable oils would far exceed her needs. An important minor gain would be that the conquest of Malaya would give assured control of the Japanese iron mines in Trengganu and Johore. At present they are held on lease and supply about one-third of the annual imports of iron ore. Possession of the bulk of the world's rubber and a great part of its tin would enable Japan to set up against Great Britain and the United States a counter-boycott the effectiveness of which would be immensely increased by the German danger. They would have to obtain their rubber and tin on Japan's terms or not at all. Australia and New Zealand would also be in a precarious position once Japan had cut their naval line of communications with Great Britain. Nor is it likely that the long alternative route through the South Pacific Islands would remain unmolested. The "new order in East Asia" is a play for high stakes, and the war in Europe is the ideal time for running the risks it involves.

The Singapore Base

The defence of South Eastern Asia must depend primarily upon sea power, supplemented by air power and land forces. A fleet however cannot operate without a first-class base; and until 1938 there was none in the whole vast area between Malta and Pearl Harbour in the Hawaian Islands. Both were too remote to be effective, and the naval bases at Hong Kong and Cavite near Manila were inadequate owing to the character of their fortifications and dockyard accommodation. The decision to build a base at Singapore was approved by the Imperial Conference in 1921, and the work was virtually completed in 1938 at a cost of £20,000,000. The distance from Japan, about 3,000 miles, was beyond the range of effective naval action: and the base could only menace her if she attempted to carry out her programme of southward expansion. As a defence against this, Singapore would have a vital effect in the whole area from India to Australia. If the Japanese fleet chose to enter the British zone of naval power it would be under the serious

disadvantages that it was acting far from its bases, and that it would be dependent for supplies upon keeping open long lines of communication. A capital ship damaged in action would find no dry dock large enough to take it until it reached Japan.

The naval and air bases at Singapore are at the back of the island, on the strait between it and the mainland of Johore. A tangle of malarial swamp and jungle has been transformed into a modern dockyard where malaria is practically unknown, with over 5,000 feet of quays with thirty to forty feet alongside at low water. The great 1,000-foot graving dock can take the largest battleship afloat, and the base is fully equipped with workshops, power stations, storehouses, hospitals, and living quarters. There is also a floating dock capable of lifting the largest ships. The air base is a few miles away, and in addition there is the civil airport, 300 acres in extent, which was opened at Singapore in 1937. Local airports have been built at Penang and at various points along the west coast of the Peninsula. The fortifications at Singapore are among the strongest in the world, and there is a powerful garrison of Imperial and Indian troops as well as squadrons of the Royal Air Force. In addition there is the Malay Regiment, and naval, military and air volunteer forces. Hong Kong, an outpost in the Japanese naval zone, would be in an unenviable position; but the Japanese who attacked Singapore would not be engaged on a military picnic. Penang at the Indian Ocean entrance to the Straits of Malacca has also been fortified.

The main naval strategy of the British Empire is based upon the axis of potential threat, namely, the vital trade route which runs from Great Britain's home waters through the Mediterranean, the Indian Ocean and the Strait of Malacca to Singapore. Here it divides, one branch running through the Netherlands East Indies to Australia and New Zealand, and the other to Hong Kong and onwards to the ports of China and Japan. The three powers which threaten the route are Germany, Italy, and Japan, and the British fleet is divided into the Home and Mediterranean fleets and the various small naval forces in the Far East and South Eastern Asia. The dangerous reduction in strength which was the result of the London Naval Disarmament Conference has made it impossible to maintain a powerful fleet in Asiatic as well as European waters. British control of the whole route, however, enables reinforcements to move to any threatened point; and South Eastern Asia could be defended unless the main fleet was held in Europe. If it were free to move to

Singapore it would protect the Eastern section of the trade route, and would make impossible any attack on Malaya or India and other parts of the Empire to the westward. It would also be a protection to the Netherlands East Indies, and would immensely simplify the problem of sending help to Australia and New Zealand if they should need it. The Straits of Malacca are not the only route open to a fleet advancing towards the Indian Ocean: it might go through the Straits of Sunda between Sumatra and Java or between Java and the numerous islands which lie to the east of it. To do this, however, would leave its long line of communications with Japan exposed to attack; and the same threat would make an attempt to occupy the Netherlands East Indies very dangerous until Singapore had been captured. This is the reason why the Dutch have watched its progress not merely with satisfaction but actually with jubilation, and why they have regarded in the same light the decision to develop a naval base at Port Darwin in North Australia, about 2,500 miles to the eastwards. It must surely be unique for a weak and wealthy power thus to contemplate the building of foreign fortifications at both extremities of its possessions. If Japan should move against Australia Singapore would be on her flank and would menace her main lines of communication. If Hong Kong were besieged and the fleet should move north to assist it, Singapore would again be its main base.

The British fleet can now hardly expect naval help from the French while the Dutch fleet is lacking in large ships; but our fleet would be operating in friendly waters and be able to use the Dutch naval base at Sourabaya and the stores of fuel oil. This might be particularly useful if a British fleet were proceeding from Singapore to the help of Australia. The whole of this long voyage of some 2,500 miles would be through the friendly waters of the Netherlands East Indies. Australia of recent years has been considerably strengthening the fortifications of her ports as well as her naval, land, and air forces, and has been rapidly enlarging her munitions and aeroplane factories. The object was to enable her to put up a considerable resistance against a Japanese attack, for it was recognized that while ultimate victory would depend upon the British main fleet, its arrival might be delayed owing to the situation in Europe. The Australian naval and air forces would also co-operate with the Imperial forces at Singapore. In October, 1940, it was announced that units of the Royal Australian Air Force were stationed in Malaya. When the programme of expanding the muni-

tions works was completed it was believed that Australia would supply not only her own requirements but also in addition some of those of the adjacent parts of the Empire. India has also been increasing her armaments production, and is supplying some of the requirements of the troops in Singapore and the Near East. This decentralization of the manufacture of munitions is one of the striking contrasts with the Great War, when the British troops in almost all parts of the world were dependent for supplies upon Great Britain. Indian troops form part of the garrisons in Malaya and Hong Kong; and in case of need Singapore could be reinforced from the army and the squadrons of the Royal Air Force in India.

The British naval forces locally available consist of the China Squadron, and the Australian and New Zealand ships. Before the outbreak of the war there were six heavy and eight light cruisers, one aircraft carrier, sixteen destroyers, a mine-laying cruiser, nine escort vessels, and fifteen large ocean-going submarines, of which two were mine-layers. The squadron was not sufficiently strong to engage the Japanese battle fleet and while a naval base is essential for fleet action, Singapore alone cannot defend South Eastern Asia and the rubber and tin which are essential to the democratic powers. The purpose, however, was that the local naval forces should hamper the Japanese fleet by threatening its lines of communication with its bases in Japan and so gain the twelve days needed for the British battle fleet from the Mediterranean to reach Singapore. In the Far East as elsewhere there was a period of acute danger after the collapse of France but the completion of the new capital ships that have recently been put into commission should make it feasible to carry out the original plan.

Japan is never likely to have a better chance to attempt her policy of southward expansion, and she has already made advances which have brought her nearer to her objective. The capture of Hainan Island and the construction there of a naval and air station did more than threaten the Philippines, Hong Kong, and Indo-China; it brought Japan to within about 1,300 miles of Singapore. In March, 1939, she annexed the tiny Spratley Island, in the middle of the South China Sea about 700 miles south of Hainan and roughly halfway between Singapore and Hong Kong. It is also about 300 miles from the oil fields of British North Borneo and the same distance from Indo-China. Japan has now a foothold, however small and precarious, which is only about 650 miles from Singapore. The collapse of France gave Japan air bases and control of the ports

and naval stations in Indo-China, and carried her a stage further south. The familiar methods of infiltration, pressure and menaces have been employed against Siam which was also marked down for absorption into the Japanese Empire. Japan recently, demanded the lease of the small naval base which Siam has begun to build at Singora on the Gulf of Siam. The port is on the Malayan-Siamese railway system, and is only 150 miles from Kelantan and fifty miles from Kedah in British Malaya. Japan's great weakness until two years ago was that she had no base south of Taiwan (Formosa), and that she must keep open long lines of communication. The turn of events has enabled her to carry out a flank attack which has brought her steadily closer to Malaya and yet has avoided a direct conflict with the United States, Holland, and Great Britain. None of the positions captured can rival Singapore as a first-class base, but Japan has acquired a series of advanced bases which stretch far to the south on the western side of the China Sea. She has considerably strengthened her position for a direct move against her main objectives. The ease with which this has been accomplished as contrasted with the stalemate of the war in China may lead her government to decide that the navy was right. It has always urged that Japan's future lay upon the seas, and that expansion southward was far preferable to the army's programme of conquest on the mainland of Asia.

British Policy in China has been conditioned by the situation in Europe and the attitude of America. Important as Great Britain's interests in China are, they are situated in the zone where Japanese power is at its strongest and British at its weakest. "When the house is on fire no one troubles about the barn." It was clearly undesirable to go to war with Japan except upon some ground that would be a *casus belli* for America also. In China therefore Great Britain pursued a policy parallel to that of America, which was to afford all possible support—moral and financial—to the Government of Chiang Kai-shek, and there is no doubt that the stubborn resistance of China has made it more difficult for Japan to pursue her southward policy. In 1940 the war in Europe presented Japan with an opportunity that may never recur to extend her Empire over China and the regions to the South and to free herself from the menace of Russia entrenched at Vladivostock. She joined the Axis in the belief that Germany will win the war but she hesitates to strike while British power is still intact and while it is uncertain at what point the

overwhelming power of America will come in against her. The extension of the war to South East Asia would constitute a direct threat to the security of the British Empire but the odds would by no means be in favour of Japan. The decisive factor for peace or war may prove to be the judgement of the Japanese Government on how far the United States is ready to support its repeated declarations that it is opposed to any change in the *status quo*.

CHAPTER II

THE GOVERNMENTS OF MALAYA

The Population of Malaya

The geographical position of Malaya made a mixed population inevitable. A rich and underpopulated land within easy reach of the overcrowded countries of China and India was certain to attract immigrants. Until seventy years ago they were practically confined to the coastal fringe of the towns and small agricultural districts in the Straits Settlements. Only a very limited number of the more adventurous Chinese settled in the Malay States as spice and sugar growers, tin miners and traders. The Malays did not welcome them, so that while there was a good chance of making a fortune, the probabilities were almost equally strong that its possessor would not survive to enjoy it. Peninsular Malaya seventy years ago was "a country as big as England without Wales, with a sparse population in small villages scattered in or on the fringe of primeval forest" that bordered the rivers. The influx of Chinese and Indians followed the establishment of the *pax Britannica* and reversed the racial balance of Malaya. According to the census of 1931[1] the total population was 4,385,346, of whom 1,114,015 were in the Straits Settlements, 1,713,096 in the Federated and 1,556,739 in the Unfederated Malay States. The Malays numbered 1,644,173 or 37.5 per cent. of the total population, and had a majority only in the Unfederated Malay States. In the Straits Settlements they were 22.5 per cent. and outnumbered the other races only in the predominantly agricultural settlement of Malacca. In the Federated Malay States they were 26 per cent. and were in the majority only in the largely undeveloped State of Pahang. They were 22.4 per cent. in Johore and 65.1 per cent. in Kedah, the balance of the population being Chinese, Malaysians, and Indians. The east-coast States had a combined population of 542,306, and the Malays formed 90.2 per cent. of the population in Kelantan and 91.2 per cent. in Trengganu. The figures for Malays are frequently combined with those of the Malaysian immigrants from the Netherlands East Indies who have been settling in Malaya continuously from the earliest times of which any

reliable record exists. Only a small number from Sumatra look upon themselves or are regarded by the native Malay as in any way alien. Unlike the Chinese and Indians the children of the vast majority of immigrant parents become merged at once in the Malay population and consider British Malaya their native country. One reason for the considerable migration is believed to be that the knowledge has spread through the Eastern Archipelago that the Malays of Malaya are more prosperous and contented. In 1931 the Malaysian settlers formed 24 per cent. of the population of Johore and 8.7 per cent. of the Federated Malay States; and altogether they numbered 317,848 or 7.2 per cent. of the whole population. If the figures for the two Malay races were combined they made up 44.7 per cent. of the total population of Malaya. In 1931 39 per cent. of the total population, or 1,709,392, were Chinese. They constituted 59.6 per cent. of the population of the Straits Settlements, 41.5 per cent. of the Federated Malay States, 41.4 per cent. of Johore, 18.2 per cent. of Kedah, but only about five to seven per cent. of the East-coast States. Apart from the tin miners and estate labourers they were largely urban, and in the towns of the Straits Settlements, the Federated Malay States and Johore they were more numerous than all the other races put together. In Singapore they were 74.9 per cent. of the population of 559,946. The Indians in 1931 numbered 624,009 or 14.2 per cent. of the total, and were most numerous in the Federated Malay States, where they were 22.2 per cent. In the Straits Settlements they were 11.9 per cent., in Kedah 12 per cent., and in Johore 10.1 per cent. While a large part of them worked on the estates they also formed about a fifth of the urban population of the Federated Malay States.*

Comparison of the last three census reports shows the progressive decline in the proportion of the Malays and Malaysians to the total population. In 1911 they were 51 per cent., the Chinese 33 per cent., and the Indians 11 per cent. of a population of 2,672,800. In 1921 the population had grown to 3,358,054 and the Malay races were 49.2 per cent., the Chinese 35 per cent., and the Indians 14 per cent. In 1931 the Malays were 44.7 per cent., the Chinese 39 per cent., and the Indians 14.2 per cent. out of a population of 4,385,346. The actual numbers of the Chinese and Indians in Malaya have little relation to the number permanently living there, since the majority

* The estimated population of Malaya on 31st December, 1937, was 5,137,474, of whom 2,169,072 were Malays and Malaysians, 2,114,195 Chinese, and 754,849 Indians. The Malays were 43% of the total, the Chinese 41%, and the Indians 14% (Statistics Department S.S. and F.M.S., *Malayan Year Book, 1938*, p. 38.)

are still transients and eventually return to their native countries. It is impossible to determine how many of those in Malaya in 1931 were permanent settlers. Some of the Malacca Chinese have been in the country for three centuries, others have lived in Penang or Singapore since the early days of British rule, but the majority of the Straits Chinese are of much more recent origin. The Malays are the only permanent element in the population. One of the clearest proofs that the bulk of the population is still migratory is that in 1931 only 2,505,931 or 57.1 per cent. had been born in Malaya. In the decade 1921 to 1930 2,417,941 Chinese entered Malaya and 1,937,941 left it, so that the surplus of arrivals over departures was 480,000. It is true that comparison of the census reports shows that the number of Chinese born in the country has been growing. In 1931 534,011 or 31 per cent. of the total Chinese population of Malaya, 205,245 or 29 per cent. of that of the Federated Malay States, and 249,495 or 38 per cent. of that of the Straits Settlements had been born there. In 1921 the corresponding figures were 22 per cent., 17 per cent., and 29 per cent. respectively. The custom has been growing amongst both Chinese and Indian immigrant labourers of bringing their wives with them instead of leaving them at home. In considerable measure the increased number of Chinese and Indian births in Malaya has been due to this. Birth however is no proof of permanent settlement, for between 1921 and 1931 approximately 35,000 Malaya-born Chinese returned to China.

Examination of the statistics for the Indian population shows that like the Chinese the majority are transients. The number born in British Malaya increased during the decade 1921–31. In 1931 131,505 or 21 per cent. of the Indians in British Malaya, 84,036 or 22 per cent. of those in the Federated Malay States, and 30,236 or 23 per cent. of those in the Straits Settlements had been born there. The corresponding figures were 12.4 per cent., 11 per cent., and 18 per cent. in 1921. According to the census of 1931 however the " turn-over of the Indian population is rapid, and evidence that relatively few Indians born in Malaya remain here is far clearer than in the case of the Chinese". The South Indian labourers remained only three years on the average before returning to India, although they very often came back to Malaya and to an increasing extent settled there permanently. It was estimated that about 250,000 of the 624,009 Indians in Malaya were permanently domiciled there.

The sex ratio of the Malays is normal, while for Chinese and Indians there is an excess of males, though the disparity is lessening.

The sex ratio for Indians was 308 females per 1,000 males in 1911 405 in 1921, and 482 in 1931. For Chinese it was 247, 384, and 436 in the same years. The birth rate for Chinese is over forty on the average and is higher than for Malays in spite of the disproportion in sex ratio. The Chinese maternity mortality rate is lower, and the infantile mortality rates for the two races are much the same. Altogether apart from immigration it is evident that the Chinese proportion of the population will increase. The Indians have a lower birth rate than the Malays, a higher maternal mortality rate, and a closely similar infantile mortality rate.

The Malays everywhere are essentially rural, only 11 per cent. being urban in 1931. The permanently domiciled Chinese are found principally in the towns, the greater part being professional men, traders, shopkeepers, or clerks. The immigrant Chinese supply the demand for manual labourers and skilled artisans. The majority of the Indians are manual labourers with a minority of professional men, clerks, and traders. Europeans numbered 17,768 in 1931, of whom 15,332 were British. They were civil servants, business and professional men, and managers of mines or estates. Except in the Straits Settlements the population was predominantly rural and engaged in the production of foodstuffs and raw materials. The urban population was mainly concerned with the administration, with supply and transport services required by the rural population, and with the marketing of the raw materials produced by them. The industrial class was largely non-existent save in Singapore, which had a considerable number of industries, most of them of small size. The urban population was 60.7 per cent. of the whole in the Straits Settlements but only 25.4 per cent. in the Federated Malay States and 29.5 per cent. for the Peninsula.

The Governments of Malaya

The government of British Malaya is almost as complicated as its racial composition: the Peninsula is divided between no less than ten separate administrations. The small Crown Colony of the Straits Settlements, which includes the islands of Singapore and Penang, and Malacca and Province Wellesley on the mainland, is the only territory under direct British rule. Attached to it are the Christmas and Cocos-Keeling Islands in the Indian Ocean and Labuan off the coast of Borneo which was formerly a separate Crown Colony. Four Malay States—Perak, Selangor, Negri Sembilan, and Pahang—come under British protection between 1874 and 1888 and united

to form the Federated Malay States in 1896. Johore, one of the five Unfederated Malay States, has been closely associated with the British since the foundation of Singapore in 1819, although a British adviser to the Sultan was not appointed until 1914. The other four States, Trengganu, Kelantan, Kedah, and Perlis, were transferred from Siamese to British suzerainty in 1909. Subject to the final control of the Secretary of State for the Colonies supreme authority over all the Malay States is vested in the High Commissioner, who is at the same time the Governor of the Straits Settlements.

From the legal point of view the position of the Straits Settlements differs from that of the Malay States in important respects.[2] The former is a Crown Colony and an integral part of the possessions of the Crown; and all persons born in it are British subjects. The Malay States are protected states, the territory is not an integral part of the possessions of the Crown, and while the inhabitants are British protected persons they are not British subjects. Sovereign power belongs to the Malay Sultans and not to the British Crown. The authority exercised in them by the latter is derived from treaties made with the different states which gave very wide powers of control over internal affairs as well as complete control over foreign policy. The Malay framework of the States was left intact and the constitutional position of the Sultans was legally unimpaired. One instance of this is that they have been held to be exempt from the jurisdiction of British courts. The practical difference between the protected states and the Straits Settlements is not very great: in both the administration is largely conducted on Crown Colony lines. At the same time the legal position of the Sultan is more than a mere form. Much depends on the personal capacity of the ruler, but especially in some of the Unfederated Malay States he is far from being a negligible factor in the government. In the Federated Malay States one reason for the policy of decentralization has been the desire to lessen the difference between the legal and the actual position of the Sultans.

The Straits Settlements

The Government of the Straits Settlements is of the normal Crown Colony type with a Governor, an Executive, and a Legislative Council. The Executive Council consists of the Governor as president, the General Officer Commanding the Troops, the Colonial Secretary, the Resident Councillors of Penang and Malacca, the Attorney General, and the Financial Secretary, all of whom are *ex-*

officio members, together with two official and three unofficial members, one of whom is a Chinese appointed by the Governor for two years. The Legislative Council is composed of the Governor as president, thirteen official and thirteen unofficial members who are British subjects. The official members, eleven of them sitting *ex-officio* and two by the Governor's appointment, are the official members of the Executive Council together with the heads of the principal departments. Eleven of the unofficial members are appointed by the Governor, viz. five Europeans, three Chinese, one British Indian, one Malay, and one Eurasian. Two additional Europeans have been elected since 1924, one by the British members of the Chamber of Commerce at Singapore and the other by those of the Penang Chamber of Commerce. The term of office for the unofficials and the two official members who are appointed by the Governor is three years, but they are eligible for reappointment. The Governor has both an original and a casting vote so that there is an official majority in the Legislative Council. The annual draft estimates of revenue and expenditure are submitted to a Select Committee on which there is an unofficial majority, before they come before the Legislative Council A Finance Committee composed of the Treasurer and three unofficial members considers supplementary votes for expenditure before they are laid before the Legislative Council. If the proposals are opposed by two of the unofficials, the Government usually abandons or modifies them, though if they are regarded as very important it may proceed if it can secure the support of one unofficial member. The legal powers of the Governor, the advisory rôle of the two Councils, and the ultimate control of the Colonial Office are much the same as in Hong Kong. The difference between constitutional theory and actual practice is also very similar: in both colonies the Governor is a limited monarch. His policy is greatly influenced by local public opinion and the press, and one of his most cherished ambitions is that he shall not provide ammunition for any questions in the House of Commons. The official majority is never used to ensure the passage of a measure unless the Colonial Office has given instructions to that effect or the Governor considers the question to be of vital importance. Normally he tries to arrange in advance a compromise which satisfies at any rate the majority of the unofficials in the Legislative Council. When the debate takes place, if a single unofficial member brings forward arguments which had not previously been advanced, enactment is postponed until the objections have been considered.

The unofficial members and the press regard themselves as a permanent parliamentary opposition to the official majority in the Council. It is a perennial source of dissatisfaction that official members must support the Governor's policy whenever he requires them to do so, irrespective of their private opinions. An air of unreality is imparted to debates, since no force of argument or eloquence can hope to detach even one member from the official phalanx. The sole chance of success is to convert the Governor or, if he is acting on instructions, the Colonial Office. The root of the difficulty is that the attitude of the unofficials is inevitably coloured by the British tradition of self-government, and that precedents drawn from the House of Commons are applied to a legislative body the character of which is intended to be fundamentally different. The members of parliament sit as the elected representatives of the people; in theory and sometimes in practice they determine the policy of the government. The unofficial members of the Legislative Council, whether elected or nominated, sit as the advisory representatives of the different races and interests. The final decision lies with the Governor, since it is fundamental to the Crown Colony system that he combines both power and responsibility while his Councils are purely advisory. The official majority is essential to maintain his authority, since experience has shown that its abolition means the beginning of the end of the Crown Colony form of government. The inevitable result is that the most important work of the unofficial members is largely done outside the formal meetings of the Council through private interviews with the Governor or discussions in the Executive Council or the Finance Committee. By the time a measure reaches the Legislative Council the likelihood of any radical alterations in it is not very great. The actual relations which have grown up between the Governor and the unofficials have a curious resemblance to the changes in the parliamentary system which have lessened the power and importance of the House of Commons. More and more the really vital decisions on policy or the scope of legislative and financial measures are made in the Cabinet, in Committee, or in private interviews between the Prime Minister and the leaders of the opposition parties. The pressure of the party whips, the use of the closure, and the practice of treating a hostile division as a vote of want of confidence, bear more than a little analogy to the official majority. A debate in the House of commons is as unlikely to produce any radical change in governmental policy as one in the Legislative Council.

The tiny minority in Malaya who take any interest in public affairs eternally grumble at their government; but at the same time very few of them wish to change the form of it. In 1920 a Select Committee of the Legislative Council was appointed to consider the problem. The Report pointed out that the vast majority of the population were foreigners and transients of an "extraordinary mixture of races" who were not British subjects and had no feeling of loyalty towards the country. Only the Malays, the Eurasians, and a growing number of the Straits-born Chinese regarded Malaya as their native country, and they were "at present but a small proportion of the population". Few even of them had any desire for the vote, and far fewer still had any experience of self-government. "Granted safety in the acquisition of wealth the average citizen has asked little else from Government . . . hitherto amongst all classes there has been general contentment with the form of Government. . . . As a bureaucracy it has fairly well maintained the chief virtues of bureaucracy—efficiency, integrity and impartiality." The Committee considered that it was impossible to give the franchise to aliens, or for that matter to British subjects who with a very few exceptions neither wanted it nor understood how to use it. A general mixed electorate was precluded by racial and religious antipathies and the different levels of civilization, and no satisfactory communal electorates could be discovered. "So far from there being any genuine desire for the introduction of the elective principle very many thinking men and some of the most influential public bodies of all races are opposed to such action, which they would regard as premature and ill-judged. . . . No advantage can be gained by thrusting upon an uninterested multitude a scheme of responsible government which they neither desire nor comprehend." At the same time the Committee believed that it discerned "amongst a section of the population, we would not say an ardent longing for reform but at least a desire to re-examine the question". It went on to condemn the official majority and recommended the substitution of a small majority of unofficials, of whom two Europeans should be elected by the British members of the Singapore and Penang Chambers of Commerce and the rest appointed by the Governor. To ensure the passage of essential legislation the Committee advised that the Governor be given certain emergency powers borrowed from the new Ceylon constitution, which, as later experience showed, failed to attain their object.[3] The Government accepted the recommendation that two of the European members be elected, but re-

jected the rest of the report. In the following years an elected unofficial majority was occasionally advocated, notably by Mr. Tan Cheng Lock, one of the Chinese members of the Legislative Council. [4] The Straits Settlements (Singapore) Association, a very small body most of whose members were Europeans, in 1930 put forward a plan for an equal number of officials and unofficials in both Councils, those in the Legislative Council being elected by a selected list of British subjects. The Governor was to have a casting vote so that the official majority would be preserved. A leading newspaper stigmatised the "crass folly" of a few "misguided idealists"; but apart from this no notice seems to have been taken of the scheme. [5]

The situation to-day is substantially the same as it was when the Committee of the Legislative Council made its report in 1920. There is exceedingly little demand amongst any race or section of the population for a change in the form of government. Despite a good deal of grumbling at this action or that there is a general feeling that the administration has been just and reasonably enlightened and that any change is likely to be for the worse. British subjects are only a minority of the population of the Straits Settlements, and the overwhelming majority of these are too engrossed in their businesses and too well content with the general conduct of government to trouble themselves with constitutional changes. A handful of Europeans and educated Straits Chinese demand democratic reforms, but they have small influence and represent little except themselves. During the past decade a minor element of discontent has appeared amongst the Chinese clerks. Prior to 1929 they were too busy making money to trouble about anything else and some of them made large fortunes out of tin and rubber. All could hope to be equally fortunate, but with the onset of the depression the opportunity vanished. Some of them began to look enviously at the more important and better paid posts held by Europeans in business and the Government services. A demand arose for admission to the Malayan Civil Service, which was met by making some of the higher posts in a newly-created Straits Settlements Civil Service open to British Asiatic subjects. Discontent also exists amongst the small intellectual proletariat, the unemployed clerks who are in the main the inefficient product of the private English schools and the failures of the government and aided schools. Dissatisfaction with the existing form of government is slight and unimportant; but one imagines that it is more likely to grow than to disappear among the Straits Chinese. They have been affected by the nationalism

which has strongly influenced China as it has most of Asia since the Great War. It may be argued that the descendants of immigrants are in a different position to the peoples of India, Ceylon, or Indonesia: they have no memories of a time when they and not the European ruled the country and therefore are unlikely to demand self-government. It is also true that at present only a part of the Straits Chinese look upon Malaya as their permanent home and that most of them are more interested in business than in politics. The number of permanently domiciled Chinese is growing, and is likely to be still further increased if the Sino-Japanese War leaves Japan in partial occupation of the country. No doubt their loyalty will long continue to be towards China rather than Malaya and the British Empire. Nevertheless it seems improbable that this will deter them from claiming self-government as they come to feel more widely that they and their descendants must remain in Malaya. They regard the Malays as inferiors, and as the chances diminish of making a large fortune quickly they are likely to entertain political as well as economic ambitions. It would not be surprising if the growth of political agitation in India in time led the educated Tamils to make similar demands.

If the demand for self-government comes it will raise a host of almost insoluble problems. Only British subjects could be given the vote, and it would be far from easy to compile a register of British Chinese subjects in a colony where registration of births is inaccurate, no registration of individual immigrants has been attempted, and the majority of Straits Chinese would be utterly indifferent to their national status and the purpose of the whole enquiry. The problem of the electorate would not be easy to solve. The Malays numbered 250,864 or 22.5 per cent. of the population of the Straits Settlement in 1931, which was slightly more than the 249,495 Chinese who were British subjects by birth. So far they have been uninterested in politics and it has been difficult to find Malay representatives for the Legislative Council. They are a conservative people, and as in Java their whole tradition has been aristocratic. As one of them put it, "We Malays like to be consulted though the decision lies with the Government; and when the Governor gives an order we like to obey it". A mixed electorate would be dominated by the Chinese, in view of the difference of the two races in characteristics and stages of development. The Indians are all British subjects but presumably only those who were permanent settlers could be allowed to vote. There are only a few

thousand Eurasians, and the Europeans while numerically insignificant are more important from the economic point of view than all the other races put together. A single electorate made up of these dissimilar and sometimes clashing racial elements is unlikely to work successfully, and the only way to ensure fair representation to each would probably be communal electoral rolls as in India. The Donoughmore experiment in Ceylon of trying to heal communal rivalries by ignoring them and combining all races in a single electoral roll seems only to have exacerbated them. Even with communal safeguards one would hesitate to predict harmony when the Malay element was politically and economically backward but beginning to resent the position of the Chinese. A further complication would be that the intimate connection between the Straits Settlements and the Malay States would make it extremely difficult to set up self-government in the one but not in the other. Yet to create a régime which would pretty certainly establish Chinese political ascendancy in the Peninsula would be regarded by the Malays as a breach of faith. Moreover, the ports of Malaya are commercial centres of Empire and not merely of local importance, and Singapore is the naval base for the whole of the Western Pacific. The experience of Malta shows how difficult it is to safeguard vital Imperial interests and at the same time satisfy the demands of the local inhabitants. All of which is no assurance whatever that the problem will not arise. If it does one can only hope that the solution will not follow the Indian model of abrupt transition from benevolent despotism to self-government by large instalments, when very few Indian political leaders had had the administrative experience even of membership in a town council.

The administration of the three Settlements is in charge of a Resident Councillor at Penang and at Malacca and the Colonial Secretary at Singapore. In each of them the urban area is controlled by a Municipal Commission the members of which are appointed by the Governor, although some are in fact nominated by various public bodies. In Singapore there are twenty-five Commissioners, of whom the Governor appoints twelve directly and another twelve on the nomination of e.g. the Chamber of Commerce, the Chinese Chamber of Commerce, and the Muhammadan Advisory Board. The President, who is both Chairman of the deliberative body and head of the executive, has for the past thirty years been a civil servant permanently seconded by the Governor to the service of the municipality after consultation with the Commissioners. Apart from

him the Commissioners are unofficials, and the principal control exercised by Government appears to be that its sanction is required for by-laws, the purchase of land, and the floating of loans. The municipal revenue varies between $13,000,000 to $14,000,000 per annum in Singapore and $4,000,000 to $4,500,000 in Penang, and the expenditure is about the same. The principal tax is the rate of 20 per cent. on the annual rental value of property. Additional rates of 2 per cent. each are levied for the Improvement Trust and for education, the latter being turned over to the Department of Education. Moderate charges are made for the supply of water, gas and electricity. In 1937 the municipal debt of Singapore was $45,693,000 and that of Penang $14,118,000. More than half the debt of Singapore was incurred in providing a water supply and an electric power station. Originally the Municipality supplied electricity which it bought from a private tramway company, but since 1927 it has itself manufactured current for the whole of Singapore Island.

The most important work of the Chinese Protectorate (since 1931 the Secretariat for Chinese Affairs) is to keep the Government in touch with the immigrant Chinese. The nominated Chinese members of the Legislative Council are supposed to voice their point of view as well as that of the Straits Chinese; but the Secretariat for Chinese Affairs is an additional channel of communication of very great value. Its duties, organization and methods of operation are much the same as those of the similar department in Hong Kong. The Protectorate was established in Singapore in 1877 to cope with the secret societies which at that time were a very serious and unsolved problem. Branches were opened in Penang in 1881 and Malacca in 1911. In 1883 the Chinese Protectorate was established amongst the tin miners of Perak, and as their settlements spread additional branches were opened in the other Malay States. In 1934 the two Protectorates were combined and placed under the control of the Secretary for Chinese Affairs Malaya at Singapore. He has advisory but not executive powers in the Unfederated Malay States, and has a staff of seventeen European Assistants in the different Chinese centres of Malaya. All cadets are sent to Canton to learn the language and can dispense with interpreters, who at best are a hindrance to frankness in a private interview and at worst are given to "terminological inexactitudes". Any Chinese can obtain an interview with a European without having to state his business to the peons, clerks, and other defensive outposts normally found in offices. Accessibility sometimes has unexpected results, as for

example about fifteen years ago when a Chinese woman Communist arrived from Canton with instructions to liquidate the Protector of Chinese in Singapore. During their interview a bomb exploded inside a suitcase which she had placed on his desk and injured his arm. The Government concluded that she was an undesirable character and deported her after she had served a light sentence.

Under the provisions of the Labour Code the Protectorate has the same powers of regulating the conditions of labour of Chinese coolies as the Labour Department has for Indians. It enforces the Registration of Societies Ordinance, supervising the legal registered societies and assisting the police to track down the unlawful secret societies. In the years when Kuomintang and Communist agitation was prevalent it did similar work regarding those organizations. The Protectorate also supervises the Chinese vernacular schools; and acting in a quasi-judicial capacity it settles many disputes between the Chinese which otherwise would be taken to court. It consider that lawyers cause more delay than enlightenment; and while it cannot always prevent their presence it can require that the case be conducted in Chinese. This soon reduces attendance to the Protector and the parties concerned, from which follows a speedy settlement. As in Hong Kong, the powers of the Protectorate have been extended far beyond their legal limits, because the Chinese insist on submitting their disputes to it. There was once a case where a dead Chinese could not be buried because he had no son to perform the necessary funeral rites. By Chinese custom a certain kinsman could be adopted and carry out the ceremonies; but his mother would not allow it because she had a grudge against the dead man's widow. In spite of the climate there could be no funeral until the deadlock was broken. So the Secretary for Chinese Affairs was asked to display his diplomatic skill, which he did with complete success after a hard morning's work.

The Straits Chinese had complained that the Protectorate concerned itself principally with the immigrants and did not assist them. To meet this criticism Chinese Consultative Committees composed of the leading local Chinese British subjects were set up about 1933 in various parts of Malaya, the Secretary for Chinese Affairs being a member. They supplemented the Chinese advisory Boards which had been created in the different centres of Chinese settlement at various dates since 1889. The members were appointed by the Governor, some of them being nominated by such bodies as the Chinese Chambers of Commerce. They represented the prin-

cipal Chinese interests, including trade and planting, the Straits Chinese, and the principal tribes of the immigrant Chinese. The Committees brought the Government into closer touch with the Chinese since they were consulted on legislation and other matters affecting them and were given explanations of proposed policies. Their advice and help have been of considerable assistance; but their usefulness has been weakened by their unwillingness openly to advocate policies of which they approved but which were unpopular with the mass of the Chinese. They would not for example support the Government in its measures to curb the Kuomintang, although individually and secretly the members expressed approval and also relief that they were no longer forced by intimidation to contribute towards the party's funds. The Committees cannot have as great an influence as in Hong Kong, because of the lack of homogeneity amongst the Chinese in Malaya. Most of the Hong Kong Chinese come from Kwangtung and their leading men on the District Watch Committee work together and exert great influence over them. In Malaya the interests of the Chinese Christians and the Straits Chinese often differ from those of the immigrants, and the latter are divided into five principal tribes who are severed by traditional hostilities. The cleavages are so deep that the Chinese on the Committees are unable to work together as in Hong Kong. In some parts of the Federated Malay States the leading Chinese on the local Committee come from a different part of China than the bulk of the labourers and are unable to influence them because of provincial jealousies.

The Malayan policy towards societies is that they must be registered before they acquire a legal right to existence. A new society is required to submit its constitution, the names of its officers, and any other information needed to prove that its ostensible are also its real objects. Registration is from year to year, and the society must inform the Secretary for Chinese Affairs of the names of its new officers and of any changes in its constitution. Certain societies such as charitable associations managing a hospital have been exempted from registering, but may be required to do so if ever it is thought desirable. Societies which do not apply for or are refused registration are illegal, and membership or other acts connected with them are punishable by fine or imprisonment. Originally the Registration Ordinance was aimed against the secret societies which appeared wherever large numbers of Chinese were living. In origin most of them were branches or sub-branches of the Triad and

Tokong Societies, which were traditional enemies; but the discipline and control of the parent bodies have decayed during the past fifty years so that branches even of the same society were often at feud with one another. This led to gang wars and riots which were really fights between rival societies. On top of this the members were often criminals and combined society feuds with their own nefarious occasions. To make things more difficult, independent criminal gangs sometimes posed as members of a society because the added terror which this aroused made law-abiding Chinese more unwilling to inform against them. At times murders were committed for disciplinary purposes: the victim had refused to join the society and was removed *pour encourager les autres*. Members were murdered for breaking the rules of a society or informing against it. Nevertheless the power of the secret societies and their ambitions are very much less than they were seventy or eighty years ago. They rarely attempt nowadays to be an *imperium in imperio* and assume the powers of Government over their members; and their headmen are no longer Chinese of wealth and outward respectability. They retain the age-old ritual at lodge meetings, but they have degenerated into associations of criminals. Secret societies are a perennial problem, but their activity seems to go in waves, which are followed by quiet times when there are only a few murders or other disturbances.

A serious outbreak occurred in Singapore in 1922 and lasted for some years thereafter. In addition to the murders and robberies committed in the normal course of their profession, members of rival societies were assassinated in a struggle for the right to control various parts of the town for purposes of extortion. A new feature of gang warfare was the use of German automatics, smuggled in by sailors, in addition to the traditional knife. The police were considerably below strength owing to retirements and retrenchments made in 1921 during the rubber slump, and their training and organization needed improvement. Under normal conditions the Chinese Protectorate would have been a great help; but its ability to obtain information was seriously impaired because its staff had been depleted during the war, and the cadets appointed after 1918 were inexperienced. About five years' training is needed to learn Chinese and make a useful officer. The police had the very great handicap that, while Chinese committed 80 per cent. of the crimes, most of the officers were Europeans and the majority of the constables were Sikhs or Malays. Very few spoke Chinese well and they were compelled to rely on interpreters and informers. This unsatisfactory

situation was made worse by the reluctance of the law-abiding Chinese to give information even when they had been the victims of extortion or assault. They had the same traditional attitude as the Hong Kong Chinese who regarded police, soldiers, actors, and collectors of night soil as alike belonging to the dregs of society. The shooting of informers and a few police still further terrorised them; and when the trouble was at its worst the police found it next to impossible to obtain information.* When the police did make an arrest "witnesses are apt to disappear, with the result that the case on arrival at Assizes practically disappears as well". The multiplicity of languages and dialects in Singapore and the constant shifting of population made it very difficult to find a wanted man even when a description was obtained. Singapore was the principal port of arrival for Chinese immigrants and between 150,000 and 350,000 strangers landed each year. Apart from a medical examination and a statement of the number of arrivals, no information concerning them was recorded. After a stay of varying duration most of them moved on to the Malay States. Inevitably the immigrants included a number of Chinese criminals whose arrival could not be detected until they committed a crime. In 1923 over three-quarters of the crimes were committed by strangers of whom the police records had no knowledge. Unless the police were able to run them down within forty-eight hours they usually escaped from Singapore and vanished amongst the hundreds of thousands of Chinese scattered throughout Malaya. In 1923 it was decided to enlarge the police force, but little was done until about 1928 because the money was needed for other services. The riots of that year brought a renewed public outcry, and the strength of the force was increased to 4,186 including 140 European officers and inspectors in 1930, as compared with 3,043 of whom ninety-four were Europeans in 1923.[6] The detective branch was expanded from 182 to 231 and the training and discipline were greatly improved. As a result of the improved system of intelligence the societies have given little serious trouble since about 1930.

Kuomintang and Communist agitation was a serious problem during the 'twenties and early 'thirties. The effect was strongest among the immigrant Chinese, who naturally felt no loyalty to-

* In 1934, for example, Inspector Popejoy was murdered in broad daylight in a Chinese pawnshop by a Cantonese gunman, who then escaped along a populous thoroughfare. He was later arrested, but it was extremely difficult to persuade any of the many Chinese who had seen the crime to identify him, even though the societies had given little trouble for some years.

wards British rule since their sole object was to make enough money to return to China as quickly as possible. They were docile and credulous, with a latent contempt and dislike of foreigners which could easily be aroused against the British. The Straits Chinese combined loyal appreciation of the advantages of British rule with a strong affection for China. Only a minority felt any patriotic attachment to the British Empire or to Malaya. For most of them their first loyalty was to China, though the strength of their feeling varied with the length of their residence in Malaya. Some of the Chinese in Malacca had been there three centuries and had severed all connection with China, to which their attachment was cultural and sentimental but not political. Straits Chinese of more recent origin were often in touch with their relatives in China, periodically visiting them and sending them money; and the strength of their loyalty was proportionately greater. It was apt to be strongest of all among those who had never visited China but uncritically accepted the eulogies of Kuomintang propagandists. Those who visited it were often much less enthusiastic. The Straits Chinese had sympathised with the revolution of 1911 and had given it liberal financial support. After the Great War many of them strongly supported the Kuomintang Party, and their loyalty to China was heightened by the nationalist movement there.

The Kuomintang established a strong organization in Malaya and sent agents to extend its membership among the Straits Chinese and the recent immigrants. It insisted that all Chinese living abroad were Chinese citizens even though they and their ancestors for several generations might have been British subjects by birth. Attempts were made to control the Chinese in Malaya through the medium of the local branches of the party and the Chinese consuls. The principal object of the Kuomintang was apparently to collect money to extend its influence in China, and wealthy Straits Chinese were subjected to strong pressure to contribute generousiy. The methods employed were often those of the secret societies, although no connection seems to have existed with them. They included intimidation in various forms, such as the threat of reprisals against relatives in China. Bankers and business men who were dependent for loans upon banks controlled by Chinese in China were threatened with ruin unless they supported the Kuomintang policy in Malaya. The movement had a strong communistic and anti-British side during the years when Russian influence over the party was in the ascendant. The breach between the Kuomintang and the Communists in China

in 1927 caused the two parties to oppose one another in Malaya, although both continued their anti-British propaganda. The Kuomintang's policy was also anti-Japanese, boycotts of Japanese goods in China being extended to Malaya. The premises of merchants who were unwilling to take part were bombed, or mobs forced them to destroy their stock of Japanese manufactures. The Government did not interfere with voluntary boycotts of Japanese goods, but it could not permit the use of violence which would invite strong protests from the Government of Japan.

A serious situation was created and from about 1925 to 1931 the police and the Chinese Protectorate were hard put to it to cope with the agitation. Vernacular and particularly night schools were a favourite method of spreading seditious propaganda: sometimes it was combined with education and at others the nominal object of the school was merely a camouflage for its real purpose. Incitements to violence appeared in some of the Chinese newspapers or in pamphlets and circulars. Many of them were multigraphed on small presses which employed only a few men and could be set up in a single room. This made detection by the police very difficult, especially since the printers moved to fresh quarters whenever they suspected the police were getting on the trail. Some of the circulars described Malaya as a nineteenth province of China which must be liberated from foreign rule. The British were few, the Malays were negligible, and the Chinese as the bulk of the population were the rightful owners of the country. There were a number of minor disturbances, the most important being the Kreta Ayer riot in Singapore in 1927. The situation had ugly possibilities in view of the effects elsewhere of inflammatory agitation upon ignorant and excitable peoples. During these years the Dutch Government was confronted with a similar attempt by the Kuomintang to organise and control the Chinese in the Netherlands East Indies. The movement was much less serious than in Malaya, since the Chinese were only 2 per cent. of the population and were disliked by the Indonesian nationalists.

The Government of Malaya found that existing laws were inadequate for controlling the situation. An agitator who was an alien could be banished, and this penalty was imposed on a number of Kuomintang and Communist agents. This punishment was greatly feared by the immigrant Chinese and was very effective; but it had the disadvantage that it could only be applied after serious offences had been committed and the culprit had at last been run to

earth. In view of the difficulties of police work in Malaya capture might be quite a protracted affair. The Government, too, was decidedly unwilling for a variety of reasons to impose this sentence. Except in very serious cases it was reluctant to inflict a punishment which deprived the offender of his hopes of making money in Malaya. Also its use might lead to the bugbear of colonial administrations—protests from the Chinese members of the Legislative Council and questions in the House of Commons. The use of the schools for propaganda was partially controlled by the Registration of Schools Ordinance. In 1924 a series of outrages led to the passage of an Ordinance imposing heavy penalties for the manufacture or use of bombs. The vernacular press was brought under control by requiring all owners of newspapers and presses to obtain a licence which might be withdrawn for illegal acts, to declare their names and addresses, and to print them on their publications. The court could order the forfeiture of a press if it were satisfied that it had been used for seditious publication.

In 1930 Sir Cecil Clementi introduced an ordinance declaring the Kuomintang an illegal society, so that henceforth it was a serious offence to organise branches of the party or belong to them. The Chinese Government protested strongly to Great Britain, and in 1931 a compromise was arranged. Mr. C. T. Wang, the Foreign Minister, assured Sir Miles Lampson, the British Ambassador, that the Kuomintang had never interfered in the affairs of the Government of Malaya. He promised that party organizations would not be established there, and that members would be instructed to avoid any action "which might be construed as inimical to the interests of the local government or as interference with the domestic affairs of Malaya". Sir Miles Lampson gave assurances that the Malayan ordinance would be amended so as to make it clear that "the Kuomintang of China is not as such an illegal society . . . if and so long as it" had no branches organized in Malaya. On those terms individuals might be members of it; but it was illegal, e.g. to carry on propaganda or to hold or advertise meetings.[7] There is reason to believe that at least the nucleus of a Kuomintang party organization exists in the principal towns of Malaya. This was the natural result of the compromise, for it was impossible to prevent individuals, each of whom was lawfully a member, from holding Kuomintang meetings and forming an organization. On the other hand, to make membership illegal would have involved the prosecution of every individual who joined the party. This would have roused such

opposition from the Chinese Government that the Cabinet would not have allowed it, in the interests of their policy of conciliating China.

Sir Cecil Clementi's final measure against subversive propaganda was the Aliens Ordinance which was passed in the Straits Settlements in 1932 and a little later in the Malay States. It made permanent the Immigration Restriction Ordinance which had been enforced since 1930 and it extended its scope. Henceforth the Government had the power to regulate the immigration not only of manual labourers and domestic servants but of all adult male aliens. It could also control the character of the immigrants in a way which had been impossible under the earlier law. This had dealt with "the wholesale prohibition of unwanted labour in the mass. That prohibition cannot be used to filter the good and keep out the bad". The Passengers Restriction Ordinance of 1919 had enabled the Government to prevent the disembarkation of undesirable Europeans. Experience had proved that it was impossible to apply it to Chinese deck passengers, and furthermore it gave no control over aliens living in Malaya. The Ordinance of 1932 applied to all foreigners but it principally affected the Chinese. The Immigration Officers were empowered to refuse a landing permit to those whom they considered to belong to a statutory list of undesirable aliens, subject in certain cases to an appeal to higher authority. Aliens who were admitted received a landing permit on the payment of a small fee, and this could be exchanged for a certificate of admission which was valid for two years and could be renewed. Aliens already living in Malaya might apply to an Immigration Officer for a certificate of admission. In practice they did not trouble to do so unless they were proposing to visit China, when the possession of a certificate would obviate delays and formalities on their return to Malaya. Any resident alien must apply for a certificate if required to do so by an Immigration Officer, and in this way the records of doubtful characters could be scrutinized. Certificates could not be refused or cancelled save in specified cases, e.g. seditious agitation, in which event the alien would be deported. An alien could appeal from the decision of the Immigration Officer to the Resident Councillor in a Settlement, or the British Resident or Adviser in a Malay State. The Chinese in the Legislative Council attacked the ordinance on the ground that it imposed special disabilities upon their immigration, since no other aliens entered Malaya in large numbers. They and some of the European unofficials also opposed it from the fear that the Chinese coolie would take umbrage at any interference with his freedom of entry,

so that the country would suffer from "a perpetual labour shortage".[8] These fears have proved to be entirely without foundation. While it is regrettable that the Chinese immigrants should have to be examined, the blame should surely attach to the Kuomintang and Communist agents whose actions had made control inevitable. Most of the governments of the world have been forced to adopt similar measures of protection. The Chinese Communist Party condemned the ordinance because "when the Aliens Bill is enforced revolutionary comrades who strive for the emancipation of the Malayan masses will lose their freedom of action".

The principal criticism which could be levelled against the ordinance was that for a long time its effect would be limited. There were over 1,000,000 alien Chinese in Malaya in 1931, and only a very tiny fraction of them would apply or be required to apply for a certificate. The vast majority would retain that anonymity which in a floating population had been one of the principal safeguards of the agitator. By changing his name in each new district he visited he had been able for a long time to avoid identification by the police. As regards newcomers it was quite possible that undesirables might baffle the examination at the ports; but if they later caused trouble it would be easier to get on their track. All aliens who received permits had not merely to give their names but were photographed and their thumbprints taken, so that gradually the police would build up a complete record of the non-British population. Kuomintang anti-British propaganda in Malaya has largely disappeared owing in part to the activity of the police in enforcing the various ordinances against it. As in Hong Kong, the principal reason has been that hostility was concentrated against Japan while British support was courted. The British, like the Dutch, are in the position that a change in the policy of the Government of China might well lead to a revival of the trouble of ten years ago. Communist anti-British action has continued, funds and instructions coming from China and sometimes Russia. Until 1937 it was so slight that the movement was not regarded very seriously; but the organization and influence over the coolies shown during the rubber tappers' strike led to the feeling that the Communists deserve more respectful attention than had recently been accorded them. In this strike the coolies made a justifiable demand for higher wages which the Government assisted them to obtain; and the Communists, after their fashion, seized on an economic grievance to foster class hatred in Malaya.

The Federated Malay States

During the nineteenth century the power of the Malay Sultans decayed, but at the same time they retained a considerable degree of authority and great influence and prestige. It would be an exaggeration to say that British intervention saved them from virtually total collapse. Nevertheless civil wars and lawlessness had increased, and the presence of unruly Chinese tin miners added another element of discord. In addition to conflicts with the Malays, they broke up into warring factions and secret societies and fought one another. As time passed the situation grew worse, the disorders began to spread to the Straits Settlements, and in 1873 the Colonial Office reluctantly decided to intervene. The four States of Perak, Selangor, the confederation of Negri Sembilan, and Pahang came under British protection and control at various dates between 1874 and 1888. The wording of the treaties differed, but in effect each Malay ruler agreed to the appointment of a British Resident whose advice must be followed in all questions other than those touching Malay religion and custom. The Colonial Office expected the British representatives to accomplish the impossible task of establishing order and prosperity solely by "the giving of influential and responsible advice". In 1878 they were warned that they were advisers and not rulers, and that "if they take upon themselves to disregard this principle they will most assuredly be held responsible if trouble springs out of their neglect of it". Since most of the Malay rajas and Sultans drew their profit from disorder and injustice, it was utopian to expect that mere advice could effect "the maintenance of peace and law, the initiation of a sound system of taxation, with the consequent development of the resources of the country and the supervision of the collection of the revenue". From the very beginning the Residents saw that moral suasion meant impotence, and that to introduce reforms they must overstep their instructions and risk the displeasure of the Colonial Office. "Even from the first the Residents had exercised, or tried to exercise, an influence which could not be truthfully defined as the simple offer of advice; and when, in 1878, they were warned that if they departed from the rôle of advisers they would be held answerable for any trouble which might occur, they accepted the responsibility as preferable to a position of impotence and an attitude which no native in the country could have either understood or appreciated". The Residential system as Sir Frank Swettenham described it proved a very great success, and the Colonial Office made no attempt to enforce its instructions. In 1880

the Governor, Sir Frederick Weld, stated that "the present theory of the native States government is that we advise, and do not assume the possibility of our advice not being taken".[9]

Legally the Sultan continued to be the ruler but the real authority lay with the Resident. A Council was created in each State composed of the Sultan, the Resident, the principal Malay chiefs, and the leaders of the Chinese. It passed legislation and discussed a wide range of questions, but it was purely an advisory body whose opinions were not binding upon the Sultan or the Resident. There has been wide difference of opinion as to whether the Resident acted independently or in collaboration with the Malay Government. Apparently a good deal depended upon the personalities of those concerned. In Selangor the Sultan and Resident were old friends and the latter had little difficulty in carrying out his measures. The first Resident of Perak, Mr. Birch, was an impatient reformer with no sense of tact, and Sultan Abdullah lacked both character and goodwill. The result was that Mr. Birch was murdered and the Sultan deposed after a war which re-established British control. The war showed that the advice of the Resident could not be disregarded; and, also, Sir Hugh Low, who was Resident of Perak from 1877 to 1889, had been trained in Sarawak under the first Raja Brooke. His guiding principle was that the government should take the initiative in introducing reforms, but that it should carry the leaders of the people with it by consulting and persuading them of the desirability of the change. This harmonized with the character of the Malays, who like to be consulted but feel that the decision lies with the Government. They attach much importance to the outward signs of power and often pay more attention to them than to its realities. So far as status went, the position of the rulers was more secure than it had been for many years, and they enjoyed an assured income far larger than they had ever dreamed of. The personal factor also counts very greatly with Malays: a Resident who was courteous and diplomatic and whom they felt to be a friend could succeed where good intentions and maladroitness failed. Sir Frank Swettenham emphasized that the Residents of his day won the trust of the rulers and chiefs, and that "it was that confidence and understanding which made the system of Resident Advisers a success". They found that discussing questions in the Council lessened their difficulties and enabled them to gain the support of the majority of the members. The rapid material development of Malaya, however, and the influx of Chinese, created more and more problems with

which the Sultans and their Councils were unable to cope. Natural shrewdness was not a sufficient equipment for grappling with e.g. the regulation of tin mining or the organization of the administrative and technical services. The growing pressure of work left the Residents less and less time to explain the intricacies of modern Western policies to Sultans and chiefs who had been brought up in a Malaya which bore many similarities to twelfth century Europe. They were increasingly compelled to act as executive officers giving orders and not advice. As Sir Frank Swettenham put it, the Residents "in the hurry and stress of work, have forgotten their obligations towards the Rulers and failed to consult them and carry them with them in large schemes of development, large appropriations of money, and important legislative measures". Legislation passed in the State Councils often conferred executive power upon the Residents and empowered them to issue orders instead of tendering advice. By 1895 the meetings of the State Councils were infrequent and did not touch many of the most important questions of government, e.g. the annual estimates of revenue and expenditure.[10]

The four Residents were under the general control of the Governor of the Straits Settlements, but in practice they were very largely independent, since roads were few and Singapore was far away. Each Resident worked out his problems in his own way, which in time led to undesirable divergences in a country where some degree of uniformity was increasingly necessary. Sir Frank Swettenham persuaded the four Sultans to agree to a federation which was formed in 1896. By the terms of the treaty a Resident-General was to be appointed as the agent and representative of the British Government. He would act under the direction of the Governor of the Straits Settlements, who in future would have the title of High Commissioner for the Federated Malay States. The Sultans agreed "to follow his advice in all matters of administration other than those touching the Muhammadan religion". The Residents would continue to advise the Sultans as previously, but the Resident-General would supervise and co-ordinate their work. All legislation was to be left to the State Councils, and the Sultans agreed to give the poorer States like Pahang such financial or other assistance as the British Government might advise. Sir Frank Swettenham comments that the treaty unified the four states for all general purposes of administration under the executive control of the Resident-General. All the important state departments were placed under one federal head who was responsible to the Resident-General for uniformity of

system throughout the Federation; but the Residents were to remain the chief executive officers in each State.[11] One cannot escape the feeling that the treaty was more likely to create an amalgamation than a true federation. The essence of federation is that the powers of government are divided between the federal and the subordinate governments; but the only field excepted from the Resident-General's control was the minor one of questions touching Muhammadan religion. The British Government, however, intended to increase and not to diminish the status of the Sultans. A clause of the treaty expressly stated that nothing in it was "intended to curtail any of the powers or authority now held by any of the above-named rulers in their respective States". The contradiction between intentions and practice which had begun in the 'seventies continued with the divergence between the Colonial Office and the Residents over the limitations on the power to advise.

A Federal Secretariat was created at Kuala Lumpur under the control of the Resident-General and took over many of the administrative powers hitherto exercised by the Residents more or less in consultation with the Sultans. It also assumed control of the rapidly expanding revenue and expenditure and of legislation. In order to ensure uniformity, all laws which were not of a purely local character and financial measures were drawn up at Kuala Lumpur and submitted to the State Councils to be passed without amendment. The rapid economic development of the twentieth century accentuated the trend towards centralization. "The introduction of a great agricultural industry, necessitating the expenditure of something approaching one hundred millions sterling, changed the face of the country and forced the Government into the rapid extension of practically all public services—railways, roads, posts, telephones, telegraphs, water supplies, hospitals and many other conveniences—and those responsible for directing affairs—for the idea of advising native rulers had long been abandoned—decided upon a general policy which appears to have been dictated not by the ambitions of the Malays or other Eastern people, but by the wish of Europeans to introduce into the Malay States the same sort of civilization as they had been accustomed to in the countries of their origin."[12] So much time could be saved if decisions were made by the Resident General and the heads of departments that gradually less attention was paid to the Residents. Their influence and that of the rulers was still further diminished because they were not in direct and continuous touch with the federal administration. Moreover, the Sultans

usually lacked the knowledge and frequently the inclination to take part in dealing with the complex problems which twentieth century development had brought to Malaya. Many of them were well satisfied with their position: their thrones were assured, their incomes were far larger than their ancestors had ever dreamed of, the whole burden of administration was taken off their shoulders, and they had all the outward marks of power. Prestige means as much to a Malay Sultan as the number of guns in his salute to an Indian prince, and he does not always distinguish clearly between the forms of power and its reality. For a long time no one seems to have realized the trend of development: mounting revenues and a growing surplus seem to have had a mesmeric effect upon all concerned. The Great War accentuated the over-centralization because it emphasized the need for efficiency, quick action, and uniformity. The development was gradual and not unnatural in the circumstances; but the aggregate of small acts and changes extending over years formed an accumulated growth which had never been contemplated in 1896. By about the beginning of the 'twenties the Residents and Sultans had very largely become the "forgotten men" of the over-centralization of Kuala Lumpur. Instances occurred where the head of a federal department visited his subordinates in a State and did not trouble to call upon Sultan or Resident or even to inform them of his visit.

The changes introduced in 1909 by Sir John Anderson, the Governor and High Commissioner, had the unexpected effect of still further decreasing the importance of the Sultans. This was by no means his intention, since one reason for his reforms was his feeling that the rulers had lost more than they had anticipated when they agreed to the Treaty of Federation. To carry out his policy a Federal Council was established in 1909 by an Agreement signed by the four Sultans. The members were to be the High Commissioner as president, the Resident-General, the four Residents, the four Sultans, and four unofficials nominated by the High Commissioner for three years. The vague and careless draughtmanship of this Agreement surpassed that of the treaty of 1896: it created a federal legislature and referred only incidentally to the grant of legislative powers. It also repeated the clause of the Treaty of Federation that "nothing in this Agreement is intended to curtail any of the powers or authority now held by any of the above named Rulers in their respective States". Whatever the good intentions of its creators may have been the practical effect of the Agreement was to deprive the

State Councils of the meagre legislative and financial powers they still retained. The Federal Council apportioned the combined revenue of the four states as it saw fit and later informed the State Councils of its decisions. The legislative function of State Councils ended, since all laws of any importance were henceforth passed by the Federal Council. "The State Councils continued to consider murder cases, appointments of Penghulus and loans or grants to mosques, but did practically nothing else. They did not touch the Estimates." Nor did the presence of the Sultans at the Council give them any control over its proceedings. These were conducted in English, of which they were usually ignorant: in practice they took no part in debates and they had no power of veto. Yet the irony was that from the legal point of view the validity of all legislative and financial measures depended upon the assent of the four Sultans, since in theory they were absolute monarchs accepting British advice. As one writer has put it, "a Federal Council was established which, by an invisible grant, received almost unlimited legislative powers, while the four rulers were left undisturbed in the complete sovereignty which they exercised on the advice of their Residents".[13] Sir John Anderson was also determined that the High Commissioner should be "the real responsible head" of the Federated Malay States "instead of being merely vested with a certain amount of control over the" Resident-General. One step in this direction was to make the High Commissioner the president of the new Federal Council; and another was to change the title of the office from Resident-General to Chief Secretary. Sir John Anderson's speech to the Federal Council in 1910 made it clear that the alteration was intended to be symbolic of the lessened independence of the post, even though it was not deprived of any of the powers vested in it.[14] The change seems to have had little effect so far as lessening the virtual independence of the Chief Secretary was concerned; but it was the beginning of the unofficial suspicion of Singapore control which has continued ever since.

After the War the problem of over-centralization at Kuala Lumpur was discussed in the Federal Council on various occasions from 1922 onwards. There was a growing feeling that the Sultans and the Malays had been overlooked in the rush of economic development, and that the administration had taken from them far more power than was just or had ever been intended. The rubber slump also led to doubts of the wisdom and success of the Government's policy. During the years of the boom when surpluses accumulated

and everyone was prosperous the federal administration had been popular; but in the early 'twenties it was accused of extravagance and over-expansion of the technical services. This feeling found expression in 1923 in the report of the Retrenchment Commission which had been appointed to recommend economy in expenditure. It considered that over-centralization had been one cause of excessive expenditure because the Secretariat at Kuala Lumpur had ignored the advice of the Residents and District Officers. Meanwhile the Chief Secretary, Sir George Maxwell, had come to the conclusion that a measure of decentralization was needed and that a distinction should be made between Federal and State affairs. In 1923 he appointed a committee to recommend changes which would give the Resident "the fullest control in State matters compatible with proper supervision and co-ordination of each Department by the Federal Department Head". He urged each Resident to assist and train his Sultan to take an increasingly active part in the administration of his State. Ultimately he hoped that the former would become less of an executive and more of an advisory officer, but the plan had little success. The Maxwell Committee reported in 1924 that efficiency and economy required a highly centralized government, but that decentralization was necessary because the growing stringency of federal control was "contrary to the whole spirit" of the treaty of 1896. It made a number of recommendations most of which were carried out. The general effect was somewhat to increase the power of the Residents at the expense of federal heads and the Chief Secretary. The Committee advised that no further advance be made until the effect of the changes had been observed, but that, later, certain departments such as agriculture and forestry should be transferred to state control, the departmental head becoming an advisory and not an executive officer.[15] A second committee was appointed by Sir George Maxwell to work out the financial implications of the scheme.

Cautious advance was being made towards the relaxation of federal control when the situation was abruptly changed. In 1925 the High Commissioner, Sir Lawrence Guillemard, with the approval of the Colonial Office announced a new policy of decentralization which included as one of its most essential features the abolition of the Chief Secretaryship. He considered that contrary to the intention and expectation of the British Government the power of the States had been reduced almost to nothing "owing to the policy of aiming at uniformity as between the different States".

"The result is that the Federated States of to-day are not a Federation but an amalgamation." Sir Lawrence believed that Sir John Anderson's reforms had failed because he had not curtailed the powers of the Chief Secretary. There must be "such gradual devolution of the Chief Secretary's powers to State Councils, Residents, and if necessary to Federal Heads of Departments, as will in effect amount to abolition of the office of Chief Secretary as at present constituted". The Federal Council must also surrender a large part of its legislative and financial duties to the State Councils. Certain departments such as Railways and Customs should obviously remain under federal control, but the others would gradually be transferred to the state governments. "An efficient federal machine" would still be necessary to control federal departments and supervise those transferred to the States, so as to ensure that decentralization did not injure economic interests in the Federated Malay States. A Federal Secretary to replace the Chief Secretary might perhaps be needed for this purpose and as a channel of communication between the High Commissioner and the Sultan in Council. The Sultans in future were to have direct access to the High Commissioner instead of, as previously, communicating with him through the Chief Secretary.

Sir Lawrence Guillemard believed that it was necessary "to loosen the knot of Federation" because "experience has shown that it is tied so tight as to be irksome". The Sultans had become increasingly dissatisfied with a loss of authority which they had never contemplated when they agreed to enter the Federation. Sultan Idris of Perak had pleaded for the maintenance of State rights as early as 1903; and although discontent seemed to have died away during the years of the rubber boom it revived during the post-war slump. While on a visit to England in 1924 the Sultan of Perak asked the Secretary of State for the Colonies, Mr. J. H. Thomas, to restrict the powers of the federal government and transfer to the States control over their domestic affairs. A fresh reason had arisen for the dissatisfaction of the Sultans in the contrast between their own position and that of the rulers of the five Unfederated Malay States. Twenty-five years earlier there had been cause for congratulation rather than envy, since, broadly speaking, the Unfederated States had been poor, indifferently administered, and several of them had been under the suzerainty of Siam. In 1909 the control of Siam over Kedah, Perlis, Kelantan, and Trengganu, which the Malays disliked, was replaced by British protection. British Advisers were appointed to them and in 1914 to Johore under treaties the terms of

which were much the same as those forty years earlier with the present Federated Malay States. The advice of the Adviser must be followed in all matters of administration other than those touching the Muhammadan religion and Malay customs. The administrations were reformed and the revenues began to grow, but the British Advisers did not, like the Residents, become executive officers and take over the government of the States. They never issued direct and public orders but consulted the Sultans and worked with and through them. The rulers were required to accept the advice if the question were important; but the British Government was considerably more reluctant to override the Sultan of an Unfederated than of a Federated Malay State. The result was that the former "occupies a position of authority in the Government of his State: and his State Council, under the guidance of European Advisers, has developed into a body possessed of both power and dignity".[16] The rulers of the Federated Malay States could not help feeling mortified that they held less authority than the Sultans of States which had come under British control much more recently.

They supported Sir Lawrence Guillemard's proposals while European and Chinese business interests in the Federated Malay States very strongly opposed them. The latter feared that the weakening of central control would injure their prosperity and impair the confidence of investors in the credit of the Federation. Above all they rallied to the support of the Chief Secretary: the old suspicion of Singapore was reawakened and the proposal to abolish the post was regarded as a move to subordinate the interests of the Federation to those of the Colony. The fear was that most of the power of the Chief Secretary would be transferred to the High Commissioner and not to the Residents or Sultans, so that the head of the Federation would be an official who knew little at first hand of the needs of the Malay States and spent most of his time in Singapore. His principal adviser there was the Colonial Secretary, who represented the interests of the Colony; and the Federation needed an official of equal rank to uphold its interests.[17]

In the end Sir Lawrence Guillemard did not abolish the Chief Secretaryship and made only a few cautious changes in the direction of decentralization. To grant the States a measure of financial independence the heads of expenditure in the annual estimates were divided into three categories. These were Schedule A, the services which must remain under federal control—such as debt charges, pay and pensions, and the Railway and Labour Departments; Schedule

B, reserved services which were transferred to the State budgets, e.g. rulers' and chiefs' salaries, and grants to Sanitary and Mosquito Destruction Boards; and Schedule C, unreserved services which might eventually be assigned to the States but were for the present left in the federal estimates. This third group included all the most important social services. Hitherto the Federal Council had authorized all expenditure, but in future it would vote a lump sum for the reserved services of each State on the basis of an approximate budget prepared by the Resident and approved by the Chief Secretary and the High Commissioner. The State Council would allocate the amount to the various services in accordance with a final budget prepared by the Resident and approved by the High Commissioner. A second committee had been appointed by Sir Lawrence Guillemard to report on means for increasing the legislative powers of the State Councils. It found that this was impossible unless a genuine federation were established in which the field of legislation was divided between the state and federal governments, a step which it regarded as premature.

The changes in the membership of the Federal Council recommended by a third committee were embodied in the Agreement made with the four Sultans in 1927. The rulers would cease to attend the meetings and, instead, would discuss the agenda beforehand with the Residents, who would represent them and inform them of its proceedings. The Sultans agreed with the official and the unofficial members that it was both boring and undignified for them to sit for "long and weary hours" listening to debates in English which few of them understood. Since the laws of the Federation derived their legal validity from the consent of the rulers they were henceforth to sign every bill. Five official and three unofficial members, who were to be Malays if possible, were added to the Council. Additional members had been appointed at various times since 1910, and as a result of the changes made in 1927 the Council was composed of thirteen officials and eleven nominated unofficials.* The committee advised that an annual Durbar should be held, attended by the High Commissioner, the Chief Secretary,

* An Indian representative was added in 1928, and later additional officials. At the present time the Federal Council is composed of sixteen official and twelve nominated unofficial members. The officials are the High Commissioner, the four Residents, the Federal Secretary, the Legal Adviser, the Financial Adviser, the Adviser on Education, the Adviser Medical Services, the Adviser on Agriculture, the Adviser Public Works, the General Manager F.M.S. Railways, the Secretary for Chinese Affairs, the Commissioner of Customs and Excise, and the Controller of Labour. Of the unofficial members four are Malays, five Europeans, two Chinese, and one Indian.

the four Residents, and the four Sultans. It would have no specific powers, but would be "a conference only" for informal discussion. The intention of Sir Lawrence Guillemard was to restore the authority which the Sultans had previously possessed. Yet the terms of the Agreement of 1927 still further diminished their nominal powers of legislation. Their withdrawal from the Council made it, even more than before, that of the High Commissioner who nominated all except the *ex-officio* members. Henceforth too the official majority was composed entirely of British officials. The final clause of the Agreement that nothing in it was "intended to curtail any of the powers or authority now held by any of the Rulers in their respective States" read like a pious and pathetic aspiration.[18]

The divergence between intentions and actions, between the wish to safeguard the position of the Sultans and the trend towards centralization, uniformity, and efficiency, runs all through the history of the Federated Malay States. By the 'twenties economic development and the influx of immigrants had made it exceedingly difficult to introduce any drastic changes lest they injure the great British and Chinese interests which had been built up under the safeguard of British control. Mining and agriculture had overleapt State boundaries and a strong Federation was essential to their prosperity. Only one Sultan and very few Malays had had any administrative training, so that to transfer extensive power to the Sultans in Council was to entrust it to inexperienced hands. Nevertheless an uneasy feeling persisted that British intentions did not accord with actual developments. This found typical expression in 1928 in the Report on his visit to Malaya of Mr. Ormsby Gore, the Secretary of State for the Colonies. "It must always be remembered that British influence became established in the Malay States . . . not as the result of conquest or aggression but at the invitation of the rulers. . . . Our position in every State rests on solemn treaty obligations. . . . They were, they are, and they must remain, "Malay" States, and the primary object of our share in the administration of these countries must always be the progress of the indigenous Malay inhabitants at the invitation of whose forefathers we first assumed responsibilities. The States were, when our co-operation was invited, Muhammadan monarchies, and such they are to-day. We have neither the right nor the desire to vary this system of government." In the Federated Malay States "the mere fact of federation, the great economic development that has taken place, and the recent immigration of so many non-Malays, have all tended to make British

administration appear, to say the least of it, to be more direct than in the Unfederated States. . . . There can be no going back on the *fait accompli* . . . but I cannot help expressing the view that the spirit and intention of our policy in Malaya has been carried out both more simply and more completely in the Unfederated States. . . . To me the maintenance of the position, authority, and prestige of the Malay rulers is a cardinal point of policy".[19]

The special duty of the British Government to the Sultans and the Malays was emphasized by Governor Sir Hugh Clifford in 1927 in his address to the Federal Council. He began by recalling Malaya as he had first known it as a cadet in 1883, and how the phenomenal economic development had made inevitable "a very elaborate, highly organized and highly specialized administrative machine". British influence was established at the invitation of the Sultans themselves and "phenomenal and radical as the changes are, they have in no iota modified the status of these countries. They were, they are, and they must remain—unless our duties, our obligations and our engagements to the Rajas, the chiefs and to the people of these countries are to be wholly ignored or forgotten—*Malay* States". Though the Malays were now a minority of the population "the primary object of our administration of these territories must ever be the continuous amelioration of the conditions of the indigenous Malayan inhabitants, at the invitation of whose forefathers we first assumed responsibility for the just government and for the efficient administration of their country. . . . These states were, when the British Government was invited by their Rulers and chiefs to set their troubled houses in order, Muhammadan monarchies; such they are to-day, and such they must continue to be. No mandate has ever been extended to us by Rajas, chiefs, or people to vary the system of government; and . . . I feel it incumbent upon me to emphasize . . . the utter inapplicability of any form of democratic or popular government to the circumstances of these States. The adoption of any kind of government by majority would forthwith entail the complete submersion of the indigenous population . . . and this would produce a situation which would amount to a betrayal of the trust which the Malays of these States . . . have been taught to repose in His Majesty's Government".[20]

Decentralization slumbered for five years, but in 1931 it was abruptly revived by Governor Sir Cecil Clementi at a Durbar at Sri Menanti. Federal control would be retained for such obviously central services as railways, and for the principal research, medical

and educational centres such as the Medical Research Institute, the Agricultural School at Serdang, the Forestry Research Branch at Kepong, and the Sultan Idris Training College. The other federal departments would be transferred to the control of the state governments; and the existing head would become an Adviser in place of having executive control. His rôle would be to supply the degree of co-ordination in the workings of the four separate state departments which was necessary in view of the common problems of Malaya. In case of a disagreement between an Adviser and a state government the question would be referred to the High Commissioner for decision. The Federal Council would continue to legislate on "certain matters of common interest to all States", such as labour, railways, and immigration, and other subjects would be transferred to the State Councils. Their membership would be enlarged and strengthened to enable them to cope with their new duties. Revenue would be divided between the Federal and State Councils but the former would "retain the keys of federal finance". The Chief Secretary would be replaced by a Federal Secretary who would be junior in rank to the four Residents and whose work would be merely secretarial. Ultimately the duties of the Resident would become the same as those of the Adviser in the Unfederated Malay States, and all the States would be "on very much the same constitutional basis".[21] On the economic side the High Commissioner strongly urged the formation of a Customs Union for the whole of Malaya. He also suggested that ultimately a Pan-Malayan Union should be created which would include the Colony and the Unfederated as well as the Federated Malay States.

A committee of three civil servants was appointed to work out the financial implications of decentralization. The members based their recommendations on the principle that the new policy must not "impair in any degree the financial credit and stability of the federation". It was essential to maintain the "joint financial responsibility on which those who lent money to the Federation in the past confidently relied". When loans were floated "the Federation must be able to enter the money market in future with credentials no whit less convincing than those it carried in the past". The committee divided the heads of revenue between the federal and state governments, assigning roughly three-fifths to the former. Stringent safeguards were devised against the possibility of extravagance by the States: their expenditure was to be closely supervised by the Federal

Financial Adviser, the High Commissioner, and the Finance Committee of the Federal Council.[22]

Sir Cecil Clementi advanced his proposals primarily on political grounds. "The federal ideal had in many respects been travestied and its place usurped by a tendency to amalgamate rather than to co-ordinate". He had no difficulty in showing that the actual developments of British control had been at variance with the intentions of the Government and the assurance given to the Sultans in the various treaties. They had complained to him a few weeks after his arrival in Malaya, and he felt that there was an obligation to restore to them powers which they had lost as "the result rather of accident than of policy". He also pointed out that decentralization was the indispensable preliminary to the formation of a Pan-Malayan Union. So long as the Federation continued unchanged there was no chance whatever that the Sultans of the Unfederated Malay States would join the other rulers in their subjection to the Chief Secretary.[23]

Sir Cecil Clementi's proposals aroused strong opposition from both Europeans and Chinese for a variety of reasons. They were brought forward within less than two years after he arrived in 1930 from the governorship of Hong Kong. Many believed that he had acted too hastily and without adequate knowledge of the conditions of Malaya. This criticism could not in fairness be brought against decentralization, since his plan was very similar to that of Sir Lawrence Guillemard which had received Colonial Office approval although it had lain dormant for several years. About the same time, however, he made several other proposals which also provoked opposition in different parts of the Peninsula. The advocacy of a Malayan Customs Union with a protective tariff aroused the traditional free trade sentiment of the Straits Settlements. The suggestion that the ultimate goal of decentralization was a Pan-Malayan Union evoked protests from the Unfederated Malay States, particularly Kedah and Johore. Their Sultans had no desire for closer contact with a Federation where the rulers had become little more than figureheads. The Europeans and Chinese planters and merchants in Johore supported their Sultan: they were very well content with economic and administrative conditions, and feared that the loss of the considerable degree of autonomy which the State enjoyed would affect their interests adversely. Incidentally their attitude was an interesting commentary on the opposition to decentralization of the Europeans and Chinese in the Federated Malay

States. The latter opposed it because they feared that their economic interests would suffer if the States received a greater measure of independence. This was precisely the condition which those who had lived under it in Johore were unwilling to abandon. Finally, the Governor's education policy and his measures against the Kuomintang aroused the opposition of the Chinese.

Business interests in the Federated Malay States contended that "federation has been a great success", while the new policy was "a step into the unknown". "The non-Malay inhabitants of the Federated States are perfectly satisfied with the system under which they now live, and any important changes must inevitably raise in their minds the fear of deterioration and dislocation of the governmental services that have served them so well. . . . Amongst the most vital, the most highly organized, the wealthiest and the ablest interests in the Federated States there is thorough satisfaction with the existing highly centralized administration, and a refusal, or at best a disinclination, to admit that that system cannot be retained in its present form for as long as they need to concern themselves with F.M.S. affairs."[24] Coupled with this was the old fear that decentralization really meant the subordination of the welfare of the Federation to that of the Colony, and that the former would suffer since there was a divergence in economic interests. It was not so much what Singapore had done as a fear of what it might do that led business interests to prefer a Chief Secretary on their own premises to a High Commissioner in Singapore.

Sir Cecil Clementi's opponents summarized their arguments in a statement submitted in 1932 to Sir Samuel Wilson, the Permanent Under-Secretary of State for the Colonies.[25] They insisted that a strong Federal Government must be preserved which would continue to control legislation and at least a very large proportion of the expenditure. "We have been encouraged to invest our capital in the development of these four States on the strength of Federal unity with stable Federal Government, and to break up that unity into four separate parts must necessarily be detrimental to our interests." Decentralization it was feared would lead to loss of uniformity, a lessening of efficiency, and possibly extravagant expenditure by the States which would weaken the credit of the Federation. Above all, the opposition insisted that the retention of the Chief Secretary was essential, both as the head of the federal administration and as champion of the interests of the Malay States against those of the Colony. The Chinese advanced the additional objection that

decentralization might "undesirably vest autocratic authority in the Rulers" to the detriment of Chinese interests. All elements in the opposition professed their anxiety to strengthen the position of the Sultans. The changes which they proposed would have added very little to the existing powers of the State Governments, which were limited to "Sanitary Boards, museums, bands, game wardens, and a few other things". The Governor's opponents paid little attention to the argument that decentralization was necessary for political reasons, to remedy the complaints of the Sultans that they had been deprived of far more authority than had been contemplated when the Federation was formed. There was a great deal of force in their counter-argument that "What's done cannot be undone". Forty years of economic development and immigration had created conditions which made it impossible to revert to the political situation of the earlier period. They had, too, no difficulty in showing that many supporters of decentralization exaggerated when they spoke of "restoring" to the Sultans and their Councils the powers which they had lost as a result of Federation. From the very beginning the Resident was more than an adviser and he had become increasingly an executive officer. The Sultan and the State Council had played a rôle of diminishing importance; but on the other hand they were not the dignified figureheads which they became after 1896. There was a valid political argument for decentralization, and the problem was how to reconcile it with the necessity of avoiding injury to European and Chinese economic interests.[26]

In 1932 Sir Samuel Wilson visited Malaya to investigate the question.[27] He reported that "from a purely economic point of view it would no doubt be advisable in a country the size of Malaya to have one Central Government administering the whole territory". Decentralization was necessary, however, because of the discontent and uneasiness of the Sultans and the promises given them. "The maintenance of the position, authority and prestige of the Malay Rulers must always be a cardinal point in British policy: and the encouragement of indirect rule will probably prove the greatest safeguard against the political submersion of the Malays which would result from the development of popular government on Western lines. For in such a government the Malays would be hopelessly outnumbered by the other races owing to the great influx of immigrants that has taken place." Moreover, decentralization was essential before the rulers of the Unfederated Malay States would enter any form of Malayan League "or even agree to meet together

periodically to discuss matters of common interest". Changes in the existing form of government must be gradual, and "the day is a long way off before it will be practicable or desirable to decentralize to such an extent" that the Sultans of the Federated would be in exactly the same position as those of the Unfederated Malay States.

The first stage would be spread over four years and would consist of the transfer to state control of the Agricultural, Co-operative, Educational, Electrical, Forestry, Medical, Mining, Public Works, Drainage and Irrigation, Prisons, and Veterinary Departments. The change affected certain problems "which as regards policy will have to remain subject to a common control, but as regards detailed administration can with convenience and economy be left to the State Governments". Examples of this need for unity in diversity were mining and estate health regulations, forest reserves and measures for prevention of floods. An Advisory Council should therefore be created, presided over by the High Commissioner and containing representatives of the States. In addition the Federal Treasurer and the Legal Adviser would be made members of the State Councils and would assist in maintaining the necessary uniformity of policy. The financial credit of the Federation would be safeguarded by keeping under federal control the collection and appropriation of the whole revenue. Debt charges and the financial needs of the Federation would be the first charge upon it; and the Federal Council would make to each State an annual block grant to meet the sum total of the cost of the services transferred to it. The States would have a considerable amount of freedom in allocating the money to the different departments. Sir Samuel Wilson considered that the extravagance of the 'twenties had been the result of federal control of finance. He believed that it would be checked by transferring control to the States, since "the State authorities who are in close touch with the details of what is being done must be in a much better position to see that there is no unnecessary extravagance than the Heads of the Federal Departments" who had little personal knowledge of local conditions. The Resident would prepare the annual budget estimates in close collaboration with the Federal Treasurer, and any disagreement must be referred to the High Commissioner. He must also approve the estimates before they were submitted to the State Council; and he would retain the right to veto expenditure or to insist that a State should provide for services which he considered essential. No State loan might be raised without the consent of the Federal Council. Sir Samuel Wilson

made no precise recommendations on the financial and administrative devolution which would follow when the first stage had been completed. Change must be cautious and further advance must depend on the results of the first instalment. He suggested, however, that in the second stage of decentralization the States might collect and appropriate certain of the revenues which were not needed for federal purposes. At a still later date further sources of revenue not required by the Federation might be transferred to them, and they might also be given the right to impose taxation.

The principal administrative change was the abolition of the Chief Secretaryship as it had existed in the past. Its powers would be transferred to the Sultans in Council in state matters and to the High Commissioner or the newly created Federal Secretary in questions which were to remain under federal control. The Federal Secretary would take the place of the Chief Secretary, since "the day is a long way off, if it ever arrives, before an executive head of what remains of the federal machine at Kuala Lumpur can be dispensed with altogether, and it would be impossible for the High Commissioner to do the necessary co-ordination himself". The latter would also require a Secretary to assist him in his new task of dealing with matters affecting the departments transferred to state control. His position here would be similar to that which he already held towards the Unfederated Malay States. Sir Samuel Wilson's scheme was a compromise between the views of the High Commissioner and his critics. On the administrative side it adopted his proposals for the transfer of departments to state control, the abolition of the Chief Secretaryship, and the lessened authority of the departmental heads by making them advisers instead of executive officers. The time allotted for putting the plan into operation was considerably extended and the necessity of cautious advance was stressed again and again. In finance, the States were given less independence than Sir Cecil Clementi had proposed: instead of controlling certain sources of revenue they were to receive an annual block grant from the Federal Council, the expenditure of which was to be closely supervised. The financial autonomy of the States and their independence of action in the field of the transferred departments would be decidedly limited.

The strengthening of the State Councils was an essential part of any scheme of decentralization. Hitherto the membership had varied from seven to fifteen and had included the Sultan, the Resident, the principal Malay chiefs, and usually one or two Chinese un-

officials. There were no European or Indian unofficials, and the language was Malay since few members knew any other. The Malay chiefs who formed the overwhelming majority were typical of the conservatism of their race in their very great unwillingness to speak or vote against their Sultan. "At present no Malay member of a State Council will vote against his Ruler—except in Negri Sembilan; and the cleverest Malay chief is one who can talk longest without expressing any conclusive views before he knows the views of his Sultan." The Council was quite incapable of coping with its enlarged powers, which is not surprising when one reflects that for forty years it had been confined to trivialities. The level of competence was decidedly lower than in the Unfederated Malay States, where many members had shown conspicuous ability as a result of administrative experience and the patient and tactful guidance of British Advisers. In the Federated Malay States very few Malays had had any training in government, since practically all the important posts in the Malay Civil Service had been held by Europeans. Until recently the Malays with occasional exceptions showed no interest in governmental affairs: the demand for decentralization came from the rulers and not the mass of the population. A number of educated Malays are beginning to appear who are keenly interested in changes which may admit them to government employment and authority; but apart from this very small minority there was never a people less politically minded. What little political organization and agitation there has been in Malaya has been Chinese, never Malay.* The advent of decentralization raised a dilemma: the old-style State Council was too inexperienced and too unrepresentative to handle its new powers, yet the Malays were likely to be swamped if European, Chinese, and Indian members were added. "Unless the Councils are strengthened by these elements—which after all have a stake in the country—they cannot hope to acquire appreciably greater powers. . . . The Malay patriot has to choose between a substantial amount of power conferred upon an

* The attitude of this small politically minded group was expressed in a translation of an article in a Malay vernacular newspaper, which appeared in *The Malay Mail* of 12th November, 1931. It complained that the Malay members of Council were usually relatives or favourites of the Sultan, and uttered the warning that unless the Malays showed themselves capable of using the new powers conferred on the State Councils "then good-bye to the Malays and their country." "Remember: the Chinese and Indians have no (inherent) loyalty to the Malay country and the Malay Rulers as the Malays have. . . The allegiance of the Chinese and the Indians is only to serve their own individual end while they are in this country."

enlarged and cosmopolitan State Council, or a small amount of power conferred on the old type of State Council."[28]

Sir Cecil Clementi enlarged the membership and made the rule that in future all unofficials on the Federal Council would be appointed from among the members of the State Councils. The Legal Adviser was made a member of all four State Councils in order to secure the necessary uniformity in legislation. The change may be illustrated from the Perak State Council. In 1927 it was composed of the Sultan and ten Malay chiefs, the Resident and his Secretary, and two Chinese. In 1937 it had twenty-six members made up of twelve Malays, seven officials, and seven unofficial members of whom three were Europeans, one an Indian, and three Chinese. All the Europeans and one Chinese were also members of the Federal Council.[29] The effect of the changes is that the State Councils have gained a real even if minor importance. The new unofficial members criticize and debate freely; and any serious disagreement between them and the official members must immediately be reported to the High Commissioner. The relations between the Resident and the unofficials seem to be evolving into something very similar to those between the Governor and the unofficials in the Colony. So far the Malay members have taken little part in the debates: almost all of them are territorial chiefs who grew up under the old régime and it is hard for them to change. Almost the only Malays with the necessary interest and training in modern problems of government are former members of the Malay Civil Service. The Government has been compelled to appoint them as additional Malay members of the Councils until qualified Malays who are not officials appear in larger numbers.

A final reform introduced by Sir Cecil Clementi was in the employment of Asiatics in the government services. Preference had been given to Malays in various forms of outdoor work, such as forest rangers; but Jaffna Tamils from Ceylon, Indians and Chinese had had a semi-monopoly of clerical positions. With the growth of English education among the Malays their demand for clerical appointments had grown. The Governor created a separate clerical service in each of the four States, open to candidates of all nationalities born and educated in the Federated Malay States, though with a preference for Malays. He also increased the number of Malays appointed to the Malay Civil Service for duty in the Federated Malay States. A special Malay Administration Service had existed since 1910 in the Federated Malay States for which Malays

only were eligible. It comprised some of the less important posts, and a few who proved to have the necessary qualities were subsequently promoted to the Malay Civil Service. Half of those appointed were taken from Kuala Kangsar College and the remainder from the English schools of the Federated Malay States. Candidates must have passed the Cambridge School Certificate examination and were appointed by the Federal Secretary on the recommendation of a Selection Board. They spent a year at Kuala Kangsar College which is modelled on the English public school and, like similar Dutch colleges in Java, is intended primarily for members of the Malay aristocracy who hope to enter Government service. Sir Cecil Clementi increased the number of promotions from the Malay Administration to the Malay Civil Service. By 1937 twenty Malays had been promoted and held such positions as that of District Officer.

The Chinese, Indians, and Eurasians in the Straits Settlements were excluded from the Malay Civil Service because a regulation dating from 1904 required candidates for it and the Hong Kong Service to be British subjects by birth and of pure European descent. On a number of occasions during the past twenty years the Chinese in particular demanded admission on the ground that they were British subjects. The Government felt itself compelled to refuse because civil servants were interchangeable between the Colony and the Federated Malay States. Owing to the Malay dislike of the idea of Chinese administration there would be strong protests if a Chinese British subject were transferred to a State which was Malay and not British territory. The Sultans would protest that when they agreed to accept British advice they had never bargained for British Chinese administrative officers. By the strict letter of the law it could of course be argued that they must accept them, as they were bound to follow the advice given. It must be admitted however that such a contingency was never contemplated by either side when the treaties were drawn up; and the Government feels that to introduce Chinese administrative officers into the Federated Malay States would be a breach of faith. Sir Cecil Clementi believed that the Straits Chinese had a right to government employment, and he devised a compromise which he hoped would do justice both to them and to the Malays. A number of positions in the Straits Settlements which had formerly been in the Malay Civil Service were put in a separate Straits Settlements Civil Service. Candidates must be Asiatic or Eurasian British subjects by birth domiciled in the Colony, and must be the

sons of British subjects by birth or naturalization. They must be less than twenty-five years of age and must have a diploma from Raffles College or a degree from an approved British university. Appointments are made by a committee on the basis of a personal interview and college record. Probationers spend one year at Raffles College studying chiefly law and economics, and the two following years attached to a government office before they are appointed to the permanent establishment for service in the Straits Settlements only.[30]

The recommendations made by Sir Samuel Wilson for the first stage of decentralization were gradually carried out, the Chief Secretaryship being abolished in 1935. The subsequent stages have not yet been put into effect since the Government has been waiting to judge the result of the changes already made before going further. The form of government is in process of evolution and any statements made must necessarily be tentative. The financial credit of the Federation has not been impaired, owing to the safeguards already mentioned. The state head of each transferred department prepares his annual estimates in consultation with the departmental Adviser and submits them to the Resident, who has power to make alterations. Differences of opinion are settled by the High Commissioner, and eventually the Resident prepares the state budget estimates in collaboration with the Financial Adviser. The next stage is the battle of the grants: the four Residents descend upon Kuala Lumpur with the firm determination to secure as close an approximation as possible to the total amount in their estimates. Naturally the revenue is rarely as large as the proposals for spending it; and the debt service and the federal departments have first call upon it. The poorer States like Pahang must be assisted by their wealthier brethren. Eventually the available funds are divided and the four budgets are submitted to the Finance Committee of the Federal Council. This body has existed since 1910 and as at present constituted is composed of the Financial Adviser, the four Residents, and all the unofficial members. Although purely advisory it freely debates financial proposals before they come before the Council. The next stage is the vote of the block grant by the Federal Council, after which the Resident returns to his State bearing his fiscal sheaves: though how far he rejoices depends on the outcome of his battle at Kuala Lumpur. He and the unofficial members of the State Council discuss expenditure in Finance Committee. They can and do make alterations in the allocation of funds in the draft budget, which even-

tually is approved by the State Council. There is little debate at this final stage since the matter has already been fully discussed in Committee; but it would be incorrect to say that the Council is merely a registering body. Local control over the allocation of funds within the limits of the block grant has been strengthened. In pre-decentralization days the budget was very largely drawn up by the Chief Secretary in consultation with the federal heads and then submitted to the Federal Finance Committee and Council. The financial authority of the Resident has also been increased, and the High Commissioner as the final court of appeal has been brought into the picture in place of being a somewhat nebulous figure in Singapore.

The power to legislate has been divided between the Federal and State Councils. The principal subjects assigned to the latter are education, forests, some phases of public health and agriculture, and Muhammadan law. In addition to the topics specifically assigned to the Federal Council it is empowered to legislate on "all projects of substantive law not otherwise enumerated which are intended to have force throughout the Federation", or on "such other subjects as the High Commissioner may declare to be within" its competency.[31] The old problem of the desirability of substantial uniformity still persists in much of the state legislation. Proposals are submitted to the Residents for their comments and they in turn often take counsel with their unofficial members. Eventually the bill is drafted by the Legal Adviser and submitted to the State Councils, of all of which he is a member. The text is freely debated but amendments are not encouraged because if accepted they must be passed by all the other State Councils, a slow and cumbrous procedure.

The federal heads of the transferred departments regarded decentralization with understandable apprehension. They feared that efficiency and uniformity would suffer, and they doubted whether as Advisers they would be able effectively to supervise and co-ordinate the workings of four separate departments. In 1934 however it was decided fully to carry out the policy only in the Medical, Public Works, and Prisons Departments.[32] The Advisers of the Departments of Drainage and Irrigation, Agriculture, Veterinary, Education, Electricity, Forests, and Mines were given personal executive authority and responsibility over each of the four state departments. This has given them the same authority over the state officer who is the head of the state department as they formerly possessed. The Adviser on Forestry is also Chief Forest Officer in

each of the four States, and he reports that absolute unanimity and harmony prevail at all consultations between the five functionaries. In the Medical and other Departments which were actually broken up, the Advisers have been able to maintain the necessary degree of uniformity since they and the state department heads have grown up together in the service. Nevertheless it would be an exaggeration to say that the new system is merely the old centralization under another name. A new factor has to be considered, the Resident, who can no longer be ignored as formerly. The state departments are under his control and his approval of proposals must be obtained, with a final appeal to the High Commissioner if agreement cannot be reached. How far the Resident exercises his new powers varies with the individual; and the general result has been to lessen the authority of the Adviser. The intention is that the Adviser should continue to lay down the broad outlines of policy for the four States and that the Resident should use his new authority in modifying it to suit local conditions, since he has a fuller knowledge of what adaptations are necessary.

One obvious result of decentralization has been to bring the High Commissioner into the affairs of the Federated Malay States to a far greater extent than ever before. The Federal Secretary is under his control far more than the Chief Secretary ever was. Some of the powers of the latter have been transferred to the governments of the States and to the Federal Secretary; but the larger part of them has been given to the High Commissioner. This entails a very great increase in his work, for in addition he has to govern the Straits Settlements and supervise the Unfederated Malay States. A High Commissioner with an unusual capacity for work makes most decisions himself, though it would seem to be a heavier burden than a normal man could carry. Since with rare exceptions the High Commissioner has no personal knowledge of Malaya when he assumes office, he must depend in considerable degree on the advice of the four Residents and the Federal Secretary. They have passed their official careers in the dependency and can provide the local knowledge which he lacks.

One means of getting this advice is through meetings of the Residents' Council. The practice of holding occasional meetings to discuss matters of common interest began in 1898; but within the last few years the Council has become of considerably greater importance. At the present time there are about four meetings a year attended by the four Residents and the Federal Secretary. One weakness of

a body which meets so seldom is that it can advise only on questions of the moment. A practice frequently followed is to circulate papers among the four Residents for their comments. Some officials complain of the delay entailed, but, for all that, it has proved to be an important means of advising the High Commissioner. Every few years a durbar is held, but its chief value is to inform the Sultans of the Government's intentions, though it is also of use in eliciting their views. A new High Commissioner will be apt to consult the Colonial Secretary at his elbow in Singapore, a source of inspiration viewed with hostility and dismay by the population of the Federated Malay States.

The High Commissioner also obtains advice from the Federal Secretary. In order to emphasize that he is not a reincarnation of the Chief Secretary, this official is slightly junior in rank and seniority in the service to the four Residents and has a lower salary. Visitors to a Residency pass a guard of the Malay Regiment with fixed bayonet, but those who call on the Federal Secretary only encounter a policeman who does not even brandish a truncheon. On the other hand the Federal Secretary is not a very junior officer: he is a man of considerable experience and his next promotion will be to a Residency. He need not refrain from criticizing a Resident's proposals, either from inexperience or from fear that he may endanger his future prospects by commenting adversely on the policy of a government officer senior to himself. When his position was created in 1935 it was laid down that in federal questions he was "the High Commissioner's mouthpiece" but that he had no authority to make decisions in matters transferred to the States. "He will remember always that the authority in the State is the Ruler, and that the British Resident is the High Commissioner's representative therein. It is the right of Rulers and of the British Residents that they should have direct access to the High Commissioner." When state affairs were referred to the Federal Secretary by the Residents he was merely to act as a channel of communications and prepare the case for submission to the High Commissioner.[33] The Resident has the right to write directly to the High Commissioner but in practice he sends his despatches through the Federal Secretary. It is a moot point whether the Federal Secretary merely transmits the Resident's proposals or also comments upon them. He is clearly entitled to give his opinion if they affect federal interests or the interests of more than one State. The Residents would strongly object, however, if an officer junior to themselves advised the High

Commissioner on the settlement of state affairs. On the other hand the High Commissioner often requires assistance in making his decision on state as well as inter-state matters; and someone must provide him with a commentary covering such points as the history of the question, precedents bearing upon it, or any implications which may have been overlooked by the Resident. Such a memorandum could easily suggest a decision without actually stating it, and the advice of the Federal Secretary might become the policy of the High Commissioner. For this reason many predict that in the end the new Federal Secretary will prove to be the old Chief Secretary writ small and that gradually and insensibly decentralization will come to be the old centralization at Kuala Lumpur. It is pointed out that he is the man on the spot, that he is brought into contact with the High Commissioner much more frequently than the four Residents, and that the descent to Avernus is further facilitated by the excellent telephone service between Singapore and Kuala Lumpur. Someone has to co-ordinate the policy of the four States, and not every High Commissioner may attempt to do so himself. In practice he may delegate his powers to his channel of communications. Quite possibly the unknown factor of personalities may prove to be the deciding one. The Residents have been given definite powers, but how far they will use them will depend, as always, upon the men themselves. One reason for the former overcentralization was that some Residents were unwilling to make decisions and passed on their responsibility to the Chief Secretary. Others scented the battle from afar and plunged joyously into the fray in defence of their rights. However, the Colonial Office has adopted the policy of decentralization and has emphasized its necessity. It is not likely to favour an evolution that would negative a reform which it regards as politically essential.

The Sultans' prestige has been increased by decentralization and they are consulted more than formerly. How far their views influence policy must necessarily depend on their ability, experience, and training, and on their desire to take an active part in the affairs of their States. Racial characteristics enter into the problem: the Governments of Malaya have the typical Western devotion to efficiency, speed, impartiality, and uniformity. The Malay like other Asiatics attaches less importance to these qualities, though there are individuals who by training and guidance have acquired a good deal of the British point of view. The mental change in Malaya during the past seventy years has been as great as the physical—from

small, warring feudal states to slum clearance and fair-wage boards The peoples of Europe have had eight centuries in which to make the same progress; and contemporary events would seem to indicate that some of them have lagged behind in moral development despite their accomplishments in material civilization. Geoffrey de Clinton was a very efficient treasurer to King Henry I. He notably increased the royal revenue and by sheer ability "rose as it were from the dust" until he was more powerful than the de Warennes, and the other great Norman barons. One wonders what he would make of the Chancellor of the Exchequer's problem of financing the war. The Indian princes have had a similar experience; and it is instructive to read the contemporary reports on a State like Haiderabad or Mysore and compare them with those written by the British Residents of ninety years ago. The then Malay Sultans could not have achieved so complete and abrupt a change in their outlook on life however hard British officials had tried to train and guide them. Training and guidance they received less and less, however, as the pace grew hotter and work increased. The longer this situation lasted the more likely the rulers were to lose interest in the affairs of their States. The Victorians and Edwardians were believers in direct rule and had little faith in the ability of Asiatics to manage their affairs as competently and impartially as their British rulers. They had a robust self-confidence and a sense of stability and permanence which the events of the past twenty-five years have shattered. The British Empire seemed as eternal as the Roman, and like the Roman Empire at its best it was engrossed in a steadily rising standard of justice, efficiency, and improvement of material conditions. It seems significant that so many of those who know the Sultans best emphasize that what they lack is training rather than shrewdness and natural ability. British officials who have served in the Unfederated States where rulers have had a chance to show what they can do seem on the whole to be the most sanguine as to their capabilities, although many of those in the Federation have the same attitude. The inability of most rulers to speak English is a serious handicap. They know their own people and can give a far truer description of what the Malays think of government policy than anyone else. Since the Great War a new school of rulers is beginning to appear, men who have been to the college at Kuala Kangsar and who sometimes have been members of the Malay Civil Service. They are interested in the affairs of their States, have the knowledge to understand their problems, and insist on being consulted by their Residents.

The future of the Malays is as unpredictable as the outcome of decentralization, and the two are bound up together. A survey of the past seventy years shows that their position has improved materially and declined politically. This has not been the result of any positive action on the part of the British Government and has been the exact opposite of its intentions; but it was the inevitable result of a régime of free immigration and equal opportunity. When the conservative, easy-going, and feudal-minded Malays came into contact with the British and the Chinese, the products of far more mature and aggressive civilizations, there could only be one result. The British failed to realize that the Malay needed special help and protection if he were to hold his own in the twentieth-century world into which he had been hurled. He did not receive it and by the 'twenties he was figuratively sitting on his own doorstep while the British and the Chinese occupied the house. The same situation has begun to arise in Palestine between Jew and Arab and is the fundamental cause of the failure of the mandate. The system of indirect rule in Nigeria and Tanganyika is an attempt to avoid it, cushioning the negro tribes and emirates against the full impact of Western civilization and simultaneously modernizing and strengthening their traditional forms of government. In Malaya the effort has been made late in the day and the difficulty is enormously increased by the great British and Chinese interests and the presence of a large Chinese and Indian population. They were encouraged to enter the country and have the right to demand that their position shall be respected. The character of the Malays themselves is equally a hindrance to their own advancement. Their demand for an increasing share in the government is in its infancy, and so far very few of them are fitted for it. Many consider that they are charming and attractive and that it is all very sad but it is hopeless to bolster them up against the more capable Chinese. The future lies with the strong; the weaker go to the wall and Malaya has outgrown the Malays. The British and Chinese will in the end control the country between them, and the Malay will remain a smallholder, a fisherman and a policeman. The problem is not made easier by the two races' attitude of mutual condescension. There is no possibility of solving the question by wholesale intermarriage; the two races will remain distinct and there are few signs of the appearance of a common Malayan patriotism. Both Malays and Chinese are beginning to become more self-conscious and more insistent on their rights; and one has the suspicion that the absence of racial friction

is drawing to a close. The problem is so difficult as to seem to defy solution in a form which is reasonably just to all concerned, but nevertheless the attempt must be made.

Any thought of a self-governing Malaya is utterly premature. Yet less than a generation ago Ceylon was a typical Crown Colony and Lord Morley was asserting that democracy was unworkable East of Suez. For the past twenty years the whole trend of the Empire's dependencies has been in the direction of increasing self-government. Freedom no longer "slowly broadens down from precedent to precedent", and there is no guarantee that Malaya will always retain its present form of government. It therefore seems only fair to assist the Malays to hold their own in case that day should arrive. In this lies is the real political necessity for decentralization and the increased employment of Malays in the Malay Civil Service. Sir Samuel Wilson had this in mind when he wrote that "the encouragement of indirect rule will probably prove the greatest safeguard against the political submergence of the Malays which would result from the development of popular government on Western lines. For in such a government the Malays would be hopelessly outnumbered by the other races."[34] It is a good omen that decentralization has strengthened the position of the Sultans. Their ultimate share in the administration will be determined by their own ability and education; and that depends upon themselves as well as upon their Residents. It was inevitable that the first effect of the new policy within the States was to increase the power of the Residents far more than that of the Rulers. The work of government must be carried on and with Sultans of the old school it was too late to enlist their co-operation. With the Rulers of the new generation it is already beginning to be different, even though it will mean increased work for the Residents. The alteration of the succession to the throne of Selangor showed however that there were unsuspected potentialities latent in the new régime. One can see the desirability of having as heir-apparent the prince who seemed to possess the most modern outlook. But to pass over not only the eldest but also the second son in favour of the third seems a decidedly drastic exercise of the rights of the paramount power. It naturally alarmed the other Sultans who feared that what was done in Selangor might take place in their own States. It seems evident that decentralization will never mean the autocratic rule of the Sultan and the Malay chiefs: the presence of British and Chinese interests will ensure that there is at most a limited monarchy. At present the preference

of the Malays is for government by their Sultans and chiefs: what they may want in the future may be left for the future to decide. Certainly for an unfixed time to come one cannot foresee a future for Malaya without a strong British element to hold the balance between the various races and interests and to supervise and direct the government services.

The Unfederated Malay States

The five Unfederated are in the same general position as the four Federated Malay States—juridically independent and practically dependent. All of them are under the treaty obligation to follow the advice of the British Advisers in all matters other than those touching the Muhammadan religion and Malay custom. The existence of certain formal marks of independence (e.g. in Johore the usual title of British Adviser is replaced by that of General Adviser), does not alter the essential reality of British control. At the same time the Malays have a much more important share in the government than in the Federation. Most of the ministers and administrative officers are Malays, although the majority of the technical officers are British, since very few Malays have as yet the necessary training for these positions. While the general situation is similar in all the Unfederated Malay States there are important differences between them owing to their history, degree of economic development, and the character of their populations.

Johore has been closely associated with the British ever since the foundation of Singapore in 1819, although a General Adviser was not appointed until 1914. Owing to the position of Johore between Singapore and the Federated Malay States rubber-planting developed on an extensive scale from about 1910 onwards. The completion of the West Coast Railway prior to the Great War opened up the country and there was a heavy immigration of Chinese, Indians, and Malaysians. Johore is the only Unfederated Malay State where the Chinese and Indian immigrants outnumber the Malays, forming in 1931 52.7 per cent. of the population. The extensive development of agriculture and mining brought wealth to the country and the revenue is larger than that of the other four Unfederated Malay States put together. Government services are much more extensive and the number of European officials is considerably greater. *A priori* one might expect that the position of the Sultan would approximate more closely to that of the rulers in the Federated rather than in the other Unfederated Malay States. In reality the present Sultan

appears to be the most independent of all the rulers, principally because he and his father were men of remarkable ability and force of character.

The four northern States of Kedah, Perlis, Kelantan, and Trengganu did not come under British control until 1909 when Advisers were appointed. Kedah has been fortunate in having in her late Regent and some of the other principal Malay ministers a group of able and astute men. While introducing reforms they have been determined to preserve the Malay character of Kedah and of limit British control as far as possible, and have achieved a fair measure of success. In Trengganu, unlike the other States, the Adviser had only consular powers until 1919. He was unable to check the flagrant oppression by the Malay rulers until the treaty of 1919 gave him the same authority as the other Advisers. A decade earlier the same conditions had prevailed in Kelantan, and the lives and fortunes of the inhabitants had been regarded as the private preserve of the Sultan's relatives, who are still remembered as the Seven Wicked Uncles. Especially in Trengganu some survivors of the old régime still hold office, and fight a moderately successful rearguard action against the onset of reforms introduced in the other States ten years earlier. Until very recently the East-coast States were relatively inaccessible: the railway through Kelantan was not completed until 1931, and the road which connects it with Trengganu was built several years later. Sea communications are uncertain for part of the year owing to the monsoons. The railway from Penang through Kedah has been open since 1918. The result of all these factors has been a marked difference in economic development, the amount of immigration, and the problems of government. European and Chinese rubber estates have been established in Kedah on a considerable scale, but scarcely at all in the other States. Thirty per cent. of the population of the former are Chinese and Indians while in the others over 91 per cent. are Malay smallholders and fishermen. The revenue of Kedah is nearly twice as large as that of the East-coast States and its government services have expanded correspondingly. Kelantan and especially Trengganu are closer to the untouched Malay States of thirty years ago, while Kedah stands midway between them and Johore.

Johore has the unique distinction of possessing a written constitution which was presented to it by Sultan Abu Bakar in 1895 and expanded by the present Sultan Ibrahim in 1923. Too much

importance should not be attached to it since the Sultan is not a slavish adherent of constitutional forms. His Malay Ministers and subjects are afraid to oppose him, and British officials who cross his will can be certain that life will be interesting and far from uneventful. A local story gives some ideas of this go-ahead autocrat. His Highness has scant regard for the speed limits of Johore, and once at a cross-road his car collided violently with a lorry driven by a Malay. The Malay traffic policeman who should have been on duty had given himself leave of absence. Nobody was injured, but when the driver and the constable found that the driver of the damaged car was their Sultan they wasted no time in apologies, farewells to their families, or other trivialities. They made a hole in the horizon and have not been heard of since. There are three advisory Councils: a Council of Malay ministers which is of minor importance, an Executive Council presided over by the Sultan (similar to the Executive Council in the Straits Settlements), and a Council of State which corresponds to the Legislative Council. The president of the last is the Mentri or Malay Prime Minister and the members include British officials and European, Chinese, and Indian unofficials as well as Malays. At the head of the administration stand the Sultan and the General Adviser and under them come the department heads, some of whom are Malays but the majority British seconded from the various services in the Colony. Each department has a varying number of Malay and British officers. In the administrative service, for example, the work is divided between Malay District Officers who have the title of Commissioners and British Assistant Advisers. The Sultan insisted that the British control the collection of land revenue and the land offices which deal with the sale of State land, registration of titles, etc. Of the technical services the medical and educational are especially developed; but in spite of the serious burden of rural debt there are no co-operative societies, since local Moslem opinion condemns them as a form of usury. The government in Kedah, Perlis, Kelantan, and Trengganu is made up of the Sultan and an advisory Council, composed of the Malay ministers and the British Adviser, which combines executive and legislative duties. The heads of the technical departments are British but most of the other department heads and officials and the whole of the clerical services are Malays. These States have a well-defined policy of employing only Malays as far as possible; and in the administrative service they hope to be able to dispense with Europeans entirely in about fifteen years. In the technical departments they realize

that Europeans will be needed for a much longer period though Kedah has begun to train its own medical staff.

The administration has been reasonably efficient and the level has risen decidedly, although it has been lower than in the Federated Malay States. The consensus of opinion among British officers is that the Malays lacked education and training rather than native ability. On the average they are not hardworking and energetic, although there are some notable exceptions, and picked men make good administrative officers. It is important to remember that in the northern states British control was established less than a generation ago, and the leading officials of the pre-British régime have only recently retired or in some instances are still in service. "One could hardly expect them to adapt themselves to or even properly to understand British ways and aims in administration. They had not the traditions or the character ingrained in them to carry on administration on British lines nor had they the education." The younger school of Malay officers who have been through Kuala Kangsar are different. "Their ideas are no longer those of the old régime and they are keen to improve the government of their States. . . . As to their ability, industry and impartiality, I have been surprised at the qualities many of them have shown. But always with a guiding and controlling hand over them; that is essential." The significant point is that there has been more British tutelage and less executive action in the Unfederated than in the Federated Malay States. Less than a generation ago the government and the point of view were almost what they had been in the Federated Malay States before British intervention. The really hopeful sign is that the standard of Malay administrative achievement has risen appreciably in so short a time and not that it still falls short of that of the rest of the Peninsula.

The position of the Adviser in an Unfederated Malay State is different from that of a Resident. Sir George Maxwell has defined the distinction as somewhat resembling that between a business manager and a consultant. "A Resident administers the government of the State on behalf of the Ruler, issues orders in his own name and carries them out. An Adviser is consulted by the Ruler but issues no orders of any kind."[35] The Adviser has the right to be consulted on all questions and can insist that the Sultan follow his advice. In practice he is reluctant to use this power and makes every effort to persuade the Ruler to give way. Usually he carries his point in the end through tact and an avoidance of too precipitate an introduction

of change. A good Adviser must be a diplomatist as well as an administrator, and the more infrequently he has recourse to his power of insisting on his policy the more successful he shows himself to be. He attains much the same results as a Resident, but he carries the Ruler with him and hastens slowly, while the Resident takes a short cut and issues an order. The same method is followed in the State Council: if some of the members oppose the Adviser's proposals the question is postponed until the following meeting and meanwhile he brings his diplomatic charms to bear. To a considerable extent success depends upon the personalities of the Adviser, the Sultan, and his Ministers. The Malays have a natural tendency to take the advice of a man whom they trust and like, and one test of a successful Adviser is the rarity with which the Sultan strongly opposes his policy.

If the Ruler remains obdurate the Adviser gives way unless the matter is of prime importance. Under this heading would come questions of Imperial or pan-Malayan concern such as the adoption of Imperial Preference, the tin and rubber export quotas, or enforcement of the Labour Code, and also domestic reforms of outstanding importance. Some years ago a State had an elderly Malay judge who was famed for his ostentatious piety and his acceptance of bribes. He was impervious to all suggestions of reform and the State Government strongly supported him since he was regarded as a very holy man and bribes were a time-honoured perquisite of office. So a Legal Adviser was brought in to codify the law, which was in a state of confusion, and eventually he became judge *vice* his colleague who retired on pension after a lifetime of lucrative service. Indirect rule might be described as little-by-little, or advance by almost painless instalments. If the Sultan remains obdurate in a matter of vital importance it is referred to the High Commissioner,* and he in turn consults the Colonial Office before taking action; or more probably the Adviser has discussed the subject with them before broaching it at all. They are decidedly more reluctant to overrule the Sultan of an Unfederated than the Sultan of a Federated Malay State; but if they consider that the policy in question must be adopted then the Sultan is required to follow the advice. The rulers of the Unfederated feel that they have more power than the Sultans of the Federated Malay States and are very strongly opposed to even the loosest form

* The channel of communications between the Advisers and the High Commissioner is the Secretary for the Unfederated Malay States at Singapore. He is junior in rank to them and may not criticize their proposals, but prepares memoranda which cite precedents and other relevant data.

of pan-Malayan union lest it should prove to be the thin end of the wedge. In 1932 Sir Samuel Wilson gave them the assurance that "His Majesty's Government have no intention of requiring the Ruler of any Unfederated State to enter against his will into any kind of Malayan League or Union".[36]

CHAPTER III

FINANCE

The Straits Settlements

The revenue of the Colony has been very much less than that of the Federated Malay States for over forty years. Its free trade policy has debarred it from a very lucrative field of taxation and its revenue is "singularly inelastic". Governor Sir Hugh Clifford pointed out in 1927 that the Federated Malay States "our very wealthy neighbour . . . sets a standard of efficiency and achievement of a kind that can only be secured by lavish expenditure. . . . The vast majority of the kind of public works most required are not only not directly remunerative, but help to swell on account of upkeep, etc., etc. the recurrent expenditure of the Colony".[1] The annual revenue and expenditure of the Straits Settlements have been as follows:—[2]

	Revenue	*Expenditure*
1913 . .	12,397,747	10,468,618
1918 . .	23,262,015	15,966,145
1919 . .	34,108,465	34,901,233
1920 . .	42,469,620	39,260,318
1921 . .	39,545,735	35,430,899
1922 . .	34,103,462	24,797,085
1923 . .	33,316,015	26,717,778
1924 . .	28,639,161	26,706,316
1925 . .	53,850,960	57,593,959
1926 . .	36,465,213	36,955,640
1927 . .	37,602,081	39,253,272
1928 . .	38,092,221	35,007,608
1929 . .	54,888,291	35,711,997
1930 . .	32,408,305	39,240,315
1931 . .	26,601,528	46,802,558
1932 . .	44,562,295	34,196,483
1933 . .	31,585,190	30,476,291
1934 . .	34,244,603	30,937,262
1935 . .	35,040,380	34,764,640
1936 . .	35,124,137	33,398,912
1937 . .	37,348,383	42,038,482

The largest single item in the revenue has been the government opium monopoly: in the first two decades of the century it produced nearly half the total and at the present time about a quarter. The receipts fell from nearly twenty million dollars in 1920 to $8,839,389 in 1937 or 23.7 per cent. of the total receipts. The decrease has been caused by the Government's policy of attempting gradually to suppress opium smoking by raising the price. An Opium Revenue Replacement Fund has been gradually built up to take the place of the monopoly. The next largest items are the import duties on tobacco, liquors, and petroleum, which in 1937 brought in $12,215,396 or 32.7 per cent. of the total. Interest on the investment of the Colony's accumulated surplus and the Opium Revenue Replacement Fund has been another important source of revenue and in 1937 amounted to $5,088,187 or 13.6 per cent. The net receipts from the Post and Telegraph Departments provided 7.7 per cent. of the revenue in 1937; and the remainder came from stamp and estate (death) duties, pawnbrokers' and other licences, fees of courts or offices, rent of government property, and land sales.

A glance at the table of revenue will show periodical sharp rises and falls. Variations in the receipts from opium and import duties in accordance with economic conditions are a partial explanation, and occasional windfalls have also been important. In 1919, for example, several million dollars were received as deferred payment from the sale in 1913 of the Singapore Railway. The income tax which was in force from 1920 to 1922 was one cause of the unprecedentedly high revenue of 1920 and 1921. It was abolished at the end of 1922 since it was exceedingly unpopular among the Chinese, Indian, and European merchants and planters, and also apparently because a high percentage of those who were liable managed to evade payment.* In 1920 the income tax added nearly five million dollars to the revenue and the opium returns exceeded the estimates by eleven million. The fall in revenue in the following years was a reflection of the rubber slump, and the abolition of the income tax at the end of 1922 accentuated the decline. The recovery in the middle and later 'twenties mirrored the return of prosperity. The greater part of the abrupt increase in 1925 however was not due to

* The Legislative Council unanimously approved the imposition of the tax in 1917, as a war measure to raise funds for the assistance of the United Kingdom. In 1920 the war-tax was made permanent, the final remittances to Great Britain being £1,000,000 in 1920 and £100,000 in 1921. In 1922 it was paid by only 2,420 Europeans and 974 Chinese, no one else apparently having an income of over $500 a month (*Proceedings of the Legislative Council of the S.S., 1922*, pp. C. 182–C. 199).

this cause but to the transfer of $20,000,000 from the Currency Guarantee Fund. This amounted to $194,950,000, which was far more than was required to cover the $161,432,000 of currency notes in circulation. The sum transferred, with an added $10,000,000 from surplus revenue, was used to form the nucleus of the Opium Revenue Reserve Replacement Fund.[3] Again in 1929 the revenue was augmented by the transfer of $19,000,000 from the Currency Guarantee Fund. If this sum be subtracted it is seen that the ordinary revenue was over two millions less than that of 1928. The fall continued during the depression years; and the abnormal rise in 1932 was largely the result of transferring $10,000,000 of excess coverage from the Currency Guarantee Fund to current revenue. The interest on the Opium Revenue Replacement Fund was similarly diverted instead of being added as formerly to the capital of the Fund; and the duties on tobacco, liquors, and petroleum were increased. In 1933 the revenue was dependent on normal sources and the amount declined abruptly. The steady increase in this and the following years reflected the lifting of the depression, the receipts received from all the principal taxes showing increases.

Prior to 1914, economy in expenditure was the guiding principle: taxes were low and the Treasurer's greatest pleasure in life was to contemplate his slowly expanding surplus. Medical and other social services suffered; but by 1915 he had a balance of about $20,500,000. From 1914 to 1918 all plans for local development were shelved as far as possible while the available funds were devoted to war purposes. The Colony emerged from the war with a great deal of leeway to make up. There was general recognition of the need for a large increase in expenditure; and in 1919 the Government launched out on a programme of expansion with the strong support of the press and public opinion. Expenditure in 1919 was more than double what it had been in the preceding year; and of this increase of nearly nineteen millions over fifteen millions represented the partial cost of improving the Singapore Harbour Works. Another $2,625,000 were accounted for by the rice famine: the Government found it necessary to buy rice at a high price and sell it at less than cost in order to relieve distress. The result was a small deficit which was met from the surplus; and very little could be afforded in 1919 to improve the medical and educational services. The following year expenditure was higher than ever: the rice famine continued and $9,680,000 was spent in relieving it. In 1921 the drought in Siam and India ended and the necessity for Government purchases of

rice came to an end: but the total cost of relief had been about $16,000,000. Expenditure was further increased by a final payment of $7,186,000 which had been voted as a contribution to Imperial war funds. The Legislative Council after investigation had voted to raise the salaries of government officers, since the pre-1914 rates of pay had become entirely inadequate owing to the great rise in the cost of living; and its recommendations were gradually put into effect from 1920 to 1922. In spite of these heavy demands the expenditure on the Medical Department was increased from $814,000 in 1918 to $1,551,000 in 1920, and on Education from $345,000 to $562,000. Some increase was also made in the Police force, which was seriously below strength. Heavy and increasing expenditure on public works continued in 1920 and the following years, the cost of new construction rising from $458,000 in 1918 to $6,184,886 in 1927. In 1922 the post-war depression caused a widespread and successful demand for the abolition of the income tax and very strong criticism of the "excessive and extravagant" expansion of personnel since 1920, particularly in the Police, Medical, and Education Departments.* The Government reduced expenditure, but while retarding the programme of expanding the social services and building public works it refused to abandon it. It was able to point out that it had been condemned for "parsimony" in 1919 because it had failed to embark on the programme of expansion which was denounced as "extravagance" in 1922.[4]

By 1925 prosperity had returned to Malaya: during the next few years the revenue continued to grow and the long-deferred programme of expansion was put into operation. Until 1927 the heaviest item of expenditure was for the building of new public works, but after that date appropriations were somewhat curtailed. There was rapid expansion of the Medical Department and in 1930 its expenditure was $3,616,000. This does not represent the full amount spent, since it omits the cost of new buildings and sundry government contributions under the budget head of miscellaneous services. If these items are added, the total government medical expenditure in 1930 was $3,884,990; and since the three municipalities of Singapore, Penang, and Malacca spent an additional

* Between 1913 and 1921 the total cost of salaries had risen by about $5,250,000, 60% of it in the Police, Education, Medical, and Post Office Departments. The real reason for the increase was much less expansion of personnel than the higher salaries necessitated by the post-war rise in the cost of living. While the personnel of the four departments had risen from the basic figure of 100 in 1913 to 130 in 1921, the "average over-all increase" in salaries was from 100 to 285 (*Proceedings of the Legislative Council of the Straits Settlements, 1922*, p. B. 145).

$1,121,496 on their public health departments the total expenditure was $5,006,486.[5] The Education Department expanded more slowly but by 1930 its direct cost had grown to $1,536,663. This did not include the education rate of the $608,000 spent by the Public Works Department on new buildings; and including these items the amount was $3,722,265 or 8 per cent. of the total expenditure.[6]

In 1931 the Great Depression reduced the revenue to its lowest level since 1918, and in the same year the Colony had the second highest expenditure in its history. This conjunction produced a deficit of $20,201,030; and to meet it the revenue surplus was reduced to $56,171,577. The expenditure exceeded that of 1930 by over seven and a half million dollars. The depreciation in the market value of surplus fund investments was over two millions; and the Colony's share in the cost of improvements in the Federated Malay States railways was an equal amount. The largest single item was public works and particularly new construction, the cost of which rose to the unprecedented figure of $8,197,700. The Government adopted this policy deliberately to relieve the widespread unemployment, and also because it could thereby carry out necessary works more cheaply owing to the fall in costs of construction.[7] An insistent demand arose from every section of the public for lower taxes and drastic economies, and a Retrenchment Committee of official and unofficial members of the Legislative Council was appointed to investigate.[8] Their Report found unanimously that certain departments especially had "expanded out of all relation to the population and to the public revenues". The principal offenders were Education, Medical, and Police, although Public Works and Defence received less condemnation. The Committee demanded reductions of personnel and salaries, no further recruitment until the revenue recovered, and no construction of new public works for two years. They complained that since 1924 the Police had grown from 106 officers and 3,300 constables to 160 officers and 4,300 constables, and the expenditure from $2,500,000 to $3,500,000. Education had almost doubled its expenditure in salaries since 1924 and together with the Medical it was "one of the Departments that expanded much too rapidly". The number of its teachers and officials had increased from 1,178 to 1925 in 1,998 in 1932 and the total cost from $1,343,200 to $2,787,100. By far the greater part of this expenditure went in salaries, the amounts for the same two years being $1,340,600 and $2,106,300. The figures for the Medical Department told the same story of expansion in numbers and con-

comitant rise in salaries. The latter were not so high a percentage of the total as in Education because the cost of equipping a hospital, for example, is much higher than that of a school. In 1925 the Department had a strength of 1,250, and salaries accounted for $1,407,500 out of a total expenditure of $3,212,400. In 1932 the personnel was 1,868, the cost of salaries $2,227,500, and the total expenditure $4,036,300. The figures illustrated the fact that, in large measure, expansion of social services meant expansion of personnel, and that the cost of salaries steadily mounted both on this account and because of the periodical increases which came from promotion. The heavy expenditure on public works illustrated the same truth to a considerable though uncertain degree. Exact figures cannot be obtained, but part of the expenditure on Public Works Extraordinary, i.e. new construction, was the cost of building hospitals and schools. This in turn entailed a steady rise in the appropriations for Public Works Annually Recurrent or maintenance and upkeep. Reduction of expenditure on social services was easier to advocate than to carry out. A certain amount of economy could be achieved by the 13 per cent. decrease in salaries which the Retrenchment Committee advised; but any important saving would require the wholesale dismissal of staff. This would curtail the social services and incidentally swell the expenditure upon Non-Effective Charges, otherwise pensions and gratuities. A large saving could certainly be secured in Public Works expenditure by the discontinuance of new construction; but a drastic slash in maintenance and upkeep was likely to mean the postponement of needed repairs and in the long run a heavier expenditure on replacement.

The Government accepted many of the Committee's recommendations: salaries were lowered, a large number of government officers and clerks were dismissed, and the expenditure upon public works was reduced by about $2,400,000 and that upon the medical services by about $420,000. Even so the cost of salaries was 46 per cent. of the budget in 1936 and 56 per cent. of the annually recurrent expenditure. The reduction in the Police Department was trifling since the Government insisted that the recent increase had merely met the "urgent and long overdue need for improvement". It reminded the Legislative Council that the result of postponement of expenditure in the 'twenties had been that the crime wave had been "practically unchecked" and that "the Asiatic public rapidly lost confidence in the Force". Owing to the increased appropriations

there had been a fair measure of improvement: "equipment and preparation are now sufficient to give the Force a chance against the gun man and the motor car. . . . Forced development over a short period has always to be paid for".[9] The two items of expenditure which showed an actual increase were irrigation works and pensions, the latter owing to the number of officials who were dismissed. As a result of the economies the expenditure for 1932 was reduced to $34,196,483 or $12,606,075 less than in 1931. This not merely balanced the budget but produced a revenue surplus of $10,365,812 which was added to the general surplus. The revenue increased from 1931 onwards, and expenditure also rose, even though each year saw an addition to the surplus of anything from a few hundred thousand to four million dollars. By 1937 the expenditure of most departments was much the same as it had been in 1930 except for Public Works which was about $2,000,000 less. Expenditure upon Education had risen by about 50 per cent. from $1,536,663 to $2,234,495.

In 1937 the general revenue surplus of the Colony was $66,886,788 of which approximately $48,590,000 were liquid. In addition the Opium Revenue Replacement Fund amounted to $59,109,971. The Government debt was a 3 per cent. loan of $30,000,000 floated locally in 1936 to redeem the balance of a 3½ per cent. sterling loan. The proceeds of the latter had been reloaned to the Harbour Boards and the Municipal Commissioners of Singapore and Penang. The conversion loan of 1936 was raised entirely for the Harbour Boards which bore all charges for interest and sinking fund; while the Municipalities paid off the balance of their indebtedness under the 3½ per cent. sterling loan and had no share in the conversion loan. The Straits Settlements had no public debt on purely Government account, and had made loans to the Governments of Trengganu, Kelantan, and Perlis of which the unpaid balance was slightly less than five million dollars.[10] Free from debt, with a surplus in its two funds of approximately $126,000,000, and with a *per capita* tax rate of about $16, the Colony has little cause for anxiety as far as its finances are concerned.

Accurate determination of the exact amounts spent on the various government services is impossible. The figures in the statement of expenditures in the Annual Reports of the Straits Settlements which have been quoted above frequently cover much less than the real expenditure of a department. Part of the cost of salaries and allowances appears under the headings of General Clerical Services or

the contribution from the Miscellaneous Services to the Malayan Establishment Office. In 1937 these two allocations amounted to $1,222,122 and $12,495,417 respectively; but it is not feasible to apportion them among the various departments. On occasion too the expenditure on Miscellaneous Services has included grants to hospitals or for anti-malarial work. A varying and sometimes large part of the cost of the different departments appears under Public Works expenditure; but not even the Public Works Department itself keeps record of how much of its expenditure is incurred for each separate department. The Department of Education also received a large revenue from the Education Rate which does not appear in the statement of expenditures. The annual expenditure of the Medical Department does not include the amount spent on public health by the Municipalities of Singapore and Penang which is sometimes in the neighbourhood of $1,000,000 a year. A typical illustration is given by the nominal and actual expenditures on education for 1937. According to the statement of expenditures the cost of the Department was $2,234,495, but the Report of the Department of Education states that its expenditure was $3,628,675 of which $1,433,224 came from revenue, $1,853,902 was the government appropriation and $341,548 was Public Works expenditure.[11] The revenue was made up of the Education Rate which yielded $759,233, a government contribution of $288,556, schools fees of $374,300 and the remainder from miscellaneous sources. If the government appropriation and the government contribution are added the total is $2,142,458, which is less by about $92,000 than the amount given above of $2,234,495. There is no apparent explanation of the discrepancy; and one is reminded of the thirteenth-century monk who, when copying a very obscure passage in a manuscript, inserted the marginal comment, "What this meaneth God knoweth for I do not". The Education Rate is certainly a government aid to education since it is the proceeds of a special tax, and when it is added to the two government appropriations and the expenditure of the Public Works Department the total government expenditure upon education is $3,243,239 and not the $2,234,495 given in the statement of expenditures. In other words the government expenditure upon education was 7.5 per cent. and not 5.3 per cent. of the total expenditure.

The following table gives the percentage of expenditure on the various services as shown in the annual statements.[12] For the reasons explained above the figures are often less than the real

amounts; but it has proved impossible to ascertain the sums really spent.*

	Non-Effective Charges	*General Administration*	*Public Order*	*Public Health*	*Agriculture and Other Services*	*Education*	*Public Works*	*Undertakings of Government*	*Defence*
	%	%	%	%	%	%	%	%	%
1918	4.0	26.7	11.4	5.1	.7	2.1	7.5	7	35
1920	1.8	65.2	7.3	3.9	.4	1.4	6.1	3.7	9.8
1925	3.8	23.3	14.4	8.7	1.3	3.8	22.6	8.4	13.1
1930	4.6	28.7	12.1	9.2	1.1	3.9	18.3	9.5	12.2
1935	6.9	27.6	12.1	9.4	1.9	5.7	15.0	8.2	12.7
1937	5.7	37.8	10.6	8.5	1.6	5.3	12.4	7.2	10.6

The Non-Effective Charges are almost entirely the cost of pensions, the annual payment on the public debt having been only $37,000. The very high cost of defence in 1918 was caused by special war expenditure of nearly two millions in addition to the Defence Contribution to the Imperial Treasury. The low percentages for public works and social services were the consequences of the policy of postponing expenditure until the war was over, while a second cause was the serious shortage of staff which had developed since 1914 in most departments. The most striking point about the percentages for 1920 is the abnormally high figure for General Administration. The reason was that $23,502,000 out of $25,622,000 were spent upon Miscellaneous Services. This elastic heading has

* Non-effective Charges includes pensions and debt charges. General administration includes the Governor's Office, the Departments of the Colonial Secretary, Audit, Treasury, Statistics, Chinese Secretariat, Immigration and Passports, Labour, Marine, the Malayan Civil Service, the General Clerical Service, Raffles Museum, Printing Office, Charitable Allowances, and Miscellaneous Services. Public Order includes the Land and District Offices, Survey, Legal, Police, and Prisons. Agriculture and Other Services includes the Departments of Agriculture, Forestry, Veterinary, Fisheries, Co-operative Societies, Drainage and Irrigation, and the Botanical Gardens. Education includes the expenditure upon the schools but not upon the Raffles and Medical Colleges. Government Undertakings includes the Opium Monopoly and Posts and Telegraphs. Defence includes the Defence Contribution to the Imperial Treasury and the cost of the local forces.

The expenditures in 1918 and 1937 were :—

	1918 $	1937 $
Non-effective Charges	650,000	2,428,919
General Administration	4,271,000	15,895,631
Public Order	1,832,000	4,464,739
Public Health	814,000	3,581,856
Agriculture and Other Services	127,000	675,311
Education	345,000	2,234,495
Public Works	1,201,000	5,240,847
Government Undertakings	1,128,000	3,060,314
Defence	5,602,000	4,456,348
Total	$15,966,000	$42,038,482

varied between $3,000,000 and $33,000,000, and has been a convenient repository for a wide variety of items which had nothing much in common save that they were undoubtedly miscellaneous. At various times it has covered grants for anti-malarial work, the Singapore Town Improvement, or the Penang Waterworks Schemes, the cost of land bought for the Singapore Aerodrome and other government purposes, gifts for Imperial defence, or contributions towards the cost of civil servants' allowances. In 1920 Miscellaneous Services included a gift of $7,186,000 voted by the Legislative Council towards Imperial war funds and a loss of $9,680,000 incurred by Government through selling rice at less than cost to ameliorate the rice famine. In 1925 Miscellaneous Services were $33,590,000; but $30,000,000 of this was caused by the transfer of funds from the general surplus and the excess of the Currency Guarantee Fund to create the new Opium Revenue Reserve Replacement Fund. If this item had been included it would have raised the cost of General Administration to $36,450,000 and the percentage of total expenditure to 63.2 per cent. It has been subtracted both from General Administration and the total revenue, and the percentages have been calculated on this basis, since the transfer of the $30,000,000 was a book-keeping transaction and not an actual expenditure. This reduced the cost of General Administration to $6,450,000 or 23.3 per cent. of the $27,593,959 which was the amount actually spent in 1925. The rising percentages for social services and public works reflect the effort which was being made to overtake arrears, but they do not reveal the full extent of the expansion. Expenditure upon public works (almost all new construction) was five times what it had been in 1918, and that upon Public Health, Education, and Agriculture had increased threefold.

Appropriations continued to mount during the rest of the 'twenties until the increase was checked by the depression in 1932. By 1935 the revenue was recovering and expenditure upon public works and social services again began to increase. The higher percentage for non-effective charges reflects the considerable number of premature retirements on pensions or gratuities. The upward movement continued and in 1937 the amounts spent on public health, agriculture, and education were as much or more than they had been in 1930 although that on public works was two million dollars less. The percentages were less than in 1935 because the total expenditure in 1937 was over seven million dollars more than it had been two years earlier. The unusually high percentage for

General Administration in 1937 was because the Miscellaneous Services amounted to approximately $12,500,000 out of the total of about $16,000,000. The principal items were the $5,369,000 which was the Colony's share in the redemption of the sterling loan and a second gift of $2,000,000 to the Singapore Silver Jubilee Fund of King George V. The first gift of $1,050,000 had been voted by the Legislative Council in 1935 as a permanent memorial to the Jubilee to create a fund for the relief of distress among persons of all races living in the Straits Settlements.

The percentage for General Administration has been about a quarter of the total expenditure save when it has been swollen by additions to the Miscellaneous Services. The cost of the police has been about two-thirds of that incurred under Public Order, the remainder representing the expenditure upon Land Registry, Survey, District Officers, Courts and Prisons. As a separate item in the budget the cost of the police has come next to that of Public Health and for some years has been about $3,000,000. The Public Works Department has been the second largest item in the budget; and the emphasis placed upon new construction has been typical of British colonial policy. Defence has included the local forces ($456,000 in 1937) and the contribution to the Imperial Treasury as the Colony's share in the cost of its defence. As in Hong Kong, periodical controversy has arisen regarding the extent to which the defence of the Colony is a local affair to be met from colonial revenues and how far it is an Imperial interest to be paid for by the United Kingdom. There has been very wide divergence of opinion between the Imperial Treasury and the unofficials of the Straits Settlements. The arrangement made in 1933 was that the annual contribution would be $4,000,000, together with a free gift the annual amount of which would be determined by the unofficial members of the Legislative Council. In practice the latter has been $500,000; and assurances were given that the fixed sum would not be altered without the approval of a majority of the unofficials.

The whole of British Malaya contributed over $100,000,000 towards the cost of Imperial defence during the years which intervened between the Great War and its successor. At times of crisis additional large sums have been voted as gifts by the unofficial members of the Councils or have been given by the Sultans. During the Great War the Federated Malay States gave H.M.S. *Malaya*, a capital ship which is still in commission, and $4,500,000. In 1926 they gave $2,000,000 towards the cost of the Singapore naval base,

and in 1937 they made a gift of $410,000 for the purchase of aircraft. In 1935 the State of Johore gave $500,000 towards the cost of building the base. The deepening crisis in Europe evoked still more emphatic evidence of the loyalty of British Malaya to the Empire. In November, 1938, the unofficial members of the Legislative Council voted a special contribution of $10,000,000 (£1,167,000) towards the cost of Imperial defence, in April, 1939, they voted an additional £1,000,000 and in 1940 another £1,000,000. In May, 1939, the Sultans of the Federated Malay States made a gift of $4,000,000 (£467,000) and in February, 1940, they gave another £1,000,000 towards the cost of the war. Large sums have also been collected for war charities and even the poorest Chinese and Malays have contributed very liberally. British Malaya has a record of loyalty and generosity of which it is rightly proud.

Federated Malay States

The following table gives the revenue and expenditure of the Federated Malay States.[13]

	Revenue	*Expenditure*
1913 . .	$44,332,711	$47,287,581
1918 . .	68,448,862	45,286,910
1919 . .	72,135,075	70,676,961
1920 . .	72,277,146	100,433,471
1921 . .	54,449,568	114,386,546
1922 . .	52,494,110	49,811,007
1923 . .	63,952,132	52,825,572
1924 . .	70,715,407	54,161,234
1925 . .	86,564,279	69,550,382
1926 . .	102,541,400	87,663,747
1927 . .	105,404,458	93,263,915
1928 . .	95,655,560	109,004,240
1929 . .	81,799,584	84,660,975*
1930 . .	65,560,870	82,470,192
1931 . .	52,348,659	62,163,328
1932 . .	43,817,151	53,740,139
1933 . .	47,198,806	50,258,671
1934 . .	58,926,323	47,211,228
1935 . .	62,364,264	51,119,943
1936 . .	68,090,902	52,702,228
1937 . .	80,864,589	71,143,470

* The returns for 1929 and onwards omit the Railway receipts and expenditure.

The principal sources of revenue have been the export duties on tin and rubber, land rents and land sales, and import duties. The export duty on tin is still the largest single source, although the receipts have fallen from 46 per cent. of the total in 1900 to 24 per cent. ($19,488,000) in 1937. Next in importance come import duties, particularly those on tobacco, liquors, petroleum, and textiles. In 1937 they brought in $17,996,000 or 22.3 per cent. The rubber export duty in 1937 produced $4,763,000 or 5.9 per cent., which was a little more than half the amount of a decade earlier.* The receipts from the opium monopoly which averaged $12,000,000 a year during the 'twenties have fallen heavily owing to the government policy of gradually abolishing smoking; and in 1937 the proceeds were only $5,422,000 or 6.7 per cent. The rental from lands and mines brought in $5,602,000 or 6.9 per cent., and the sale of land $471,000 or .6 per cent. The remaining third of the revenue came from a wide variety of sources, of which the most important were excise, licences and other internal revenue (8.1 per cent.), court and other fees (5.7 per cent.), electric light and power ($3,521,000 or 4.4 per cent.), post, telegraphs and telephones (4.2 per cent.), interest on investments and rent of government property (3.7 per cent.), and forests (1.8 per cent.).

The weakness of the revenue is that the receipts from all the principal taxes are seriously affected by the world demand for Malaya's staple products. The amount of the tin and rubber duties is directly dependent upon the quantity exported, and this is governed by the world demand and particularly that of the United States.§ Land revenue is rather more stable even though it is derived largely from the rents paid for tin and rubber properties. The Government has been markedly unwilling to lower rents in times of depression despite the appeal of planters and miners, although the unprecedented severity of the Great Depression led to a temporary reduction. The return from import duties varies considerably, since the volume of imports depends largely upon the prosperity of the miners and rubber growers. Examination of the returns of revenue and exports shows close correspondence between

* From 1909 to 1929 the export duty on tin produced $250,000,000 and that on rubber $76,000,000 (*Proceedings of the Federal Council of the F.M.S., 1930*, p. B. 102).

§ The export duty on tin fell from $13,141,841 in 1918 to $5,766,808 in 1922, rose to $17,704,014 in 1927, decreased to only $3,594,022 in 1932, and with returning prosperity increased to $19,487,585 in 1937. The export duty on rubber fell from $4,443,100 in 1920 to $164,169 in 1921, rose to a maximum of $11,192,715 in 1926, declined to $376,380 in 1932, and recovered to $4,763,184 in 1937 (*C. Reps. Annual Report on the F.M.S., 1937*, p. 156).

them. The fluctuations of the revenue of the Federated Malay States have been as precipitate as the alternate booms and slumps of the tin and rubber industries.*

The financial policy of the Federated Malay States prior to 1914 was to tax lightly, keep down expenditure and accumulate a surplus. The Medical Department was given fairly generous appropriations but decidedly too little was spent on the other social services. Their development was halted and expenditure reduced during the war, and in 1918 most of the social services were in a decidedly backward condition. In that year only 1 per cent. of the expenditure went to the Department of Agriculture, 1.1 per cent. to Forestry and 1.3 per cent. to Education. The two departments upon which there was heavy expenditure both before and during the war were Public Works and Railways, the former accounting for 26.7 per cent. of the total in 1910 and 16.3 per cent. in 1918. Unless the rapid extension of rubber planting and tin mining were to be checked, very large appropriations for road building and maintenance were essential to enable the industries to get their products to the railway. By 1920 1,969 miles of road had been built, nearly half between 1900 and 1910. Railway construction absorbed on the average almost as much of the revenue as public works, the cost of the department in 1918 being 24.5 per cent. of the total expenditure. The first short length of line was completed in 1884 to connect the tin mines at Taiping with Port Weld, and by 1899 150 miles of track had been laid. The rapid rise of the revenue caused by the growth of the tin and rubber industries enabled the Government to spend more on construction. The whole cost was met from surplus revenue, and in 1919 the length of line (first track) was 805 miles and the total mileage 1,131 including sidings. The West coast line had been built from Singapore to Penang, and in 1918 the extension through Kedah was completed which linked the Federated Malay States with the Siamese Railway, giving through service from Singapore to Bangkok. Branch lines linked the tin districts and the ports on the west coast. The Department proposed to spend $146,000,000

* In 1920 the exports rose to the previously unprecedented value of $288,715,698, and the revenue of $72,277,146 was the highest yet known. The following year exports fell to $134,955,549 and the revenue to $54,449,568. The recovery of tin and rubber caused the exports to increase to $445,600,203 in 1926. This was accompanied by a rise in revenue which reached its maximum of $105,404,458 in 1927. During the following years both declined until in 1932 the exports were $87,851,281 and the revenue $43,817,151. With returning prosperity the exports rose to $357,247,152 in 1937 and the revenue to $80,864,589 (*C. Reps. No. 1875, Annual Report of the F.M.S., 1937*, p. 156).

in improving its equipment and building an East coast line through Pahang and Kelantan. The Federated Malay States Government owned the whole railway system of Malaya with the exception of the Johore State Railway which was leased from the Johore Government.[14]

The Government and the public realized that their social services were seriously inadequate and that revenue must be spent lavishly to bring them up to date. "The war has bequeathed us a heavy legacy of things that ought to be done and cannot be done cheaply." Even a deficit would be justified in "wiping off arrears".[15] To contemplate with equanimity the incurring of a deficit was a new departure in Federated Malay States finance although there were a few isolated precedents. The new policy was adopted wholeheartedly and the combined deficits for 1920 and 1921 were $88,093,303, which reduced the revenue surplus from $109,926,017 to $21,832,715 The largest items were railway extension and the construction of new roads and buildings. In 1920 the Public Works Department accounted for 15.5 per cent. of the total expenditure and the Railway for 36.9 per cent. The rice famine of 1920 and 1921 caused an unexpected expense of $20,000,000 and over $10,000,000 were lost through the depreciation of the Government's investments owing to the post-war depression. Salaries also had to be raised to meet the rise in the cost of living, and expenditure upon the social services was increased. Partially to finance the Railway and Public Works programmes the Government of the Straits Settlements in 1921–2 floated a loan of $80,000,000 in London which it reloaned to the Federated Malay States.

The tin and rubber slump led to a strong demand for economy, and in 1922 the Government balanced the budget by reducing expenditure to less than half what it had been in 1921. A large part of the cost of new construction of the Public Works and Railway Departments was provided by the loan, so that work continued on an extensive scale despite the heavy reductions in their appropriations from revenue. The depression was of short duration and by 1923 departmental appropriations were beginning to recover lost ground. During the following years the revenue rose to the unprecedented height of $105,404,458 in 1927 and the surplus grew to $96,228,644. The revenue then began to fall sharply and by 1932 was less than half what it had been in 1928. Expenditure continued on a lavish scale until 1932 and there was an uninterrupted series of deficits until 1934. The surplus was reduced to $49,526,824 of

which only $11,090,187 were liquid; and a considerable part even of this was made up of surplus loan funds which could be applied only to the specific purposes laid down in the loan enactment. Both the Government and the public were carried away by the "lush prosperity" of the 'twenties; and what would have been regarded as extravagance a few years later was looked upon as merely normal spending. What everyone overlooked was that this flood of wealth was based upon the very unstable and unpredictable foundation of the world demand for tin and rubber. So when the Great Depression forced prices below costs of production and cut the revenue to less than half the Government found itself with fixed charges that could only be met by prices which were never likely to recur.*

Railway construction was one of the heaviest items of expenditure during the 'twenties. Capital expenditure varied between two and seven million dollars a year, and was financed from the sterling loan, the revenue surplus and annual appropriations from revenue.§ The East coast line was opened for traffic in 1931 and joined the Siamese State Railway. Until 1927 no special provision was made to cover the cost of depreciation of railway assets, renewals being provided each year out of receipts. A Railway Renewals Fund was established in 1927 and sums from the annual surplus of railway receipts were added to it.[16] The expenditure of the Public Works Department was very heavy and reached its maximum in 1928–1930, when $75,857,943 was spent of which $46,684,240 was on new construction.[17] The building and upkeep of roads and water works were two of the costliest items. The expansion of the Electrical Department was a minor cause of Public Works expenditure. The Government undertook the manufacture of electricity in 1906 primarily for its own needs, but it gradually began to supply the public as well. In the later 'twenties the use of electricity spread rapidly in homes and industry and by 1935 "even the smallest kampongs within reasonable reach of the distribution mains enjoyed

* The Chief Secretary and the unofficial members of the Federal Council were a trifle uneasy in 1928, when they contemplated their mounting expenditure. They considered that the Federation had now 'gone a very long way in overtaking the arrears (of public works and social services) that existed a few years ago,' and should in future live nearer to its income. At the same time they regarded the financial situation as 'pretty satisfactory.' Mr. A. Savage Bailey deplored the 'enormous growth' of annually recurrent expenditure since 1924: salaries and pensions together absorbed about one-third of the Federal revenue. 'There is no doubt that a spirit of extravagance does seem to overcome the Federation when money is plentiful' (*Proceedings of the Federal Council of the F.M.S., 1928*, pp. B 116–B 123).

§ In 1926, $34,896,963 of the surplus were reserved for capital expenditure on the railway and major public works (*C. Reps. No. 1344, F.M.S. Report for 1926*, p. 14).

the benefits of electricity". Between 1926 and 1935 the Government sale of electricity increased by over 1,338 per cent. and divided the field with private enterprise. An interesting phase of the Department's policy was the rent of electric appliances such as fans and cookers to private persons.[18]

Expenditure upon the social services rapidly increased from 1923 onwards, particularly in the Medical Department, which received its maximum appropriation of $6,099,310 in 1930. This was more than a million and a half less than the real expenditure, since it did not include the amounts spent by the Public Works Department upon new buildings or the expenditure by the Sanitary Boards and other agencies upon anti-malarial measures. The correct total was $7,620,933, which meant that the Federated Malay States were spending upon health 9.2 per cent. of the annual expenditure and not 7.3 per cent. as the departmental appropriation alone would seem to indicate.[19] Education was the only social service which had been spared during the retrenchment of the early 'twenties: year by year it slowly but surely forged ahead, and with the boom years the tempo accelerated. Including the departmental appropriation and the Public Works expenditure of $629,331 upon new buildings, it reached a maximum of $4,128,170 in 1930, or 5 per cent. of the expenditure.[20] The expansion of the other social services was far less spectacular, but all of them showed a moderate advance during this period.

The Great Depression compelled the Government to introduce sweeping economies and impose additional taxes. *Per capita* taxation rose from $16.43 in 1932 to $19.83 in 1934. A local loan of $16,000,000 was floated in 1931 to meet capital expenditure of the Railways, Public Works, and Electrical Departments. The annual contributions to the Opium Revenue Replacement Fund ceased in 1931, and the interest received on the investment was credited to revenue instead of being added to the principal of the Fund. On the side of expenditure by far the greatest saving was in the Public Works Department. By 1934 its total expenses were reduced to $4,082,300 and new public works were only $431,363. The cost of new railway construction was drastically cut down after 1931 and reached its minimum of $17,540 in 1934. Operating expenses were more than halved but revenue fell even faster, and for the first time in its history the Department had deficits from 1931 to 1933 which totalled $3,855,988. The receipts from freights fell heavily owing to the slump in tin and rubber, and the same cause

greatly decreased passenger traffic. The competition of buses and motor lorries was also very serious: it had been growing since the middle 'twenties but was intensified by the depression. The road transportation companies even carried goods at a loss rather than go out of business from lack of any return on their investment. The complaints of the Department were very similar to those which railways were making in other parts of the world. The trunk roads frequently paralleled the railway so that they were competitive instead of being complementary. The railway had heavy overhead expenses for the maintenance of its right of way; while apart from the petrol tax the motor companies paid nothing for the upkeep of their right of way, the roads. They captured a considerable part of the passenger and expensive freight traffic, leaving to their rival the bulky freight on which rates were low. The railway tried to meet the situation by lowering freight and passenger rates, establishing its own motor services to collect and deliver goods and cancelling some of the trains. Contributions to the Railway Renewals Fund were suspended from 1931 to 1933. Ordinances were passed in 1933 which permitted the railway to restrict specially reduced rates to shippers who undertook to support it, and to refuse to carry unremunerative freight for those who were sending their more valuable goods by road. [21]

To postpone the construction of new public works was far from sufficient to balance the budget. Further economies were essential, but the difficulty was that by 1930 annually recurrent charges had grown to 78.99 per cent. of the total revenue.[22] In most departments salaries made up the bulk of the expenditure, for one part of the extravagance of the 'twenties had been the over-expansion of personnel. A Retrenchment Commission of official and unofficial members was appointed by the Government and recommended sweeping economies, a large part of which were adopted. Recruitment was suspended and vacancies left unfilled, salaries were lowered, and, as the depression grew worse, more and more of the staff were retired on pensions. Between 1930 and 1933 the personnel was reduced 17 per cent. in number and 26 per cent. in cost. Medical and health expenditure fell to $4,126,799 in 1934, including the amounts spent by the Medical and Public Works Departments and the Sanitary Boards.[23] The expenditure upon education including the cost of new buildings was reduced to $2,679,247 in 1934. The appropriations of the other social service departments had never been large and the reductions were correspondingly less. The ex-

penditure of the Department of Agriculture had fluctuated around three quarters of a million dollars, but it was reduced to $667,567 in 1934. Only a few thousands could be lopped from the budget of the tiny Veterinary Department, but its expenditure was decreased to $113,985 in 1934. The Co-operative Societies Department fell from $202,571 in 1930 to $124,710 in 1934.

The recovery of the revenue began in 1934 and departmental expenses gradually increased although on a less lavish scale than in pre-depression days. In 1937 the cost of the Medical Department was $4,155,579. Adding the amounts spent by the Public Works Department and on anti-malarial measures the total was $4,950,600 or 6.9 per cent. of the whole expenditure of the Federated Malay States.[24] The cost of the Department of Education in 1937 was $3,545,268, and adding the amount spent by Public Works the total was $3,882,244 or 5.4 per cent. of the whole expenditure.[25] The expenditure of the Department of Agriculture in 1937 was $756,480, and that of the Co-operative Societies Department $126,430.[26] The Irrigation Department ever since its establishment in 1932 has had the largest expenditure of any of the departments concerned with Malay agriculture owing to the cost of its operations. In 1937 its expenditure was $1,341,196 of which $163,532 was from the local loan of 1931 and the remainder from revenue.[27] The total cost of these three departments, which were peculiarly concerned with Malay agricultural welfare, was $2,224,106 or 3.1 per cent. of the whole expenditure of the Federated Malay States. Public Works expenditure also increased after 1934 and in 1937 amounted to $10,340,366, of which practically $4,000,000 was for new construction.[28]

Railway finances recovered as economic conditions improved and from 1934 onwards there was an annual surplus. It was added to the Renewals Fund, which amounted to $16,233,249 at the end of 1937. Little new construction has been undertaken since 1931, and capital expenditure in 1937 was less than a quarter of a million dollars. The total cost of construction of the Federated Malay State Railways to that date was $227,600,693 of which only $50,038,652 came from loan funds. Another $63,383,084 was provided from railway receipts and the remaining $114,178,957 from the revenue of the Federated Malay States. The railway made a net contribution of $64,758,520 to the general revenue of the Federation since 1885. The length of the line, counting the first track only was 1,068 miles.[29] It would be impossible to estimate how large a part of the private

wealth and public revenue of Malaya has come from the opening up of the country by the railway. That over three-quarters of the cost was provided from revenue is a remarkable testimony to the prosperity which the dependency has enjoyed. There must be few railways which have earned a large and often a very large surplus in forty-nine years out of fifty-two and where the total deficit has been only $3,855,988. The railway and roads together formed a system of communications which in quality surpassed those of any other European dependency in Malaysia and the Philippines. There were two trunk roads, one on the west and the other on the east side of the main range of mountains, with feeder roads branching off from them and four transverse roads connecting them. To a considerable extent steel and concrete bridges had replaced the original wooden structures. In 1937 the length of roads in the Federated Malay States was 4,558 miles, of which 2,939 miles were metalled and gravelled and the remainder unmetalled roads and bridle paths. Of the metalled roads 2,183 miles were bituminously treated. *[30]

The debt charges were reduced in 1935–6 by the redemption of the 1921–2 Straits Settlements sterling loan of $80,000,000, part of which bore interest at 4½ per cent. and the remainder at 6 per cent. The Government decided to take advantage of the lower rate of interest and issued two Federated Malay States conversion loans bearing interest at 3 per cent. and with an aggregate value of $49,285,715. The proceeds together with the sinking funds paid off the original loan. This reduced the public debt by practically $30,000,000, the total amount in 1937 being $65,285,715. The annual charge on the revenue for interest and sinking funds was $3,617,574. By 1937 the general revenue surplus had grown to $85,880,937, and excluding amounts allocated to specific purposes the net liquid surplus was $58,023,390, or almost four times what it had been in 1930. The Opium Revenue Replacement Fund in 1937 stood at $30,054,561, and since 1936 the interest earned has again been added to the principal. A Revenue Equalization Fund was created in 1937 which was known by its critics as the Next-Rainy-Day Fund. The nucleus was a contribution of $15,000,000 from revenue, and additions will be made until the fund reaches $35,000,000. The general surplus has been used to finance heavy capital expenditure or such emergencies as the rice famine; but the new fund will be kept separate from all other surpluses and drawn

* The length of roads in the Straits Settlements in 1937 was 1,165 miles, of which 1,071 miles were metalled (*C. Reps. No. 1863, Annual Report on the S.S., 1937*, p. 52).

upon only in the event of abnormal economic conditions. The revenue of the Federated Malay States has been subject to abrupt and extreme fluctuations, and the purpose of the special fund is to equalize matters and avoid, e.g. the sudden and drastic economies necessitated by the Great Depression.[31]

Some critics of the policy demanded that instead of using the annual surpluses to create the fund the Government should reduce taxation; while others called for an extensive programme of new public works. The Government refused to be diverted from its policy: its expenditure upon public works was moderate and it refused to make any changes of importance in taxation. A few taxes on imported food which had been imposed during the depression were abolished or reduced, the most important being those on sugar and rice. The amount of revenue received had been small, (only about $3,000,000 a year), but the burden had fallen most heavily upon the poorest section of the Asiatic population.[32] The Government rejected the plea that the annual quit rent on rubber land should be lowered since it had been fixed in the days when the price for rubber was very much higher than it was ever likely to be again. The case for the petitioners was somewhat weakened by their ability to pay dividends in spite of the rent. Another proposal was that the export taxes on tin and rubber should be abolished since they were a handicap upon Malayan producers who had to sell at the world price, and were also discriminatory in that they were paid only by planters and miners. Increased import duties and an income tax were suggested to compensate for the heavy loss of revenue. These suggestions provoked spirited rejoinders from Malaya that the proposals would increase the dividends of shareholders at the expense of their employees and the general public, who would all have to pay the import duties. The widespread and successful evasions of the income tax in the Colony made a repetition of the experiment inadvisable.[33]

The export taxes are borne by the Malayan producers since the world prices of tin and rubber are not determined by their exports but are fixed independently of the prices at which they must sell to make a profit. On the other hand the rate is a sliding one: it lessens as the price falls and grows heavier as it increases and the producer is better able to support it. It is impossible to determine exactly how far the export taxes would hamper Malayan producers in competition with the Dutch if international restriction were abolished and free competition resumed. Detailed information could not be

obtained but it would appear that costs of production were roughly equal. Land rents were higher in Malaya but taxes were lower, and costs of labour and estate health services were approximately the same. One is therefore inclined to doubt the argument that the export taxes would cripple Malayan planters and miners. The attitude of the Government is that it has a right to a reasonable share of the wealth produced in Malaya. The country has a very great need of medical, agricultural and other social services and of means of communications. The most convenient and probably the most equitable method of raising the revenue is by the export taxes. They are really a substitute for income tax, are lower than the latter is in most European countries, and are less easy to evade.[34] The case for an export tax on tin is particularly strong since it is merely a form of royalty on a wasting asset while rubber can be grown for centuries. In the long run the legacy of tin-mining will be huge excavations, silting, and a Drainage and Irrigation Department.

The following table gives the percentages of expenditure in the Federated Malay States on the different services. The headings cover the same items as in the tables for Hong Kong and the Straits Settlements; and the same observation applies that the expenditures given for the social services on which the percentages have been calculated are frequently less than the actual amounts.*

* The expenditures in 1925 and 1935 were.—

	1925 $	1935 $
Non-effective Charges	9,579,029	14,548,726
General Administration	21,591,811	10,258,140
Public Order	5,479,865	4,961,703
Public Health	3,912,588	3,628,167
Agriculture and Other Services	1,499,631	2,905,087
Education	2,125,705	2,666,744
Public Works and Land Purchases	7,256,500	5,750,734
Government Undertakings	3,101,280	5,083,895
Defence	1,030,915	1,316,731
Railways	13,973,036	—
Total	$69,550,382	$51,119,943

The other Departments included with Agriculture are Co-operative Societies, Fisheries, Veterinary, Irrigation, Forests, and Geological. Land purchase is included with Public Works, and under Government Undertakings come Posts and Telegraphs, the Electrical Department, and Customs and Excise (which includes the Opium Monopoly). In 1935 railway receipts and expenditure were entered in a separate budget and the surplus added to the Renewals Fund, whereas in the earlier years they formed part of the general budget. The difficulty of determining the exact expenditure of each department is increased by the difference between the amounts given in the various Government Reports. The medical expenditure for 1935 is a typical example. The percentage in the text is calculated on the figure 3,628,167, given in the *Report by the Auditor S.S. and F.M.S. on Revenue and Expenditure of the F.M.S. for 1935*, p. 27. The Department's own figure is 3,903,997 (*F.M.S. Annual Report of the Medical Department for 1935*, p. 2).

	Non-Effective Charges	*General Administration*	*Public Order*	*Public Health*	*Agriculture and Other Services*	*Education*	*Public Works*	*Undertakings of Government*	*Defence*	*Railways*
	%	%	%	%	%	%	%	%	%	%
1925	13.8	31.0	7.8	5.6	2.1	3.0	10.4	4.4	1.4	20.0
1930	12.7	20.4	8.3	7.3	3.5	3.9	22.7	10.2	1.7	8.9
1935	28.4	20.0	9.7	7.1	5.6	5.2	11.2	9.9	2.5	—

Debt charges are much heavier than in the Straits Settlements because of the loans for public works. They accounted for roughly three-quarters of the Non-Effective Charges in 1925 and three-fifths in 1930, the remainder being the cost of pensions. The startling increase in the Non-Effective Charges for 1935 was caused only in small part by the $16,000,000 loan of 1931. The principal reason was the growth of pensions from $2,307,346 in 1925 to $5,960,005 in 1935. This reflected the expansion of the Government services and the premature retirement of so many officials owing to the depression. In 1935 debt charges accounted for 16.8 per cent. and pensions 11.6 per cent. of the total expenditure. The unusually high percentage for General Administration in 1925 was due to the inclusion under Miscellaneous Services of $10,000,000 (14.3 per cent. of the total expenditure) which was transferred from the annual revenue to form the nucleus of the Opium Revenue Reserve Fund. The rising percentages for Public Health, Education, and Agriculture and Other Services show the increasing attention paid to them. The sharp rise in the last of these to 5.6 per cent. in 1935 was largely due to the expenditure of $1,249,734, nearly half the total, by the new Drainage and Irrigation Department. Public Works and Railway percentages together amount to over 30 per cent. and illustrate the very important place which they have always held in the Government's policy. About a quarter of the Railway expenditure in 1925 was for new construction and about a third in 1930, the remainder being costs of operation. The marked rise in the percentage for for Undertakings of Government after 1925 was due to the expansion of the Electrical and the Posts and Telegraphs Departments. More fortunate than the Colony, the Federated Malay States have never felt it necessary to spend much on local protection, although they have been most generous in their gifts towards the cost of Imperial defence.[35]

Unfederated Malay States

The revenue of *Johore* is larger than that of the other Un-

federated Malay States put together owing to the much greater development of its natural resources. Rubber provides the bulk of the money either directly in the form of export duty and land rents or indirectly through customs and excise. The rapid extension of its cultivation was reflected in the growth of the revenue from $4,348,642 in 1912 to $11,838,976 in 1920. The amount fell temporarily during the rubber slump but soon recovered and rose to its maximum of $20,698,077 in 1928. A very heavy fall occurred during the depression, the lowest point being reached with $11,518,363 in 1932. Recovery soon began and by 1937 the revenue had risen to $20,197,000. Of this, 37.7 per cent. came from customs, excise, and marine. The principal items were import duties on tobacco, liquors, and petroleum, export duties on rubber, copra, tin and iron ore, and the opium monopoly. Rents from agricultural and mining lands, land sales, and a small sum from the sale of forest produce contributed 22.7 per cent. Licences provided 19.6 per cent., interest on investments 7.9 per cent., and the remainder came from municipal taxation (principally electricity and water rates and house assessment), posts and telegraphs, and other miscellaneous sources. Johore has no public debt, and the surplus of assets over liabilities, including the Opium Revenue Replacement Fund of $15,406,000, was $43,663,000. The financial policy has been more conservative than in the Federated Malay States. While there has been considerable development of public works and social services, expansion was on a more moderate scale, and there was usually a small surplus which was added to the reserve fund. In 1937 public works were 37.1 per cent. of the total expenditure, social services about 25 per cent. and pensions 3.4 per cent.[36]

The revenue of *Kedah* has increased remarkably since it came under British control, and in A.H.1,356 (14th March, 1937, to 2nd March, 1938) it was $7,544,682. Customs duties provided 47.31 per cent., the principal items being the same as in Johore, save that the list of dutiable articles was longer. Land rent and land sales came second with 13.23 per cent., followed by the opium monopoly with 11.28 per cent., interest on investments (6.78 per cent.) and municipal taxation (6.53 per cent.). There was no State debt and the surplus of assets over liabilities was $7,737,435. In addition, $6,273,161 were invested in the Opium Revenue Reserve Fund. In 1925 opium produced 30 per cent. of the revenue, and its lessened importance shows the progress which has been made in carrying out the Government's international obligations. Expenditure in

1937-8 was $6,625,653 and was apportioned as follows, the various headings covering the same items as similar tables already given.* The most notable feature is the typical Malayan emphasis upon Public Works and Public Health.[37]

Pensions	*General Administration*	*Public Order*	*Public Health*	*Agriculture and Other Services*	*Education*	*Public Works*	*Undertakings of Government*	*Volunteer Force*
5.9%	25.3%	15.0%	10.5%	2.0%	7.5%	26.1%	6.3%	.8%

The little State of *Perlis* has a population of 49,296, and the principal industry is rice growing, with a small amount of rubber cultivation and tin mining. In A.H.1,356 (14th March, 1937–2nd March, 1938) the revenue was $728,531 and the expenditure $634,483, or almost five times as much as when Perlis came under British control. Normally there has been a small surplus, and the management of the State's tiny budget has been a miniature copy of the fiscal orthodoxy which usually characterizes British colonial finance. Perlis had a public debt of $100,000, having borrowed from the Straits Settlements to build a road. The State gradually accumulated a surplus of suitably microscopic size which amounted in 1937–8 to $635,993, and had also an Opium Revenue Replacement Fund of $274,781. The sources of revenue were similar to those of Kedah, import duties providing 37.6 per cent., export duties 18.2 per cent., the opium monopoly 21.6 per cent., land rents 9.9 per cent., and interest on investments 3.1 per cent. The heads of expenditure in 1937–8 were as follows:—[38]

Non-Effective Charges	*General Administration*	*Public Order*	*Public Health*	*Co-operative Societies*	*Education*	*Public Works*	*Customs & Monopolies*
4.3%	21.9%	21.1%	5.5%	1.3%	6.6%	30.5%	8.4%

The principal occupation in *Kelantan* is rice growing, although the most valuable export is rubber. Over 91 per cent. of the population are Malay smallholders and fishermen, and there is little of the European and Chinese economic development which provide the revenue of Johore. In 1937 the revenue of Kelantan reached the

* With Agriculture are included the Departments of Co-operative Societies, Forests, and Veterinary.

exceptionally high figure of $3,209,000 and its expenditure was $2,757,000. Of this, 58 per cent. came from import duties and the opium monopoly, while the export duties on rubber, tin, and manganese were not very lucrative since the exports were small. Land rents and a small income from the sale of forest produce brought another 20.5 per cent., licences, stamp duties and court fees 10 per cent., and municipal taxation 7 per cent. The latter came from an assessment based on the rental value of property, licences, and water and electric rates. Electricity was supplied by Government in the two towns of Kota Bharu and Kuala Krai, and the demand was rapidly increasing. Kelantan had a debt of $5,182,734 in 1937, most of it borrowed from the Straits Settlements and the Federated Malay States to settle the claims of the Duff Development Company. The State had a small surplus of $1,915,000 and an Opium Revenue Replacement Fund of $328,000. The form in which the returns of expenditure were given make it impossible to ascertain how much was spent on the different departments. According to an analysis of the estimates for 1936, debt charges were 7.24 per cent., pensions and allowances 11.95 per cent., administration 46.17 per cent., public works 14.11 per cent., social services 20.11 per cent., and defence .42 per cent.[39]

Trengganu provides a typical example of the financial handicap of a tropical colony in its early stages of development.[40] It has an area of 5,050 square miles and a sparse population of 179,789, of whom over 91 per cent. are Malay fishermen and cultivators. The principal crop is rice, although a small amount of rubber is grown, chiefly by the few thousand Chinese and on the two large European estates. The State has rich iron mines and also exports a small amount of tin and manganese. There is a good deal of malaria and the other typical Malayan diseases, and a correspondingly large need of medical and health services. There are only 345 miles of road, and there is much scope for Departments of Agriculture and of Irrigation and Drainage. In some of the valleys the rice crop is periodically destroyed by floods. The miniature Education Department is in charge of the State Treasurer assisted by two Malay Inspectors. The vernacular schools can accommodate only 20 per cent. of the Malay boys of school age, the one Government English school "cannot be said to be very satisfactory", and the few private English schools "provide English education of a sort". Almost every department can point out many highly desirable ways of spending money; and the small staff of Government officials are well

aware of the needs of Trengganu and very keen to improve conditions. The great difficulty is lack of money: the revenue in 1937 was only $2,660,399, and this was the largest amount collected in the history of the State.

Sources of taxation are few and not very lucrative, by far the most important being the customs duties and the opium monopoly which in 1937 provided 77.5 per cent. of the total. Import duties are similar to those in the other Malay States but are more comprehensive and include a duty on rice. The principal export duties are on rubber, tin-ore and iron-ore, agricultural products, fish, and livestock. The Japanese iron mines are the largest single source of revenue: in 1937 the export duty on the ore was about 17 per cent. of the total. Land rents and a small amount from forests and mines provided another 13 per cent.; and the remainder came from licences, fees of court, posts and telegraphs, and municipal taxes. Despite its unfavourable circumstances Trengganu has managed to accumulate a reserve fund of $831,400. It has also a debt of $3,000,000, the balance due on a series of loans made by the Straits Settlements for development between 1923 and 1932. The greater part of the money was spent on building the State's only land outlet, the road into Kelantan, and on resuming the concessions made by a former Sultan in the days prior to British protection. He alienated large tracts and their revenues to his relatives and favourites, and it is only recently that the Government has at last been able to redeem its rights of administration and taxation. For many years these grants were a heavy burden, and it is not surprising that the budgets of Trengganu have had eleven deficits in twenty-seven years.

Under these circumstances the expenditure upon social services is perforce strictly limited. In 1937 debt charges and pensions took 29.7 per cent. ($786,500), General Administration 22.5 per cent. ($596,700), Public Order 16.1 per cent. ($426,000), and the Customs and Posts and Telegraphs Departments (which produced a net revenue) 5.7 per cent. This left only 25.7 per cent. for public works and social services, which was divided in the proportions of 18.3 per cent. ($484,700) for Public Works, 4.2 per cent. ($112,500) for the Medical, 2.2 per cent. ($59,500) for the Education, and 1 per cent. ($27,900) for the Forestry Department. To allot 68.3 per cent. of the expenditure to General Administration, Public Order, and Non-Effective Charges may seem out of all proportion if percentages only are considered. The number of government officers employed was as few as was feasible, and the actual amount was only $1,809,200.

What makes it seem so large was that the total expenditure was only $2,645,686. Good administration, courts and police are so fundamental to government and progress that there is a strong tendency to take them for granted, and forget that they are the essential foundation for developing prosperity and the social services. It is only when they break down as they did in China, after the fall of the Manchu dynasty in 1911, that the consequences are revealed. Trengganu in 1909 was a case in point: administration might more accurately have been called spoliation, and the best commentary on law and order was that the *kris* was as much a part of a man's dress as the *sarong*. "There were no written laws, no courts, and no police. All manner of crime was rampant, the peasantry was mercilessly down-trodden, but the land was full of holy men and the cries of the miserable were drowned in the noise of ostentatious prayer." [41] The financial result was a revenue of $191,418 in 1911; and a rough indication of the effect of British rule is given by its fourteenfold increase by 1937. The consequence of security and justice has been a remarkable growth in the taxable capacity of Trengganu; and save for borrowing, which implies repaying, there was no other way to raise the money for social services. The result in 1937 was $684,600 available for those services.

The need was far greater than the Treasury could meet and the allocation of funds had to be determined by the Government's judgment as to what was most essential. The strong tendency in British colonial administration has been to emphasize public works, whereas the American policy in the Philippines was to stress education. Roads and bridges increased the cultivator's prosperity by enabling him to produce for a wider market. The lack of them restricted him to his own locality, since his foodstuffs and raw materials were of great bulk in proportion to their value and could only be sold at a profit if the costs of transport were low. Trengganu had especial need of a road to the railway in Kelantan as an outlet for its trade, since its sea communications were uncertain during the north-east monsoon from November to April. A strong case could be made for spending less on public works and more on medical services; but when these two prime necessities were met very little remained for other purposes. A beginning has been made with education, irrigation, agricultural improvement, and forestry, but less than $100,000 have been available.

The duty on iron ore from the Japanese mines was $429,033 in 1937, or nearly two-thirds of the expenditure on public works and

social services. Most of the remaining third came from the other mineral exports and the two European rubber estates. This raises a problem which recurs in practically every tropical dependency in its early stage of development. With a few exceptions the prevailing source of wealth is a backward agriculture which provides subsistence but little margin for taxation. It cannot support the expensive social services of the Western industrialized states, and yet the need for them is almost unlimited. One alternative is to borrow little, since this burdens the revenue and make the most of the small funds available. Trengganu on the whole has followed this method and the result has been slow progress and inadequate social services. On the other hand the Government and the people have remained Malay, foreign economic interests and immigration have been negligible, and neither the rulers nor their British Advisers have any wish to change. They do not want an influx of European capital and Chinese settlers because they fear that the distinctively Malay character of Trengganu would be lost. Local patriotism is so strong that the Malays of Trengganu dislike the appointment to office of a Malay from another State.

The alternative to the Trengganu policy is to encourage the investment of foreign capital. The result is a rapid expansion of revenue and social services owing to the taxes levied on the new economic interests. From the beginning the Federated Malay States followed this policy and encouraged the immigration of Chinese and the investment of Chinese and European capital. The consequences are seen in the phenomenal rise in the revenue and the surpluses, which, like the widow's cruse of oil, replenish themselves however much they are depleted. Translated into material achievements there are the very fine public works, the Medical and Health Department which has made the Federation a show-colony, and all the other social services. The compensating drawback to the encouragement of foreign development is that a conflict of interests is reasonably certain to occur between it and the people of the country. So far British Malaya has been almost uniquely free from this normal evolution; but of recent years there have been signs that a change is beginning to take place. Broadly speaking, the policies of Trengganu and the Federation are typical of modern tropical colonization: in central Africa, for example, Kenya resembles the Federated Malay States while Uganda and Nigeria are more nearly similar to Trengganu.

Both policies are based on the principle that a dependency can

have only those services which it is able to maintain out of its own revenues and that it cannot expect subsidies from the United Kingdom. Unavoidable deficits have been paid by the Imperial Treasury; but the strict control which it exercised over colonial finances was intended to prevent their occurrence. The creation of the Colonial Development Fund in 1929 enabled the dependencies to obtain help by grant or loan in financing the capital cost of plans for developing agriculture and industry. About £5,000,000 have been spent, but the Fund could not make grants in aid of recurrent expenditure, nor could it assist schemes which would not promote material betterment, such as the expansion of non-technical education. It acted in accordance with the old principle that a dependency should have only those services which it could afford to keep up out of its own revenue. An entirely new policy was announced in 1940 under which proposals submitted by colonial governments will be aided up to a maximum of £5,000,000 a year for the next ten years. The former limitations have been abolished, and assistance will now be given not only for schemes involving capital expenditure necessary for colonial development in the widest sense, but also for helping to meet recurrent expenditure on such services as agriculture, education, health, and housing. The first emphasis will be on the improvement of the economic position of the dependencies, since it is by development of their resources that they will be able to obtain the revenue necessary to support social services. An additional £500,000 a year will be available to assist research.[42] The Government's statement of policy does not make it clear how far the financial aid will be given rather than lent, though the implication seems to be that the former method will be used where necessary. This is probably the only way in which some of the most desirable reforms such as slum clearance can be carried out, since they are unlikely to make a sufficient return to cover interest and sinking fund. Many of the Chinese tenants in Hong Kong for example cannot afford to pay a rent which would cover the cost of improved housing. A wealthy dependency might provide the money out of general revenue and quiet the conscience of the Auditor by charging it to Charitable Allowances. A colony like Hong Kong with a small revenue can only abolish its slums at the expense of the taxpayer in Great Britain. One is inclined to wonder how far he will be able to shoulder this new burden in addition to the costs of the present war.

CHAPTER IV

THE TRADE OF MALAYA

Singapore and Penang resemble Hong Kong in that the basis of their prosperity is their entrepôt trade. Industry apart from tin-smelting is only of minor importance, and the Colony has grown wealthy because it is the natural trade centre for the surrounding countries. The principal difference is that Hong Kong is entirely dependent upon its foreign trade while the Straits Settlements have a hinterland in the Malay States which accounts for an increasing proportion of the imports and exports. Singapore would still be an important sea-port if it were the entrepôt for Malaya alone; but Hong Kong would be ruined if it were cut off from China. Penang, the first of the three Settlements to come under British rule, was founded in 1786; but it failed to fulfil the expectation of the East India Company that it would attract to itself a large part of the trade of the Dutch Colonies. The port lay on the western edge of the East Indian Islands, and moreover the Straits of Malacca swarmed with pirates who inflicted heavy losses upon the small and poorly armed boats of the native traders. The majority therefore stopped at Riau or Malacca, and only a comparatively small number made the long and dangerous voyage to Penang. Apart from them and a small but important trade with Siam and China, the bulk of Penang's commerce was with Burma and the Malay states of Northern Sumatra and the west coast of the Malay Peninsula. Malacca, the traditional trade centre of the Straits, suffered severely because the establishment of Penang deprived it of its trade to the westward. Furthermore, Malacca's harbour was rapidly silting, and the foundation of Singapore in 1819 120 miles to the south east deprived it of its commerce with the Archipelago and with China. Thenceforward its trade was confined to the adjacent states of the Malay Peninsula and Sumatra, and Malacca became little more than a depot where the produce of the neighbouring countries was collected for transmission to Penang and above all Singapore. To some extent Penang also became a commercial dependency of Singapore: a large part of its imports from Great Britain and India did not come to it directly but were transshipped from there. Much also of the

Straits produce which it collected was not sent directly to its destination but was forwarded to Singapore. Singapore from the date of its establishment in 1819 rose rapidly to the predominant position which it has held ever since. By about 1822 it had already captured the bulk of Penang's trade except with the adjacent countries of Burma, Northern Sumatra and the west coast of the Malay Peninsula. Singapore was the centre of British trade in the area which extended from Sumatra to New Guinea and from Java to China. It attracted to itself a large part of the commerce of the Netherlands East Indies, it had a very important trade with China, and it also had valuable markets in Siam, Indo-China, and the Philippines. During the greater part of the nineteenth century its trade with the undeveloped Malay Peninsula was insignificant and Singapore relied entirely upon its foreign entrepôt trade. The principal imports from Great Britain were cotton and woollen piece goods, iron, and other manufactures. India supplied opium, one of the most important exports, particularly for the China trade, and textiles. Singapore and Penang redistributed British and Indian manufactures throughout South Eastern Asia and collected its products for shipment to Europe. The East Indian Islands and the Malay Peninsula provided Straits produce, e.g. pepper and other spices, gambier, tin, rattans, beeswax, damar and other gums, bêche-de-mer and birds nests.* From China came tea, silks, and cassia in exchange for opium,

* Straits produce is a technical trade term which 'includes all agricultural or mineral products grown or produced in the Malayan Archipelago and brought to British Malayan ports for the purpose of grading bulking, or otherwise preparing for shipment to consuming countries.' The meaning has somewhat altered in the course of time since some of the principal commodities of a century ago have sunk to a minor position, while new ones have arisen. Rattan, coffee, and gambier, which is used in tanning, are no longer of importance. Gums are still collected in the jungles for export, jelutong for example being sent to the United States, since it conveys to chewing gum its everlasting properties. Gutta percha is used for insulating submarine and underground cables. The cultivation of spices in Malaya has almost disappeared, but the re-export of East Indian pepper to Europe, Brazil, and Hong Kong is still a valuable minor branch of commerce. Remembering the history of the spice trade there is something ironical in the reflection that cloves from Zanzibar are re-exported from Singapore to the Netherlands East Indies. Areca or betel nuts are still sent to India in large quantities. A century ago the return cargo was often opium; to-day it is more likely to be gunny sacks for the rice and sugar of Indo-China, Siam, and the Dutch colonies. Tapioca and sago flour is now used for sizing in piece goods. Tin is one of the original components of Straits produce which has grown immeasurably in importance, and new minerals have appeared in oil from Sumatra and Borneo, and iron ore which is exported to Japan. Rubber is by far the most valuable form of Straits produce, and also one of the most recent. There is a lesser but growing export of palm and coco-nut oil, copra and canned pineapples. Since the Great War Malayan hardwoods have been sold in London for furniture and inlays. Another and valuable form of Straits produce is dried and salted fish from Siam and Indo-China. It is redried, sorted, and cleaned in Singapore and re-exported to Java, Sumatra, and Rangoon. In return, sugar is brought back from Java and rice from Burma, a greatly decreased quantity of which is still re-exported to Sumatra (*Report . . . on the Trade of the Colony, 1933–34*, i, 42–6).

Straits produce and British textiles. Siam and Indo-China supplied sugar, rice, ivory, and salt.[1]

The trade area centering in the Straits Settlements has gradually diminished. The first loss was the China trade which was transferred to Hong Kong after its establishment in 1842. A large part of the trade of Indo-China was cut off after the French conquest as the result of the heavy duties imposed upon foreign imports and the establishment of direct services between the colony and France. In the Netherlands East Indies Macassar was made a free port in 1847, and so diverted to itself much of the trade from Celebes and adjacent islands. Additional areas were lost through the development of regular steamship services by the Koninklijke Paketvaart Maatschappij and other Dutch companies between Java and the Outer Islands, and between the principal ports and their overseas markets. An illustration was the import and export trade of the east coast of Sumatra, which for many years was conducted through Singapore and especially Penang. The opening of the port of Belawan as a regular port of call diverted much of this trade, including the transshipment of the rice which was formerly sent from Rangoon by way of Penang. Another example was the trade between Java and India which was carried on through Singapore until the establishment of direct steamship services. Yet another instance was the export of sharks' fins, birds' nests and similar edibles collected in the Dutch East Indies. They are now graded and prepared locally instead of being sent to Singapore as formerly to be made ready for the Chinese market. The effect of the establishment of direct steamship services has been greatly reinforced by the growing practice of shipment on through bills of lading. These enable the merchant in a large way of business or producer in an outport to obtain his overseas imports or sell his produce with merely trans-shipment at Singapore. The former practice was to order manufactures from an importer in Singapore and sell the produce to the same source. As a result these firms obtained in the aggregate considerable profits from their rôle of middlemen. With the development of through bills of lading the only profit which accrues to Singapore from the transshipment is a certain amount of employment for stevedores and warehouse keepers. The decline in exports of manufactures from Singapore to Java is partially attributable to the growing tendency of importers there with reliable financial standing to order directly from overseas instead of through one of the firms in Singapore. A similar development in Malaya itself has been the tendency of mer-

chants in the Federated Malay States to import their requirements directly by way of Port Swettenham instead of drawing on the Colony's stocks. Since 1933 the exports of the Straits Settlements have been still further curtailed by the imposition of quotas in the Netherlands East Indies. A further loss of trade has occurred because native "wet" rubber from the Dutch colonies, which was formerly sent to Singapore to be prepared for the overseas market, is now milled locally. The tin ore which until a few years ago was sent to Singapore to be smelted has now been diverted to a smelter in Holland.[2]

Despite the shrinkage of the vast original trade area Singapore remains the collecting and distributing centre for the Malay Peninsula and a large part of the Dutch colonies, particularly Central Sumatra and Borneo. It retains an important trade with Java, Siam, and Indo-China. Penang continues to be the focal point for much of the trade on both the east and west coasts of Northern Sumatra, the Malay States on the west coast and Southern Siam. The expansion in the volume and value of trade with these territories brought about by such developments as the immense extension of rubber cultivation in Sumatra and the Malay Peninsula has more than compensated for the contraction in area. Singapore also has a good harbour and is on the principal trade route from Europe to the Far East. Equally fundamental was the policy of free trade established at Singapore by Sir Stamford Raffles in 1819, and at Penang in 1827. The effect was all the more striking because at that date every Dutch port was burdened with heavy dues and vexatious regulations. Sir Stamford Raffles foresaw that a port where no customs duties were levied and harbour-regulations were kept to a minimum would prove an irresistible attraction, and would defeat the Dutch efforts to establish a monopoly of the trade of the Archipelago. His policy was justified from its very inception; and any attempt to interfere with the freedom of the port has always been the surest way to arouse the mercantile community of Singapore. Other factors have been the tendency of trade to continue to move in its long-established channels, combined with the attraction of Singapore as a produce market offering high prices, skilful grading and preparation of goods for market, excellent shipping and commercial facilities, and a large assortment of manufactured commodities to take in exchange.

The improvement of port facilities has had so much to do with the maintenance of Singapore's position that no account of Malaya's

trade would be complete if it omitted the Singapore Harbour Board. The harbour is practically land-locked by islands, the total area of the Inner and Outer Harbours and the Western Anchorage being 36.20 square miles. The Inner Harbour is also protected by a mole, and the approaches to the anchorages are safeguarded by a very complete system of government signal stations, lights and buoys, as well as a government observatory. Originally trade centred around the mouth of the Singapore River, and the quays along both its banks still form the headquarters of the dealers in Straits produce. The landing places were provided by Government free of charge to those who made use of them. Wharves were also built by two private companies which amalgamated in 1899; but their holdings were expropriated in 1905 by the Straits Settlements Government. The facilities had become inadequate and the Government determined to take over and develop them in Imperial interests. Financial and administrative management was entrusted to a Board of nine members appointed by the Governor and representing various interests such as shipping, merchants, and the Chinese community. The Board was to appoint its own officers, fix their salaries, and frame its regulations and charges subject to the approval of the Governor in Council. A despatch from the Secretary of State for the Colonies laid down the principles that have ever since governed the conduct of the Singapore Harbour Board and its relations with the Government. "The management of the Company's business would be conducted by a Board on strictly commercial principles, and every person employed by the Board, from the General Manager downwards, would stand to the Board in the ordinary business relations of employed to employer. The Board would be appointed by the Governor for a fixed period, its members retiring in rotation, but his interference in the ordinary administration of the Port management would be neither necessary nor desirable." In other words the Government would supervise the policy of the Board in the general interests of trade but would not interfere with its management. The result of this combination of public and private control has been economic and financial success.

The first work of the Board was to substitute permanent concrete for the old wooden wharves and increase their area, and to reorganize and improve the dockyards. Singapore entered the war period well-equipped and was able to meet all the heavy demands made upon it during the ensuing years. Further extensions of the

wharves became necessary, but while the plans submitted were approved in 1929, action was postponed for several years owing to the depressed condition of trade. When the 3,300 feet now under construction are completed the present 11,077 feet will be increased to nearly three miles of wharves with full facilities for loading cargo, and about 1,500,000 square feet of warehouse accommodation. The present storage capacity of the Board's own warehouses is about 260,000 tons of cargo and 150,000 tons of coal for bunkering, in addition to which there are the numerous warehouses owned by various private firms. To supply oil-burning ships the Board in 1926 leased a tract of land to the Asiatic Petroleum Company for the erection of a pumping station and storage tanks which are connected with most of the wharves by pipe lines. The Board has also built tanks for the handling of latex and of palm oil in bulk, and has leased land to a private company for a cold storage warehouse. The whole of the Board's premises are connected with the Federated Malay States Railway. Ocean liners dock at the wharves, but many, particularly of the smaller craft, anchor in the harbour to discharge cargo. The Board therefore maintains a fleet of cargo lighters, the shipowners having the option of employing them or the cheaper but less reliable native lighters. The Dockyard Department of the Board is very efficiently equipped for ship repairing. There are five dockyards of which the largest has a maximum length of 879 feet. In addition the Board has its own police and fire brigade, a fire float and two powerful salvage tugs. No port, harbour, or light dues are levied, but ships using the wharves are required to pay the Board's charges for such expenses as the cost of moving cargo, bunkering, and storage in the warehouses. An inquiry held in 1934 showed that the rates compared very favourably with those at other Eastern ports. The Penang resembles the Singapore Harbour Board in its powers and relations to Government. Originally established in 1908 it is now composed of a Chairman (who is also Chairman of the Singapore Board), a local Chairman, and other members appointed by the Governor. The wharf and warehouse facilities are similar to those of Singapore but on a much smaller scale, Swettenham Pier having a length of only 1,200 feet. There is also practically unlimited anchorage in the roads which are fairly well sheltered in all weathers. The only port in the Federated Malay States which can accommodate ocean-going vessels is Port Swettenham, a landlocked harbour at the mouth of the Klang River on the Straits of Malacca. The wharves and warehouses are owned and operated by

the Federated Malay States Railway, and handle a growing percentage of the trade of the Peninsula.[3*]

The commercial organization of which Singapore is the centre has been evolved to meet the requirements of the entrepôt trade. "On the one side this trade consists in the importation of cottons, cigarettes, machinery, milk, provisions, hardware and other manufactured goods from Europe, America, India and the Far East and their distribution to the Malay States, Siam, Borneo, Sumatra and other neighbouring parts of the Malay archipelago and, on the other, in collecting general tropical produce from these countries and (after sorting, grading, conditioning and treatment) re-shipping it to the consuming markets of the world. The two sides of the trade are complementary; the produce pays for the manufactures, and the machinery of collection is closely interlocked with that of distribution. There is in addition a large import and export trade in rice, sugar and petroleum. The trade is essentially one of exchange; it is 'barter with prices fixed' and accounts as a rule are settled by drafts on Singapore, though sometimes actual goods are exchanged (e.g., rice for native rubber). . . . The producer finds in Singapore an extremely efficient and favourable market. There are no restrictions: a man can get the best price for his goods and take in return any-

* The Federated Malay States receive rather more than half of their imports and dispatch three-fifths of their exports through Penang and Singapore, the remainder passing through Port Swettenham. The introduction of Imperial Preference in 1932 fostered the tendency to direct importation owing to the difficulty of proving that goods transhipped from the Straits Settlements were of Empire origin and entitled to preference. The percentage of Federated Malay States trade carried on *via* the Straits Settlements is shown in the following table (*Reports on the Federated Malay States for 1920, 1930, and 1937.*)

	1920.	1930.	1937.
Imports from	*Per cent.*	*Per cent.*	*Per cent.*
Singapore . . .	37·2	35·25	27·52
Penang . . .	24·6	17·70	18·58
Malacca . . .	·2	2·33	1·85
Exports and Re-exports to			
Singapore . . .	56 6	23·29	23·53
Penang . . .	22 7	33·19	35 01
Malacca . . .	2·0	2·97	1·50

The Unfederated Malay States conduct the greater part of their import and export trade through the Straits Settlements, although a certain amount passes through the Federated Malay States. The form of the trade statistics makes it impossible to be more exact. Kedah and Johore, which alone are economically developed, carry on their foreign trade through Penang and Singapore respectively, and much of the trade of the undeveloped States of Trengganu and Kelantan is by coastal steamer with Singapore. Trengganu also receives a limited amount of machinery from Japan and Germany on the tramp steamers which take its iron ore to Japan when the monsoon is favourable. Trengganu, Kelantan, and Kedah have a limited import and export trade directly with Siam.

thing that his own market requires. It resembles London in the enterprise and accumulated experience of its merchants, the excellence of its communications and the fact that 'you can always find a market for anything'." The trade is financed from Singapore and advances to outport middlemen secure for the Singapore dealers a lien on the produce collected from the actual growers.[4] The banks of the Colony are thus primarily exchange banks which in addition assume the functions of ordinary domestic banks. The sterling value of the Straits Dollar was fixed at 2*s.* 4*d.* in 1906, the exchange value varying between the Currency Commissioners' exchange selling rate of 2*s.* $3\frac{3}{4}$*d.* and their purchasing rate of 2*s.* $4\frac{1}{16}$*d.* The fluctuations in value which were so marked a feature of Hong Kong's commercial history have thus been held within very narrow limits; and owing to the stability of the currency Malayan statistics are given in Straits Dollars.

More than 99 per cent. of the consumers are Asiatics with a low standard of living and a limited purchasing capacity, to whom the price of an article and not its quality or durability is the dominant consideration. This was the principal cause of the growth of Japanese trade, since the trait was greatly enhanced during the depression. The remainder of the population is made up of a small number of Europeans and wealthy Asiatics, principally Chinese, with a high standard of living. Their purchases and those of the European estates and mines account for a large part of the sales of United Kingdom manufactures. The governments and the municipalities are also very important purchasers of British goods for the Public Works and similar departments. A considerable part of the production is in the hands of Asiatics, some of them wealthy proprietors of rubber estates and tin mines but the majority being producers on a small scale. European companies produce the bulk of the staple exports of tin and rubber. The one important industry, tin smelting, is also in European hands; but the others, which are of minor importance, are controlled by the Chinese. Broadly speaking direct business between the overseas manufacturer and the consumer is negligible, and the bulk of the production also passes through the hands of various intermediaries before it is exported. As in the Netherlands East Indies, the salient feature of the machinery of distribution and collection is the rôle of the Chinese. At some stage in almost every sale of imported goods the Chinese trader enters, varying from the wealthy importer in Singapore to the petty village shopkeeper. They control the retail trade apart from a few European

department stores and a larger number of Indian and Japanese establishments. In general they also control the collection of produce from the native small producer: it is they who bring it to Singapore or Penang and sell it to European merchants by whom it is sorted, graded, bulked, and exported. There are various channels by which manufactures from overseas are imported into Malaya. The most important is the large European merchant house with offices in the United Kingdom, the United States, or Europe which holds manufacturers' agencies for the principal articles. Non-British now outnumber the British firms, many of them having been established since the Great War. All act as agents for both British and foreign manufacturers according to which pays them best. Some of these firms have become increasingly interested in the management of rubber estates, the supplying of their requirements for machinery, etc., and the export of produce, rather than in the general import trade. There are also a growing number of Chinese, Indian, Arabian, and Japanese merchants who import directly from abroad, the Chinese forming the majority of this class. Some import largely from the United Kingdom, but especially since the depression the majority have handled Asiatic and above all Japanese manufactures. The Sino-Japanese War and returning prosperity led to an increase in the sale of British and a marked decline in that of Japanese goods. The Malayan market offers few preferential tariffs or quotas to British manufacturers and is very keenly competitive, price and not sentiment being the dominant consideration.[5]

The following tables gives the imports and exports of Malaya since 1918. The area covered is the Straits Settlements, the Federated and the Unfederated Malay States of the Peninsula. The statistics exclude inter-state trade and include only imports from and exports to countries abroad. The returns for 1920 and 1923–38 are for merchandise only, while those for 1918, 1919, 1921 and 1922 also include bullion, coin, and parcel post. The exact amount of these cannot be determined and is probably not large; but the statistics for the four years should be regarded as not strictly comparable with the rest of the table.[6]

	Imports	*Exports*	*Total*
1918 ..	$498,080,520	$561,919,020	$1,059,999,540
1919 ..	622,447,140	808,888,217	1,431,335,357
1920 ..	891,495,961	821,259,587	1,712,755,548
1921 ..	482,655,780	416,995,543	899,651,323
1922 ..	454,583,383	488,370,266	942,953,649

	Imports	*Exports*	*Total*
1923 ..	576,337,975	667,652,755	1,243,990,730
1924 ..	653,314,046	720,451,817	1,373,765,863
1925 ..	967,943,366	1,281,777,231	2,249,720,597
1926 ..	1,003,898,768	1,262,627,340	2,266,526,108
1927 ..	990,581,837	1,061,926,217	2,052,508,054
1928 ..	860,645,066	845,064,660	1,705,709,726
1929 ..	881,169,000	925,440,000	1,806,609,000
1930 ..	706,277,000	657,660,000	1,363,937,000
1931 ..	453,374,000	401,451,000	854,825,000
1932 ..	376,774,000	323,400,000	700,174,000
1933 ..	350,246,000	373,423,000	723,669,000
1934 ..	460,466,000	544,003,000	1,004,469,000
1935 ..	466,646,000	570,360,000	1,037,006,000
1936 ..	503,023,000	627,763,000	1,130,786,000
1937 ..	679,920,000	897,120,000	1,577,040,000
1938 ..	546,610,000	569,315,000	1,115,925,000

Rather less than a third of the imports into Malaya consists of foodstuffs. Fishing, cattle-raising (as far as it exists), and rice-growing are practically confined to the Malays, the Chinese and Indian emigrants preferring the far more lucrative industries of tin, rubber, and commerce. The Malays produce roughly enough for their own requirements, including about 42 per cent. of the rice consumed, but not sufficient to feed the very large additional population who have immigrated in the past seventy years. A large part of the food is therefore imported, as are most of the requirements of the Europeans. In normal years the purchase is easily financed by the sale abroad of Malaya's tin and rubber. Owing to their very heavy fall in price during the depression the financial burden of imported food supplies became much heavier. The Malayan governments adopted the policy of fostering rice cultivation partly to make the country more self-sufficient in food supplies. Raw materials and articles mainly unmanufactured account for roughly another third of the imports, the principal items being rubber, tin ore, copra, rattans, and various gums collected in the jungles. The greater part of the copra comes from the Netherlands East Indies, particularly Sumatra and Borneo, and is reshipped from the Straits Settlements to Europe. Until 1932 most of the tin ore came from the Dutch mines in the islands of Banka, Billiton, and Singkep between Singapore and Batavia; but since then it has been sent to Holland to be smelted. The quantity sent to the Straits Settlements declined from a maxi

mum of 29,964 tons in 1929, out of the total amount of 48,785 tons imported, to thirty-two tons in 1934. To some extent the Dutch ore has been replaced by the growth of imports from Siam; but nevertheless the loss in trade remains serious.[7] Rubber has been the leading commodity in this group of imports, the bulk of it coming from the Netherlands East Indies. The class of imports described as "articles wholly or mainly manufactured" includes most of the commodities which are supplied by the industrialized nations of Europe, the United States, and Japan. In 1938 they amounted to $246,507,000 of the total imports of $546,610,000. One item deserves special mention, and that is the mineral oils—petrol, kerosene, fuel and lubricating oils—which are imported on a large scale from Sumatra, Dutch Borneo and Sarawak. While some is retained for local consumption a large part is always re-exported to Australia, New Zealand, Japan, Siam, the Netherlands East Indies, and occasionally to Mauritius, Madagascar, and South and East Africa. The oil is stored in bulk installations on islands near Singapore, and is brought there for convenience in blending and subsequent export. In 1937, for example, out of the $87,788,000 of oil imported $55,906,000 were re-exported. This was about 13 per cent. of the total imports into Malaya and 6 per cent. of the exports.[8] The trade in mineral oils is noteworthy not only because of its volume, but also because it is in a different category from most of the re-export trade. Most of the re-exports, tin or rubber for example, bring to the Colony various profits such as the cost of milling or smelting, or the middleman's profits for the resale of the goods. The oil brings no particular benefit to the Colony's trade beyond the employment of a certain amount of labour by the oil companies and the periodical overhaul of the tankers in the Singapore dockyards. The oil is essentially a Netherlands East Indies export which is temporarily stored in the Straits Settlements while en route to its destination.

The exports of Malaya consist partly of the produce of the country, principally tin and rubber, and in part of the re-export of imported commodities. The export of imported rice and tobacco to the Netherlands East Indies was formerly an important branch of trade; but it has declined considerably since the depression. The sale of tobacco fell to less than half owing to the greater consumption of the cheaper local product.[9] The export of raw materials and articles mainly unmanufactured amounted in 1938 to $325,759,427 out of the total of $569,315,000. By far the largest item was rubber, the value of which was $272,980,000 or nearly half the total exports

from Malaya. It included not only the production in Malaya itself but also the large quantity imported from the Netherlands East Indies. The next largest item was copra and various vegetable oils such as coconut and palm oil, partly the produce of Malaya and partly re-exports from the Netherlands East Indies and elsewhere. Although the value is still barely a ninth of that of rubber, the importance of this branch of the export trade has been rapidly increasing. An important minor item has been iron ore, all of which is shipped to Japan. The export rose from 798,363 tons in 1929 to 1,531,728 tons in 1938. Extensive deposits exist in the Malay States of Trengganu and Johore, that in the latter having an average metallic content of 64 per cent. The mines are operated by Japanese companies and now supply over a third of Japan's normal imports. The ore is brought down the rivers in barges and is then loaded on tramp steamers; and in Trengganu the royalties received by the Government form an important addition to the meagre revenue of the state. In 1938 the export of articles wholly or mainly manufactured was valued at $183,346,490, or about a third of the total exports. The most important item was smelted tin, which accounted for over half the total exports in this class. The re-export of mineral oils from the Netherlands East Indies amounted in 1938 to about a third of the exports of manufactures, and in some years the proportion has been even higher. Most of the other manufactured articles exported had been imported from Europe, America, and Japan for the entrepôt trade. They included textiles, iron and steel goods, machinery, electrical goods, vehicles, chemicals, and drugs.[10]

A comparison of the principal exports shows little change since before the depression.[11]

	Percentage of value of total exports	
Item	1927	1938
Rubber	50.0%	47.8%
Smelted Tin	19.5	16.9
Mineral Oils	5.8	9.8
Copra and Coconut Oil	2.8	3.1
Rice	3.4	2.2
Canned Pineapple	.8	1.2
Areca nuts	1.0	1.7
Salted and Dried Fish	1.3	1.2
Total Cotton Piece Goods, Sarongs, Thread, etc.	2.0	1.0

They continue to be overwhelmingly raw materials and foodstuffs, roughly four-fifths of which are sold in the world markets and not in the local foreign market. Manufactured goods which are almost entirely re-exports are sold in the entrepôt trade area of the Straits Settlements and are only a small percentage of the total exports. Rubber and tin continue to provide three-fifths of the exports; and the salient development of the past quarter of a century has been the rapid expansion of rubber cultivation until the export has surpassed in value the older staple of tin. The origin of the rubber is altering, however: in 1927 over a third was re-exports from Sumatra and Borneo. The quantity imported from the Netherlands East Indies has been declining owing to the growing practice of preparing the rubber there for the market and shipping it direct to its destination. Similarly, tin exports represent domestic production to a considerably greater extent than ten years ago. Mineral oils continue to hold third place. The growth of exports of copra and coconut oil is encouraging since it shows that Malaya is becoming somewhat less dependent upon the two staples of tin and rubber. The decline in the importance of the rice trade is the result of the measures adopted by the Dutch during the depression. The reason for the increase in the exports of canned pineapples is that through their cheapness they have captured 80 per cent. of the United Kingdom market and have also a growing sale in Canada. Cotton piece goods have continued the decline in relative importance which was already noticeable before the depression: for example in 1924 they had amounted to 3 per cent. of the total exports. The Netherlands East Indies and Siam, the principal markets, have been importing directly from manufacturing countries to an increasing extent; and the quotas imposed by the Dutch Government since 1933 have still further curtailed exports from the Straits Settlements.

The following table gives the percentage shares of the total Malayan exports by value of merchandise taken by countries of destination from 1923 to 1938.[12]

	United Kingdom	*British Empire*	*Europe*	*United States*	*Netherlands East Indies*	*Japan*	*Siam*
	%	%	%	%	%	%	%
1923	13.8	13.0	10.4	40.5	12.3	4.4	3.4
1924	13.1	12.1	11.3	41.2	11.8	3.6	3.5

	United Kingdom	*British Empire*	*Europe*	*United States*	*Netherlands East Indies*	*Japan*	*Siam*
	%	%	%	%	%	%	%
1925	13.8	9.6	10.0	49.9	9.3	2.9	2.3
1926	16.4	10.5	9.1	47.5	8.0	3.0	2.3
1927	15.0	11.8	10.8	44.2	9.9	3.5	3.0
1928	11.6	12.0	11.9	41.7	10.8	4.0	3.4
1929	14.3	11.4	12.9	42.5	9.1	4.1	2.5
1930	12.2	15.9	14.5	34.5	10.4	6.3	2.8
1931	11.3	13.4	11.4	32.9	11.5	12.3	3.6
1932	11.1	18.5	15.3	22.2	11.9	12.4	4.2
1933	9.4	13.5	17.4	33.5	9.0	9.8	3.8
1934	16.5	12.2	16.1	34.6	5.5	9.4	2.3
1935	15.3	14.2	12.9	37.4	5.8	9.1	2.2
1936	8.5	14.9	12.1	47.0	5.2	7.6	2.0
1937	10.9	13.2	15.8	44.4	3.8	6.7	1.6
1938	14.2	17.2	16.8	30.0	6.4	9.4	2.8

The importance to Malaya of its various markets is determined principally by the amount which each takes of its tin and rubber. The United States is by far the most valuable customer; and in 1938 it bought 40.7 per cent. of the exports of rubber and 54.9 per cent. of the tin. In 1928 it took 69.5 per cent. of the rubber and 57.5 per cent. of the tin. The prosperity of Malaya's two principal industries are very largely dependent upon the conditions prevailing in the American motor-car and steel industries. The decline of Malayan exports during the depression was due to the lessened sales in all markets, but by far the most important single factor was the decreased American demand for tin and rubber. In 1932, for example, when Malaya's exports reached their minimum of $323,400,000, the United States took only 41.6 per cent. of the tin and 57.4 per cent. of the rubber out of an export the value of which had shrunk to a fraction of what it had been before the depression. The other exports to the United States are of minor importance, the principal being a limited quantity of foodstuffs, copra and coconut oil, and jelutong for use in the manufacture of chewing gum. The exports of copra have fallen from 9.2 per cent. of the total in 1928 to .5 per cent. in 1936.

The chief exports to the United Kingdom are rubber, tin, foodstuffs, and vegetable oils. In 1938 the United Kingdom bought

18.7 per cent. of the rubber and 6.8 per cent. of the tin as compared with 14.7 per cent. and 13 per cent. respectively in 1928. Minor exports of some importance are foodstuffs, especially canned pineapples, together with a limited amount of pepper, sago, and tapioca. Roughly three-quarters of the production of canned pineapples is sold in the United Kingdom, which is also one of the principal markets for the small but expanding export of vegetable oils, particularly copra, coconut and palm oil. The principal demand comes from Europe; but the United Kingdom's share of the copra has increased from 6.1 per cent. in 1928 to 22 per cent. in 1938.

The British Empire has been a valuable market for mineral and vegetable oils, foodstuffs, rubber, tin, and a limited amount of cotton textiles. The greater part of the trade has been with Australia, India, and Sarawak. Fourth in order of importance has been Hong Kong, to which commodities were sent for redistribution in its entrepôt trade area; but exports have declined very heavily since the depression. Australia has been one of the principal markets for the re-export trade in mineral oils, taking 31.9 per cent. of the total volume in 1936. India has taken the bulk of the export of areca nuts and between three and four per cent. of the tin. Sarawak is an important buyer of such typical re-exports as rice and European and Japanese manufactures.

The value of the European market has on the whole been somewhat less than that of the United Kingdom, the most important customers being France, the Netherlands, Germany, and Italy. France has usually been the largest European market, the value of her imports in 1938 being higher than before the depression. In 1937 she bought 11.7 per cent. of the rubber and 9.6 per cent. of the tin, the corresponding figures for 1928 being 3 per cent. and 4.6 per cent. respectively. Exports to the Netherlands have declined to less than a fifth of their pre-depression value. A principal cause has been the diversion of tin ore to the smelter in Holland: the exports of smelted tin fell from 10.9 per cent. of the total in 1928 to 1.5 per cent. in 1937. The German market showed marked fluctuations and was rather more than a third the value of the French. In 1937 it took 3.5 per cent. of the rubber and 32 per cent. of the copra.

Japan has been a minor market of increasing importance, the most striking feature being the rapid growth of the imports of mineral oils from .8 per cent. in 1927 to 12.9 per cent. in 1936. The volume increased nearly sixfold in 1930, continued to rise very heavily in 1931 to its maximum of 44.2 per cent. of the total ship-

ments and thereafter gradually declined. One presumes that Manchukuo was the cause of this marked temporary expansion in demand. Japan has also taken the whole of the output of the Malayan iron mines which are controlled by Japanese companies. The value increased from $1,378,452 in 1925 to $7,357,000 in 1938. The chief export to Japan has been rubber, her purchases having been about 6.5 per cent. of the total for the manufacturing of rubber shoes, tyres, and other articles. Japanese imports of tin increased from 2.4 per cent. of the total in 1928 to 13.8 per cent. in 1938.

The Netherlands East Indies have traditionally been one of the principal markets of the Straits Settlements, and the foundation of both Penang and Singapore was in large measure due to the desire to develop trade with them. It has already been pointed out that the Straits Settlements' trade area in the Dutch colonies had been shrinking for many years, although the loss had been compensated by the more intensive development of Sumatra and Borneo. The depression very seriously accentuated this tendency and the share of Malaya's exports sent to the Netherlands East Indies fell from 10.8 per cent. of the total in 1928 to 6.4 per cent. in 1938. Imports from Malaya into the East Coast Province of Sumatra fell from 30.75 per cent. of the total in 1932 to 1.8 per cent. in 1937. Even so, the Dutch colonies remained by far the most important of the adjacent local markets, the exports to them in 1938 being $36,800,000. Minor causes were the increase of the pre-depression tendency to order directly from manufacturers and the decreased purchasing power of the population. The principal reason however was the new economic policy adopted by the Dutch Government.

Until 1933 the Netherlands East Indies had for many years followed an Open Door policy, tariffs being imposed for revenue only and no preferences being granted to imports from Holland. The prosperity of the empire and particularly of Java and Sumatra, the most developed islands, was based upon the large and increasing exports of raw materials and foodstuffs, such as rubber, sugar, tin, mineral oil, cinchona, and tea. Normally the balance of trade was heavily in favour of the Netherlands East Indies. Manufacturing was insignificant, and almost all manufactured goods were imported. In 1928 the imports came from the following countries:—Netherlands, 20.0 per cent.; Singapore and Penang 13.07 per cent.; Great Britain, 12.22 per cent.; Germany, 10.66 per cent.; United States, 10.24 per cent.; Japan, 9.54 per cent.[13] European estates and native cultivators alike suffered severely from the curtailment in

demand and the fall in prices which resulted from the depression. In addition the partial closing down of estates, particularly in the sugar-growing areas of Java, gravely accentuated native distress, since thousands of Javanese had supplemented the income from their own small holdings by work on the plantations. Since the vast majority of Javanese were cultivators they were able to maintain themselves, although on a reduced standard of living, by agriculture. The harvests were good, and the acreage under padi or unhusked rice increased, since the sugar estates ceased to rent land from the villagers for seasonal cultivation. Padi, however, dropped to the lowest price on record, a very serious matter as, from the native point of view, the real standard of values was paddy or labour rather than currency. Currency had to be found only for a few purposes such as the payment of taxes or the purchase of clothing and other requirements. To cite one example: In favourable years when padi prices were high 5 per cent. of the crop might suffice to pay the cultivator's annual taxes; while with the reduced prices of the depression 15 per cent. to 20 per cent. of the harvest might be necessary. The result as regards imports for the native bazaars was a market where cheapness of price and not quality was the one essential. From 1929 onwards the sale of British and Dutch manufactures fell heavily while that of Japanese rapidly increased. In 1931 Japan took first place among the countries exporting to the Netherlands Indies, and in 1932 and 1933 her predominance was complete. By 1933 the total imports of merchandise from Holland had fallen to 12.37 per cent. and from Great Britain to 9.65 per cent., while those from Japan had increased to 30.96 per cent. The imports from Singapore and Penang had fallen by only a fraction of one per cent. to 12.34 per cent.; but analysis of the country-of-origin factor would show that a much higher proportion of them were of Japanese origin than before the depression.* The prosperity of Holland was dependent to an important degree upon her colonial trade and investments, and both suffered very heavily. The final element in

* A typical instance is found in the report on British imports into the East Coast Province of Sumatra in 1932 (H. A. N. Bluett, *Economic Conditions in the Netherlands East Indies, February, 1933*, p. 144). 'The percentage of 53·17% represented as being the share of the British Empire in the import trade of the province is misleading in that articles entered as coming from the Straits Settlements [30·60% of the total] are largely of Japanese origin. A more probable, if less flattering, picture would therefore be given by subtracting the major portion of the percentage of the Straits Settlements from the total of the British Empire and transferring it to the total of Japanese imports which would thus be increased to approximately 35%.'

the situation was that while the origin of imports shifted to a considerable extent from Western to Eastern countries, an exactly opposite change occurred in the destination of exports. In 1928 49.43 per cent. of the exports were shipped to Europe and America and 44.51 per cent. to Asiatic countries, of which 3.63 per cent. went to Japan. In 1933 51.01 per cent. of the reduced exports were sold in Europe and America and only 37.94 per cent. in Asia, of which Japan took 4.86 per cent.* This was a very serious situation in a world where international trade was increasingly conducted on the principle of "He who will not buy, neither shall he sell". It was necessary to lessen so far as possible the discrepancy between the origin of imports and the destination of exports, and to enable the Netherlands Indies' best customers to pay for their purchase of colonial exports by their sales in the colonial market.[14]

The result of this situation was that in 1933 the Netherlands East Indies radically departed from the former Open Door system. Unavoidable as were many at least of the measures adopted, the effect was very damaging to the re-export trade of the Straits Settlements. The foundation of the new policy was the Crisis Import Ordinance of 1933 which empowered the Government to prohibit or regulate the imports of any article. The Ordinance and those subsequently issued under its authority had the following purposes:—

1. To protect and foster Netherlands East Indies agriculture and manufacturing.

2. To favour the import of goods from those countries which were the principal purchasers of Netherlands East Indies products or which made commercial treaties with the colonies.

3. To protect Dutch trade with the colonies.

4. To protect the Dutch mercantile marine and the existing organization of wholesale and retail trade in the colonies from Japanese competition.

The means adopted were quotas and prohibitions: except in a few instances the tariff continues to be for revenue and not protection. Tariff rates varied from 6 per cent. to 20 per cent., and owing to the urgent need for additional revenue a surcharge was levied of 50 per cent. of the duty payable. Of the three forms of quota employed, one limited the total quantity which might be imported from all sources of certain articles produced within the country,

* Exports to Singapore and Penang were 20·72% of the total in 1928 and 17·95% in 1933, and were included in the above statistics as sold in Asia. This was misleading since the bulk of them were re-exported to Europe and America, and not to Asiatic countries.

e.g. woven sarongs and rice. Another limited the total quantity of a commodity which might be imported from each country of origin. The period taken as a basis for the allotment of quotas, 1929 to 1933 inclusive, was favourable to Japan and unfavourable to Great Britain, since it was during this period that Japanese competition developed and British trade declined. A similar method was adopted in Malaya in order to reduce somewhat the extent to which the market was being flooded by Japanese textiles. Quotas were reserved for goods of Dutch origin, which in some cases exceeded the amount obtained from Holland prior to the depression.* The Dutch Government announced that the size of the quotas assigned to foreign countries would depend upon the extent of their purchases of East Indies exports. A third form of quota known as the Import Licence System was not concerned with the quantity of goods imported or with the country or origin. The purpose was to protect the existing and long-established apparatus of trade, under which the bulk of the importers were Dutch and other Occidental firms, and the great majority of the retailers were Chinese. The Japanese wished to replace them by Japanese importing and retail agencies. The attempt was substantially defeated by requiring importers to obtain a Government licence for each shipment of goods; and permits were granted only to established firms which could prove that they had in the past imported the commodity for which they sought licences.[15]

One restriction which particularly affected the Straits Settlements was the temporary prohibition of imports of foreign rice as from March, 1933. In July of the same year this Ordinance was superseded by another under which the importation of foreign rice was subjected to a Government licence. The purpose was to foster the increased cultivation of rice by raising the price and by substituting Javanese for foreign rice in those parts of the empire such as Sumatra which had previously imported it from abroad. As a result re-export from the Straits Settlements declined from 4,230,000 cwt. in 1928 to 2,610,000 cwt. in 1936. The Colony's exports were also lessened by the fostering of local manufactures in the Dutch colonies. Handloom weaving as a cottage industry had existed for centuries and, Javanese batik is well known. The establishment of factories some

* To some extent manufacturers in Holland regained their lost trade. For example, their share of the imports of cotton textiles had fallen from 26·2% of the total value in 1928 to 7·1% in 1933; while that of Japan had risen from 25 9% to 76%. In 1934 the import of cotton textiles from Holland increased to 10·8%; and Japan's share also rose to 76 9% at the expense of the British, which had fallen from 28·6% in 1928 to 4·6% in 1934 (de Wilde and Moll, *The Netherlands Indies During the Depression*, p. 54).

of them European-owned for weaving sarongs was, however, a new departure, although at present the output covers only a small part of the requirements. If the experiment proves successful the intention is to promote the development of an extensive textile industry. To encourage it the Government in 1933 removed the import duties on yarns and limited the import of coloured woven goods. This reduced the re-export of sarongs from the Straits Settlements; and in addition a certain proportion of the new manufacture was exported chiefly to Singapore. The effect is shown clearly by the percentage of the total Straits Settlements exports of cotton textiles and yarn sold in the Netherlands East Indies. This fell from 59.8 per cent. in 1928 to 53 per cent. in 1932, the last year before the quota was introduced; and in 1937 it had fallen to 24.4 per cent. The Straits Settlements also suffered from the restrictions imposed upon the importation of tyres and other rubber goods in order to increase the trade of the factories established in Java.[16] The building of mills to convert native wet rubber into dry sheet led to a progressive decrease in the quantity exported to Singapore mills to be prepared for the market. The imposition of quotas further accentuated the tendency to order direct from the country of origin instead of through a firm in Singapore, since the importer in the Netherlands East Indies had to furnish proof of the country of origin of all goods. This was far easier of accomplishment if the commodities were bought directly from the manufacturers, and the large importing firms have been adopting this practice increasingly. Small importers perforce continue to order through Singapore houses. Exchange restrictions, particularly in Germany, have also tended to compel purchasing directly from the country of origin.

The Dutch quotas are officially described as a temporary and regrettable deviation from the Open Door policy which will be restored when the economic conditions of world trade make it practicable to do so. While disclaiming the rôle of prophet one is inclined to reflect that trade barriers go up faster and farther than they come down. The new industries whose growth is being fostered will require protection for many years, and it is unlikely that the policy of the Dutch Government will differ from those of the Governments of China and India under similar circumstances. Factories will absorb part of the excessive agricultural population of Java and so help to solve the problem of raising the low standard of living. In the past, native rubber-growing was encouraged to this end; but the restriction of production will prevent the continuance

of this policy. Moreover manufacturers in Holland are unlikely to agree to the reversal of a policy which gives them an entrenched position in their colonial market. Many of the restrictions were imposed owing to the impossibility of competing with the Japanese in the open market. Their competitive advantages will no doubt become less but will not disappear, so that it is difficult to envisage a time within the practicable future when European manufactures can compete with them on equal terms. Add the fact that a considerable part of the Malayan exports to the Netherlands East Indies will continue to be of Japanese origin. The conclusion would appear to be that larger quotas may be assigned to the United Kingdom as a result of trade negotiations; but that they are not likely to be granted to the Straits Settlements as long as they remain a free trade entrepôt. At the same time a large trade will continue with such regions as the East Coast of Sumatra owing to geographic proximity. On the whole, however, one would expect a growth of the existing trend for direct shipment of goods from Great Britain to the Dutch colonies rather than a recovery by Singapore and Penang of their lost trade. This is particularly true as regards cotton textiles, which formerly were one of the principal British exports.

The following table shows the percentage shares of the countries of origin in the total Malayan imports by value of merchandise. The figures for 1913 are for the Straits Settlements only, while those for later years are for the whole of Malaya. During the pre-war period approximately 95 per cent. of the imports and exports of Malaya passed through the Straits Settlements, so that the percentages for 1913 give an approximately true picture of the origin of all imports into the country.[17]

	United Kingdom	*British Empire*	*Europe*	*Japan*	*United States*	*Netherlands East Indies*	*Siam*
	%	%	%	%	%	%	%
1913	11.5	unknown	5.5	3.4	1.8	18.0	10.0
1921	19.0	26.8	2.6	4.5	5.5	19.7	10.1
1922	16.2	25.0	3.4	4.0	3.7	25.0	13.7
1923	14.0	23.0	4.0	3.0	3.1	33.4	11.9
1924	13.6	23.4	4.4	2.5	3.4	33.6	10.8
1925	13.4	20.2	4.2	3.0	3.9	40.0	9.3
1926	13.6	19.0	6.1	3.5	3.5	27.7	10.0
1927	13.5	19.5	5.9	3.0	3.2	27.7	11.5
1928	16.2	19.6	6.7	2.3	3.2	26.2	11.9

	United Kingdom	*British Empire*	*Europe*	*Japan*	*United States*	*Netherlands East Indies*	*Siam*
	%	%	%	%	%	%	%
1929	16.3	18.6	7.9	2.6	3.6	24.3	11.2
1930	13.9	17.4	5.9	3.5	3.3	36.2	11.1
1931	13.7	15.5	5.6	3.9	2.5	38.1	11.4
1932	14.6	17.8	5.6	4.6	1.9	35.2	12.3
1933	14.1	17.9	4.6	7.3	1.5	30.9	14.6
1934	14.6	15.1	4.3	8.1	1.8	34.7	13.9
1935	16.5	16.7	4.8	6.7	2.0	31.2	13.7
1936*	15.2	16.5	4.8	6.4	1.9	32.0	15.2
1937	15.6	17.3	5.7	6.0	2.3	32.4	13.6
1938	18.6	18.1	6.5	2.3	3.1	27.0	15.7

Sixty per cent. of the imports are normally foodstuffs and raw materials, while manufactured goods for local consumption or re-export make up the remaining two-fifths. In 1938 the value of the latter was about $246,507,000 out of the total imports of $546,610,000. The first come principally from Asiatic countries, Australia, and South Africa, and the second from the industrialized Western nations and Japan. The only foodstuffs of importance from Europe are cigarettes, condensed milk, alcoholic liquors, and biscuits. The United Kingdom supplied the greater part of the demand save in condensed milk, where it encountered vigorous competition from the Netherlands and Australia. British beer vanquished German, though a new and formidable rival appeared from Japan. The imports from the Netherlands East Indies, almost a third of the total, are made up of rubber, copra, and mineral oils from Sumatra and Borneo, pepper, areca nuts, and sugar. Most of the last is used in Malaya; while the others are re-exported. Java also sends a small but increasing quantity of cotton sarongs and batteries for electric torches from the recently established factories. Imports from Siam have been steadily increasing and are made up of rubber and tin ore which are prepared for the market and re-exported, and rice and salt fish of which the greater part is consumed in Malaya and the remainder re-exported. The expansion of tin-mining in French Indo-China has led to a small but growing shipment of ore to the Singapore smelters. Indo-China is also a minor source of supply of rice and salt fish.

The British Empire taken as a whole has usually held the second place in the list of countries from which imports are received. Of

the various parts of the Empire, Burma and India are by far the most important, and in 1938 supplied 7.5 per cent. of the total imports into Malaya. Burma sends rice, tin ore and rubber; while the principal Indian exports are sarongs and, especially, gunny sacks which are re-exported throughout the whole area which lies between Sumatra and Japan. Sarawak is third on the list of Empire countries, Singapore being the focal point for its import and export trade. The state has a fairly rich oil field, and its principal products are oil, rubber, and a limited amount of pepper and copra. Australia supplies condensed milk, wheat flour and other foodstuffs; and Hong Kong exports its local manufactures including, at least until recently, Japanese textiles which had been mysteriously reborn as British products, and a limited quantity of Chinese goods. South Africa vies with Japan as the principal source of coal, and Canada sends motor-cars and tyres.

Three-fifths of Malaya's imports—the foodstuffs and raw materials—can be practically ignored in estimating its importance as a market for the Western nations and Japan. With some minor exceptions they are not produced in the industrialized countries which supply the manufactures and therefore are not competitive. If the 60 per cent. of non-competitive imports are omitted and the 40 per cent. of manufactured articles only are considered, then the percentages of the Malayan market secured by the industrialized countries of the world are very different from their shares in its total imports as shown above. The following table gives the percentage of imports into Malaya of goods wholly or mainly manufactured from the principal supplying countries. The figures for 1913 refer to the Straits Settlements only and those for other years to the whole of Malaya. Owing to the form of the trade returns it has been impossible to give the manufactured imports from the Netherlands East Indies save for a few years. They were usually included under the entry "Other Countries", of which group they formed the greater part.[18]

	United Kingdom	*British Empire*	*Europe*	*Japan*	*United States*	*Netherlands East Indies*	*Other Countries*	*Value of Manufactured Imports*
	%	%	%	%	%	%	%	
1913	42.0	18.0	unstated	unstated	unstated	unstated	40.0	$93,360,317
1924	30.0	20.0	9.0	6.0	6.0	,,	29.0	227,167,759
1925	28.0	19.0	9.0	7.0	6.0	,,	31.0	338,907,572

	United Kingdom	*British Empire*	*Europe*	*Japan*	*United States*	*Netherlands East Indies*	*Other Countries*	*Value of Manufactured Imports*
	%	%	%	%	%	%	%	
1926	27.0	18.0	10.5	6.4	6.5	23.4	2.7	393,468,371
1927	27.5	19.2	11.5	6.2	6.3	unstated	29.3	368,000,000
1928	31.2	18.3	11.6	4.6	5.7	,,	28.6	343,100,000
1929	29.0	16.0	14.0	5.3	6.5	,,	29.2	370,200,000
1930	21.1	12.5	8.2	6.2	4.8	,,	47.2	332,000,000
1931	20.1	9.9	6.5	6.4	3.5	,,	55.6	221,800,000
1932	21.3	14.2	7.5	7.4	2.7	,,	46.9	189,300,000
1933	20.5	13.6	7.5	13.6	2.4	35.1	7.3	166,000,000
1934	22.8	10.2	7.5	15.3	3.1	33.0	8.1	200,100,000
1935	25.0	11.6	8.3	11.9	3.4	31.6	8.2	204,100,000
1936	25.7	10.9	9.0	12.7	3.6	29.2	8.9	203,400,000
1937	26.9	12.0	11.3	11.5	4.6	26.4	7.3	283,064,000
1938	29.7	13.6	11.8	3.6	5.7	27.3	8.3	246,507,000

Comparison of the two tables of total and manufactured imports shows for example that in 1938 the share of the United Kingdom in the Malayan market was over a quarter, instead of less than a fifth. The explanation was that over 71 per cent. of its exports to Malaya were manufactures. On the other hand the proportion of the British Empire fell from a sixth to an eighth owing to the exclusion of such imports as rice and tin from Burma and rubber and copra from Sarawak. Practically the only Empire countries which supplied manufactures were India, Sarawak, Hong Kong and Canada. The shares of Japan, the United States and Europe were almost doubled, since their exports to Malaya were in the main manufactures. The share of the Netherlands East Indies fell, owing to the omission of raw materials and foodstuffs; but as a rule they retained their position as the largest source of supply of manufactures because of the heavy exports of mineral oils.

American exports to Malaya have never been extensive, the total value in 1938 being $17,100,000. The bulk of them were manufactures including electrical goods, machinery, motor-cars, drugs and medicines, perfumes, typewriters, and lubricating oils. In all save the final item, imports from the United States were very much less than from Great Britain. Owing to the proximity of Sumatra and Borneo the import of American kerosene and other mineral

oils is negligible save for a limited amount of lubricating oils. American sales declined during the depression since the demand was regulated by the prosperity of the staple industries; but with returning prosperity in tin and rubber American exports have recovered their lost ground.

The growth of imports from the continent of Europe at the expense of United Kingdom manufactures has been one of the outstanding post-war developments. The principal European exporting countries have been France, Belgium, the Netherlands, Italy, Czecho-Slovakia and, above all, Germany. After the Great War they rapidly regained and then exceeded their pre-war share of the market until by 1929 Europe supplied 14 per cent. of the manufactured imports. Between 1922 and 1927 Dutch imports increased by 222 per cent., Belgian by 325 per cent., and German by 417 per cent. from $2,651,217 to $13,705,396. During the same period United Kingdom imports increased by 74 per cent. from $76,245,749 to $132,608,666.[19] The depression and also Japanese competition reduced their share to 6.5 per cent. in 1931; but thereafter it recovered to 11.8 per cent. of the manufactured imports in 1938 with a value of $29,081,000. There were several reasons for the growth of European at the expense of British trade. Malaya was a market where price rather than quality was the determining factor so far as the vast majority of the Asiatic population were concerned, although the relative cost of commodities in the 'twenties was not so overwhelmingly decisive as it became during the depression. Like Japan, though of course to a far lesser extent, the countries of continental Europe had cheaper costs of production owing to their lower standards of living, lower wages and longer working hours. They also specialized in the cheap and medium grades of merchandise which were more within the means of the Asiatic population with its low purchasing capacity. British manufacturers concentrated on the more durable goods of better quality—and decidedly higher price. The typical result was seen in the bazaar trade in cutlery and tools which was largely supplied by German manufacturers until they were partly replaced by the Japanese. Still another reason was that European and particularly German firms studied the tastes of their customers more carefully than many British manufacturers. They kept in closer personal touch with the Malayan market and often showed more enterprise in promoting sales. As in China, German firms have shown a marked tendency to sell direct to Chinese retailers instead of through the medium of

one of the old-established European importing houses, and they have offered credit on a much wider scale than their British competitors.[20] The reasons for the decline of British trade were similar to those which were simultaneously producing the same effect in Hong Kong. Some of them were beyond the control of manufacturers, e.g. the refusal of the British workman to accept lower wages and longer hours. Others, however, such as the failure to study the requirements of their customers, were in a totally different category.

The principal articles imported from Czecho-Slovakia in 1936 were iron and steel goods and also boots. Ten years ago Great Britain had a semi-monopoly in footwear; but the Czechs captured about half the market owing to the lower price of their goods. M. Bata, the principal Czech manufacturer, established a shoe factory in Malaya about 1937. Belgium also supplied iron and steel goods, and France perfumes and roofing tiles. The Netherlands' chief exports were condensed milk and formic acid, which is extensively used in the rubber industry. Germany was by far the principal continental European source of supply, the value of her exports to Malaya in 1938 being $10,986,000 or 4.4 per cent. of the total manufactured imports. This may be compared with her previous percentages of 1.5 in 1913, .6 in 1922 and 2.2 in 1929, the year in which her exports to Malaya reached their pre-depression maximum. They fell rapidly in the ensuing two years; but they again rose after 1932 and in 1936 amounted to rather more than half their value in 1929. The principal articles were cutlery, tools, iron and steel goods, machinery, and formic acid. In all these commodities Germany was a serious competitor of Great Britain, although in most cases the British sales exceeded the German.[21]

The outstanding trend in United Kingdom trade with Malaya has been its fall from the dominating position which it held before the Great War. The decline would have been even more marked if it were not that Government orders for supplies have been placed with firms in Great Britain. The Public Works Department for example has been a substantial importer of British manufactures such as machinery; and municipal governments have also ordered many of their requirements from Great Britain. This practice, which is also followed in the Dutch and indeed in almost all dependencies, is a substantial assistance to British manufacturers; but it only covers a minor portion of the total field of manufactures. In what might be called the competitive market British sales have fallen where

price has been the deciding factor and not quality and durability. Broadly speaking United Kingdom manufactures have been bought by the European and the well-to-do Asiatic population; but to an increasing extent German and Japanese goods of cheap or medium quality and price have supplied the bazaar trade. British firms have supplied for example the great bulk of the electrical and other machinery, electric cables, and the more expensive grades of textiles. Germany or Japan have largely filled the native demand for textiles of low price, cutlery, hardware, galvanized iron for building, rubber shoes, bicycle tyres and inner tubes. Expressed in terms of percentages the share of the United Kingdom in imported manufactures fell from 42 per cent. in 1913 to 29 per cent. in 1929, and reached its minimum of 20.1 per cent. in 1931. Thereafter a gradual recovery set in as more prosperous conditions began to return to Malaya, and in 1938 the United Kingdom's share of manufactured imports was 29.7 per cent. The textile quota was of some assistance, and as the natives' purchasing capacity increased they again began to buy British goods because of their superior quality. In 1937 the trade in many cheap lines of Japanese goods suffered a severe setback. This development has been very greatly accentuated by the Sino-Japanese War and the consequent Chinese boycott of Japanese products, which has inflicted heavy losses on Japanese trade. The loss of trade during the depression was due to the lessened purchasing capacity of the natives combined with the simultaneous growth of Japanese competition. It will be observed however that the heaviest fall took place in the previous period when Japanese competition was less severe. Japan supplied 6 per cent. of the manufactured imports in 1924 and 5.3 per cent. in 1929; and it was only after this date that her percentage rose rapidly to its maximum of 15.3 per cent. in 1934. It is of course true that she had been gaining ground since about 1920 at the expense of Great Britain in certain commodities such as cotton textiles; but this by itself was quite insufficient to explain the decline in British trade during the 'twenties. A further reason was the increase in imports of manufactures from the British Empire and to a minor extent the United States. The principal cause however was the rapid growth of European imports which has already been described.

A study of the imports of United Kingdom manufactures since 1924 shows some developments of interest.[22] Japan has produced cement at a price with which no other country can compete. European

cement has almost disappeared; and that British cement retains over a third of the market is principally due to its use in the Singapore naval base and in public works. For other construction Japanese and to a limited extent Hong Kong cement almost monopolize the market. Iron and steel goods form an important class which includes such diverse articles as bars, tin plates, galvanized iron, cooking utensils, bedsteads, nails, and girders. The share of the United Kingdom has fallen from 69 per cent. in 1925 to 46.8 per cent. in 1938; while that of Belgium and Germany rose from about 16 per cent. to 25.6 per cent., and that of Japan from 2 per cent. to 15.7 per cent. in 1936 prior to the Chinese boycott. This is another branch of imports where Government purchases of, e.g. girders and railway materials are of substantial value to British manufacturers. The United Kingdom's sales of cutlery, hardware and tools declined from 34 per cent. of the total in 1925 to 23.9 per cent. in 1938. During the same period European (chiefly German) imports increased from 31 per cent. to 55.9 per cent., and Japanese from 10 per cent. to 22.9 per cent. in 1936. Generally speaking the United Kingdom supplied the limited demand for the more expensive articles such as cutlery of high quality and engineers' tools. Electrical goods and appliances are an important and increasing branch of trade owing to the growing use of electricity not only for household requirements but also in industry. Dredgers in the tin mines for example are substituting electricity for wood fuel. The United Kingdom's share has declined from 78 per cent. in 1925 to 62.5 per cent. in 1938, and that of the United States has increased from 8 per cent. to 15.6 per cent. Great Britain supplies almost the whole of the electric wire and cables; and she together with the United States provides practically the whole of the wireless apparatus and the electric cookers and refrigerators. Ten years ago the majority of electric torches and batteries came from the United States or Japan; but since then Hong Kong has made heavy inroads into the American share of the market. Since 1934 the American branch factory established in Java has rapidly increased its export of batteries until its sales almost rival those from the United States. Imports of machinery decreased very considerably during the depression, but have been again increasing for several years. Great Britain filled 66 per cent. of the demand in 1938, the same percentage as in 1927. The German percentages for the same years were 9 and 14, and the American 16.6 and 10. This field of Malayan trade is one of the most valuable to Great Britain, and one in which she has been most successful in maintaining her

position. She has supplied practically all the dredges and heavy machinery used in tin mining, electrical machinery, and a large part of the equipment of the rubber factories.

The importation of aeroplanes has been small and in 1936 was entirely from Great Britain, which also supplied nearly the whole of the bicycles, 62.4 per cent. of the passenger cars and 23.4 per cent. of the commercial vehicles. Practically all the remainder came from the British Empire and especially Canada, only about 4.8 per cent. being American and almost none European. The American share has fallen steadily since 1925 when it was about half of the total, and the Canadian has increased greatly from its 10 per cent. of the cars and 24 per cent. of the commercial vehicles in 1926. The initial preference for United Kingdom as against American cars appears to have been due to the excellence of the roads, combined with the desire for light cars of moderate horse power owing to the high cost of petrol. The introduction of Imperial Preference also greatly increased the sale since a registration tax of 20 per cent. *ad valorem* was imposed on all cars whether passenger or commercial not of British Empire manufacture. The United Kingdom share of the imports increased from 28 per cent. of the passenger and 13.7 per cent. of the commercial vehicles in 1930 to 78.4 per cent. of the former and 55.2 per cent. of the latter in 1933. The sale of Canadian motor trucks, or more accurately, of American cars made in Canada also increased after the imposition of this tax, from 36 per cent. in 1930 to 41.4 per cent. in 1933. The imports of American passenger cars fell from 22.6 per cent. in 1930 to 2.7 per cent. in 1933, and of motor trucks from 49.4 per cent. to 2.7 per cent. Since 1933 United Kingdom and Canadian cars have virtually divided the market between them. The Anglo-American Trade Agreement of 1938 reduced the registration tax to 15 per cent. Great Britain and the United States each supplied in 1938 a third of the spare parts and Canada 13 per cent. Compared with pre-depression imports this was an increase of the British and a decrease of the American percentages. On the other hand, prior to the Chinese boycott Japan replaced Great Britain as the principal exporter of bicycle spare parts and also captured a large part of Germany's former share of the market. A flourishing Malayan industry arose which made up cheap bicycles out of imported spare parts, many of them Japanese. Their product cost only a fraction of the price of the British; but purchasers found that their durability was commensurate with their price.

The minor imports include an increasing quantity of rubber manufactures. In a normal year rubber-soled shoes are almost a monopoly of Japan, which supplied 88.4 per cent. of the imports in 1936 at so cheap a price that effective competition from other sources was impossible. Hong Kong which also has low costs of production profited by the boycott and in 1938 increased its sales nine-fold to 46.3 per cent. The principal factory in Malaya for the manufacture of rubber shoes failed during the depression. Japanese rubber shoes in 1934 cost thirty to thirty-five cents a pair as compared with sixty-five cents for those locally made and $1.10 for imports from Europe. The sale of tyres and inner tubes has been expanding owing to the widespread and increasing use of motor transport. Imports from Great Britain have very greatly increased in the past decade, and in 1936 she supplied half the market. A new competitor has appeared owing to the recent building of an American factory in Java. As in China and other parts of Asia Western manufacturers are establishing branches to take advantage of the cheap local labour or to avoid the tariffs and quotas. Japan supplied only a small fraction of the motor tyres and tubes, but almost monopolized the market in the same articles for bicycles. An unusual branch of trade is the importation of old newspapers, chiefly from Great Britain, which are used as wrapping paper by small retailers. One may perhaps be thankful that the Malays are not adherents of the Wahhabi sect of Mohammedanism which strictly enforces the Prophet's prohibition against any representation of the human form. A shipment of newspapers sent to Jeddah was confiscated because it contained sundry advertisements of ladies in intimate garments.

Japanese competition has been very severe in many branches of Malayan trade but has attracted most attention in the field of textiles. Cotton goods have always been one of the principal imports into Malaya both for sale locally and for re-export, and traditionally they have been the most valuable branch of the trade with Great Britain. The spectacular inroads made by the Japanese therefore attracted more attention than their equally heavy gains in less important commodities. The decline in the sales of British textiles was not attributable solely to the Japanese. It began in the early 'twenties, and what happened after 1929 was an accelerated and almost catastrophic fall caused by an intensified Japanese trade drive which coincided with the diminished purchasing power of the native population due to the depression. The story is told in brief by the

statistics for 1926, a normal year, 1933, the last year before the quota was imposed, and 1937. In 1926 the total value of all cotton manufactures imported into British Malaya was $66,000,149 of which the United Kingdom supplied 43 per cent., the British Empire (principally India) 19 per cent., Europe 8 per cent. and Japan 11 per cent. Japan's trade drive suddenly developed in 1930 when the value of her imports of cotton manufactures rose from 10.9 per cent. in 1929 to 23.9 per cent. of the total value, while those of the United Kingdom fell to 30.7 per cent.[23] From this year onwards Japan's share of the market rapidly increased at the expense of British, Indian, and European manufacturers. By 1933 the value of the imports was $24,317,910, of which 25.9 per cent. came from the United Kingdom, 6.7 per cent. from India, 3.6 per cent. from Europe, 4.6 per cent. from the Netherlands East Indies, a new competitor, and 47.4 per cent. from Japan. In 1937 the total import was $30,312,945, of which 41.2 per cent. came from the United Kingdom, 18.8 per cent. from the British Empire and especially India, 3.3 per cent. from Europe, 24.4 per cent. from Japan, and 4.9 per cent. from the Netherlands East Indies. This partial recovery by Japan's competitors of their former trade was the result of the quota imposed in 1934. No attempt was made to reduce Japan's sales to their pre-depression dimensions, and she continued to export to Malaya over twice as much as a decade earlier. The effect of the Chinese boycott which began in the latter part of 1937 was shown in the figures for 1938. The total import was $25,940,185, and of this 45.1 per cent. came from the United Kingdom, 22 per cent. from India, 5.1 per cent. from the Netherlands East Indies, 5 per cent. from Europe, and only 10.8 per cent. from Japan. The United Kingdom captured a considerable part of the Japanese sales and regained her position of twelve years earlier. The Indian manufacturers continued to expand their sales considerably and were an increasingly formidable competitor to Great Britain.[24]

Statistics based upon price give a somewhat misleading picture of the situation in the textile trade, however. The heavy fall in the value of imported cottons—from $66,000,149 in 1926 to $30,312,945 in 1937—was due in part to the lowered purchasing capacity of the population, and to the decline in price of cotton manufactures during the depression. There was however another important element present, namely the much lower price of Japanese as compared with United Kingdom cotton manufactures. To a considerable extent the decline in total value of cotton imports was due to the entrance

of a very greatly increased yardage of Japanese goods after 1929. A more correct picture of Japanese competition is therefore obtained if one considers the yardage imported from the various countries of origin. Of the different varieties of cotton textiles imported, piece goods, plain, dyed, printed or woven coloured, are by far the largest item. In 1927 the total import into Malaya was 154,958,635 yards, of which the United Kingdom supplied 52.2 per cent. and Japan 23 per cent., the remainder coming from India, Hong Kong, Italy, Holland and China.[25] British sales had been growing less for some years, principally owing to the lower price of Japanese goods. Japanese dyed piece goods for example sold for eighteen cents as opposed to thirty-six cents a yard; and in 1927 the yardage of this class of cotton textile from Japan exceeded that from Great Britain for the first time. Other factors which assisted the sale of Japanese goods were lower costs of freight, quicker deliveries, and the gradual passing of much of the value which old-established trade marks of well-known British manufacturers had formerly possessed. Native purchasers were being increasingly influenced by price and not by the superior quality and durability of Lancashire cottons. The Japanese method of distributing their piece goods was also cheaper than the British and so enabled them to offer a lower price. British manufacturers sold to European houses in Singapore who in turn resold to some Chinese firms which avoided as far as possible trading in Japanese goods. The Chinese together with a number of Madras Indians controlled the Malayan retail trade and also most of the re-export of textiles to the Netherlands East Indies and Siam. Japanese exporters sold direct to a different group of Chinese in Singapore and thus eliminated the cost of the commission charged by the European importing house for handling Lancashire goods. Another reason for the decline in imports of British piece goods was the gradual shrinkage in the total quantity re-exported to the Netherlands East Indies, Siam, and French Indo-China. Foreign importers were tending more and more to order directly from manufacturers instead of as formerly from Singapore. Moreover the British share even of the reduced re-exports was becoming less, since Japanese cottons were beginning to enter the field even before the depression.[26] The situation on the eve of the depression was that the import of Lancashire cotton piece goods was declining, in part through the shrinkage of the re-export trade and also because Japanese and to some extent European textiles were conquering the bazaar trade in Malaya owing to their lower price. Japan's imports tem-

porarily declined in 1928 and 1929 owing to the boycott; but in 1930 her share of the yardage suddenly leapt from the 20.8 per cent. of 1929 to 47.7 per cent., while Great Britain's fell from 51.6 per cent. to 27.2 per cent.[27] During the following years the importation of Japanese piece goods rapidly increased while that from the United Kingdom fell. Of the 145,900,000 yards imported in 1933 25,900,000 or 17.7 per cent. came from the United Kingdom and 99,500,000 yards or 68.1 per cent. from Japan. Examination of the imports shows a decline in quantity from 154,958,635 yards in 1927 to 145,900,000 yards in 1933. During the same period the importation of Japanese artificial silk quadrupled, the yardage in 1933 being about 12,600,000 more than in 1928. This increase was rather greater than the decrease in the yardage of imported cotton piece goods. The conclusion appears to be that during the depression the consumption of textiles increased; and that, as in other parts of the world, the preference of the purchasers was to some extent changing from cotton goods to artificial silk.[28]

Indian and Javanese factories were as powerless as British to hold their own against the Japanese. Before the depression India and Java together supplied nearly four-fifths of the important class of textiles known as "sarongs, slendangs and kains", while about an eighth came from Lancashire. The sarong was the national dress of the Malays and Javanese, and in addition to the sales in Malaya there was a considerable re-export to the Dutch colonies. Many of the Javanese factories printed their designs on imported Japanese cloth. Japan began to export sarongs to Malaya during the depression, and in 1933 supplied 58 per cent. of the demand. Imports from British and French India had fallen to 22.3 per cent. of the total, from Java to 18.2 per cent. and from Lancashire to .6 per cent.[29] Chinese manufacturers suffered the same fate in the Malayan silk trade, in which they and the Japanese had each supplied about two-fifths of the market during the 'twenties. The quota did not apply to real silk and by 1936 China's share had fallen to less than a fifth, while Japan's had risen to 76.4 per cent. Moreover the yardage imported had almost doubled owing to the very heavy increase in Japanese imports. The same development took place in artificial silk, save that in this field Germany, Italy, and Siam were added to the list of countries which were quite unable to sustain Japanese competition. United Kingdom manufacturers had never held an important place in the trade owing to the higher price of their goods. In 1928 the imports into Malaya were 4,360,000 yards, of which

Italy and Japan each supplied a quarter, the United Kingdom 18.1 per cent., and China 11.3 per cent. The remainder came from Hong Kong, Siam, the Netherlands East Indies and Germany. In 1933 16,984,000 yards were imported, of which Japan supplied 92.9 per cent., China 4.1 per cent., and the United Kingdom 2.4 per cent. Siam had formerly supplied almost all the artificial silk sarongs; but by 1933 64.1 per cent. came from Japan, 11.4 per cent. from Siam, and 1.7 per cent. from the United Kingdom.[30]

Closely allied to piece goods was the import of wearing apparel, a minor branch of trade the importance of which considerably increased after the imposition of the textile quota. Prior to the depression the United Kingdom provided 28.8 per cent. of the imports, principally the more expensive articles of good quality; while the bazaar trade was shared between various European and Asiatic countries. More specifically, Hong Kong supplied 13 per cent. of the total value of imports, particularly socks and singlets, Japan 16.1 per cent., Germany and Italy together 22.8 per cent., China 6.2 per cent., and India 4.4 per cent. By 1933 the usual development had taken place: imports from the United Kingdom continued to supply the shrunken demand for apparel of high quality while Germany and Italy had been almost driven out of the bazaar trade and supplied only 3.6 per cent. of the imports. Japan had taken first place with 30.5 per cent. followed by Hong Kong with 23.6 per cent., China with 19.7 per cent. and India with 3.9 per cent. The quota did not apply to made up garments until 1938, and by 1936 Japanese imports had grown to 48.6 per cent., Hong Kong's had fallen slightly to 20.7 per cent., China's had dropped to 9 per cent. and the German and Italian share had still further declined to 1.8 per cent. The demand for the more expensive grades had failed to recover and the United Kingdom's share was only 12.7 per cent.[31]

The Commission appointed to inquire into the trade of the Straits Settlements in 1933 investigated the growth of Japanese competition.[32] It pointed out that imports from Japan were almost entirely articles wholly or mainly manufactured, the class in which European exporters were principally interested. Japan's exports had more than doubled at their expense, increasing from 6.2 per cent. of the total manufactures to 13.6 per cent. Had the Committee been gifted with clairvoyance it could have reported that in the following year they would rise to 15.3 per cent. Incidentally one might remark that from the point of view of the value of the imports the Japanese increase was relative rather than absolute. The total value of

Japanese imports in 1933 was not markedly different from what it had been in 1927 and was in fact rather less, $26,597,000 as compared with $30,214,000. During the same period however the total value of Malayan trade had been more than halved and the imports from all other countries had suffered in the same or an even higher proportion. Japan's ability to maintain the same approximate value thus stood out in marked contrast to the experience of her commercial rivals. The Commission also pointed out that in many classes of goods Japan had had a large and growing share of the trade prior to the depression. What had happened after 1929 was that her exports had suddenly accelerated and captured a great part of the reduced market from pre-depression competitors, both European and Asiatic. In addition Japan had rapidly built up a large trade in other articles in which she had had practically no interest a few years previously, such as cotton sarongs, tiles, and nails. The Commission made an elaborate study of all the commodities in which Japanese competition was felt, and showed the startling progress made at the expense of the former sources of supply in nearly sixty different articles. The result was that "many of the leading merchant firms in Singapore, finding it impossible to purchase goods from the United Kingdom or the Continent of Europe at competitive prices, have recently made arrangements to secure supplies from Japan". Previously the European importers had placed the bulk of their orders in Europe, although many of the Indian and Chinese firms in Malaya had for some years been securing supplies from Japan.

The Commission considered that the sudden growth of Japanese competition was due to the partial loss of the market in China owing to the boycott of 1928 and 1929. This forced exporters to seek other outlets, particularly in countries with a low standard of living, of which Malaya was one. Analyzing the reasons for the low price of Japanese goods the Commission agreed that it could not be explained as the result of subsidies. The total pecuniary assistance given by the Government of Japan to industry and to internal and export trade was believed to be only ten million yen, a practically negligible amount when spread over the whole field. The principal single cause appeared to be the exchange value of the yen, the gold value of which had been reduced by 66 per cent. Other manufacturing countries had reduced the gold value of their currencies by some 40 per cent. or less, so that the greater depreciation of the yen gave Japanese exports a very substantial competitive advantage. Another reason was that Japanese manufacturers had placed heavy forward

contracts for raw materials before the fall of the yen, so that for a considerable time its lowered exchange value did not increase the cost of the imported materials used in manufacture. Furthermore the internal price level and wages had not risen, and the Japanese factories had the additional advantage of lower freight rates, longer working hours and lower wages, skilled operatives, efficient management and organization, and up-to-date equipment. The combined result was "the appearance on the world's markets of Japanese goods which now offer good value for money and no longer merit the criticism directed against them in earlier years".

The conclusion reached by the Commission was that "in the absence of further restrictive measures against the Japanese, the latter may look forward within a limited period to a practical monopoly of the bazaar trade of Malaya". The same situation was developing as in the Netherlands East Indies, where the Dutch and native importers were turning to Japan for the supply of goods formerly imported from Europe. The Japanese moreover were attempting with some success to oust the existing machinery of transportation and distribution in the Dutch colonies and to replace it by Japanese steamship companies, importers and retailers. Eventually their attempt was substantially defeated by the Dutch Government; and the Japanese did not try to supplant the existing organization of Malayan trade. In 1934 however the Commission expressed some apprehension lest they should do so. "If Japan continues unchecked the development of her trade at the pace she achieved in 1933, the likelihood appears to be that the European merchant will become more and more an importer of Japanese goods, as the Indian merchant in cotton piece goods has already become. In the further future, if we may indulge in prophecy, even this may fail and Japanese merchants may become, as has happened in Java, the importers and distributors of their own goods, and British goods become finally restricted to a limited range of specialities in which Japan is unable to compete or finds it not worth her while to do so."

To diagnose the situation was easy: to find a remedy was not. The Commission examined various proposals and found them all useless or undesirable. At the same time it felt strongly that something should be done. One suggestion was the increase of the existing tariffs in the Malay States and their extension to the Straits Settlements. The difficulty was that the difference in price between Japanese and British goods was so great that a drastic increase in duties would be necessary. The purchasing power of the population

of Malaya was low and had been still further lessened by the depression. The cheapness of Japanese manufactures had therefore been of material assistance to them; and the exclusion of Japanese competition would compel them to buy the much more expensive Western commodities. This created the dilemma that "any effective preference must be unreasonable and any reasonable preference must be ineffective". The proposal that all goods should be marked with the name of the country of origin was dismissed as ineffective. "It is extremely doubtful whether even a knowledge of the source of origin would for long prevail against the cheapness of Japanese goods." A third suggestion was that a system of quotas should be established in the Straits Settlements and the Malay States to limit the entry of Japanese goods. The majority of the Commission opposed the idea from the fear that it would raise the cost of living to the poorer classes of the population and would also injure the entrepôt trade. The introduction of quotas would entail a certain measure of official regulation such as the examination of imports with resulting formalities and delay. "The majority of the commercial community hold that it is largely the absence of these consequences of official control that has retained, for Singapore in particular, a valuable entrepôt trade, and that their introduction would seriously damage that trade." The Straits Settlements like Hong Kong have always been vigorous exponents of free trade; and it is therefore interesting to note that "there is a growing volume of dissentient opinion among local manufacturers and firms more particularly interested in import business". This division in Straits Settlements opinion would have been inconceivable forty years earlier and was the result of the growing importance of the internal market in Malaya combined with the slow decrease in the re-export trade. While the majority of the Commission were agreed on "the urgency of finding methods to deal with" Japanese competition they were dubious of all the remedies proposed, and on this head of their inquiry they returned an answer answerless.

The Commission made its report on 22nd May, 1934; and on 7th May the President of the Board of Trade had announced that the governments of colonies and protectorates would be invited to regulate by quotas the importation of cotton and artificial silk piece goods of foreign origin. Before adopting this policy negotiations had been conducted with the Japanese manufacturers and Government to limit the competition in textiles. The Japanese however had been unwilling to make any concessions, and action by Government

therefore followed. The Governor had several interviews with a committee of the Singapore Chamber of Commerce, and attempted so far as possible to meet their wishes in the terms of the Ordinance which was drawn up to comply with the injunction of the President of the Board of Trade. The majority opposed the imposition of quotas and a resolution condemning them was passed at a meeting of the Singapore Chamber of Commerce by a vote of twenty-three to nine. The division of opinion was typical of the transitional stage through which Singapore is passing, the rising importance of the peninsular trade and the decreasing but dominant share of the trade with South Eastern Asia upon which the Colony's prosperity was originally founded. The minority represented the importers of Lancashire textiles whose interests lay in the Malayan market and who welcomed a measure which would restrict the Japanese competition that threatened to ruin them. They pointed out that the efforts of the British Government to reach an agreement had been defeated by "the unreasonable attitude of the Japanese", and that quotas had become essential "to safeguard what is left of our Lancashire trade". The majority were the older and forty years ago the sole economic group, the merchant houses and shipping firms who were concerned primarily with the re-export trade. They felt that there was serious danger that it would be "irretrievably lost" if a policy of regulating trade were adopted; and demanded that Singapore like Hong Kong should be exempted from the necessity of imposing a quota system since it controlled 92 per cent. of the Malayan re-export trade. The Chamber of Commerce stressed the traditional and very cogent argument that the entrepôt trade of Singapore had been built up in the face of powerful competition, and that "complete freedom from restraint in both the export and the import trade" had been a fundamental cause of success. Chinese dealers were the mainstay of the trade; and they had made Singapore their headquarters because of its geographical situation, the absence of customs formalities, and the economy in transacting business which was made possible by free trade. Incidentally one might remark on how similar the motives were to those which had led other Chinese merchants to establish themselves at Hong Kong. While Chinese trade was large in the aggregate, individual transactions were often small—a single case being that of mixed textiles and other goods bought with the proceeds of a small sale of rubber. "The cost in time, money and patience of passing his goods through the Customs and of complying with Customs formalities is elimin-

ated. He has no heavy handling charges: for his commodities arrive at and leave his door by water. Storage charges, demurrage charges, overtime charges do not affect him for his shop is at once his warehouse, his residence and his place of business. This economy of expenditure is vital in a business which is conducted on a minimum capital and often on so narrow a margin of profit that success is dependent on taking advantage of every infinitesimal fluctuation of a difficult and variable market. . . . Except for the lodgment of a declaration at the Import and Export Office there are no restrictions or regulations of any kind." The Chamber of Commerce feared that the Chinese traders might feel there was no longer any advantage in a market where their purchases were impeded by the delays and additional costs necessitated by releasing their textiles from re-export depôts. "If we make it more difficult to buy manufactured goods, it follows that we shall make it more easy for our competitors to eat into our produce trade." Some speakers also condemned quotas on the ground that they would raise the cost of textiles to the poorer classes of the Malayan population who could ill afford to pay a higher price. The quota Ordinance was designed for the benefit of the Lancashire manufacturers and operatives and not for that of Malaya. If they could not or would not reduce their costs of operation so as to compete with Japan there was no reason why the re-export trade and the Malayan consumers should be penalized to assist them. [33]

The same arguments that the re-export trade might be injured were again advanced when a bill to introduces quotas based upon the model Ordinance drafted by the Colonial Office was brought before the Legislative Council of the Straits Settlements on 11th June.[34] It was pointed out that 76 per cent. of the cotton piece goods imported into Singapore were re-exported and that 80 per cent. of the textile re-exports were Japanese. Under the proposed Ordinance Japanese imports would be restricted to about 40 per cent. of their total in 1933 so that the sale of textiles in the Netherlands East Indies and other countries was likely to decline. The opponents of the measure were naturally unable to foresee that under stress of the same cause the Netherlands East Indies were on the eve of adopting quotas which would limit the import of textiles from Malaya. Government speakers pointed out that the Straits Settlements exporters of textiles were in a cleft stick. The Malay States would certainly impose a quota, and if the Straits Settlements were excepted as demanded, their textile exports to the Malayan

market would be liable to the quota as well as to the loss of the preference already granted on Empire products. To escape the double handicap they would have to prove Empire origin, which might often prove impossible since the voyage from the country of origin would have been broken at Singapore or Penang. The provision of re-export depôts would preserve the re-export trade from injury. As regards the claims of the poorer Asiatics, Government speakers pointed out that the *pax Britannica* had brought the Malay cultivator and the Chinese immigrant a far higher degree of material prosperity than they would otherwise have attained. To the Chinese in particular Malaya would never have become an El Dorado to which they resorted by the hundreds of thousands if the establishment of British rule had not made development possible by assuring property, opening up the country by roads and railways, and by greatly improving health conditions. The British Empire could not afford to be a purely philanthropic institution: its protection and continued existence depended upon the revenue collected in Great Britain *inter alia* from Lancashire. The income from which the revenue was derived was based largely upon overseas trade; and to maintain the basis of taxation and therefore of British protection was as essential for the protected as for Great Britain. Until 1929 the Asiatic population of Malaya had bought chiefly British textiles; and in the existing emergency it was only a fair return for past and prospective benefits that they should buy a reasonable percentage of Empire cloth. Digressing from the immediate theme of the debate, one might observe that almost all empires except the British have as it were practised the theory of trusteeship with tariff limitations. If one studies the American, Dutch, or French colonial policies, one observes that none of them have felt trusteeship to be incompatible with the reservation of some special economic rights to themselves. All of them have earnestly striven to promote the interests of the colonial populations; but they have never considered that this precluded them from a due regard for their own commercial interests. The French and Americans long before the Great War, and the Dutch from the time when Japanese competition jeopardized their own trade, followed a policy of imperial preference. The European colonial powers were impelled towards this policy by more cogent reasons than the United States, for none of them could compare with her in, e.g. extent of natural resources and size of the home market with which to support their populations. Japanese competition was so unprecedented and so uncompromising in its deter-

mination to exploit its advantages to the uttermost that no Western nation could withstand it. All the colonial powers were faced with the alternative of protecting their trade or of being practically driven out of the markets whose material prosperity they had so largely created. All of them reacted to the situation with tariffs or quotas or both; they did not hope to recover the whole of their lost trade but they did propose to retain more than a token share of it. Asiatics or Africans with their lower standard of living should not be precluded from buying commodities produced under an Asiatic standard of living and compelled to buy only those whose price is determined by a Western standard. The British Government did not attempt to restore Lancashire's former market and allocated to Japan a share of the imports which was over twice as large as it had been before the depression. Nevertheless in large measure it was Western standards of administration and development which had created the purchasing capacity of colonial markets; and so long as the immense difference continues between Western and Asiatic costs of production some form of protection will be unavoidable to preserve part of them for Western manufactures. Eventually the Importation of Textiles (Quotas) Ordinance of 1934 was passed by the vote of the twelve official members of the Legislative Council, the whole of the seven unofficial members present opposing it. It became law on 15th June with effect as from 7th May, 1934; and in June and July the Federated and Unfederated Malay States and Sarawak came into the scheme.

The Ordinance imposed quotas upon the importation of cotton and of artificial silk piece goods but not upon other textiles or commodities in which Japanese competition had been severely felt. The import of ready-made clothing however increased to such an extent that on 1st January, 1938, it became necessary to impose quotas upon these articles when made of cotton or artificial silk. The Malayan quota system was much more restricted in its scope than that of the Netherlands East Indies. The Dutch however made little use of preferential duties, while in the Malay States (though not in the Straits Settlements) textiles which were the produce of the British Empire had received a moderate preference since 1932. The preference was too small to have any appreciable effect upon Japanese competition since in 1933 for example the average price of Japanese was ten and of United Kingdom textiles eighteen or nineteen cents a yard. The quantity of textiles imported during 1927 to 1931 was taken as the basic quantity upon which the quota assigned

to each country was calculated. This period was somewhat unfavourable to Japan since the great increase in her textile imports began in 1930. Two types of licences were issued under the Quota Ordinance, viz., restricted and ordinary import licences. The former were issued for imports from any foreign country where the net import of all textiles subject to quota during the basic years 1927 to 1931 had exceeded 2½ per cent. of the total net imports. The scheduled countries, as they were called, were Japan, China, the Netherlands East Indies, Italy, and the Netherlands. Ordinary import licences were issued for non-scheduled countries, i.e. those from which the net imports in 1927 to 1931 had been 2½ per cent. or less of the total. The principal non-scheduled countries were French India, Germany, Russia, Switzerland, and the United States. Importers who applied for licences to import textiles from a scheduled country were required to prove that they had been direct importers from it during the period 1st January, 1933, to 7th May, 1934. The size of the quota assigned to each importer was determined by the percentage which his imports had had to the total import from the country in question during the period 1933–4. For non-scheduled countries licences were issued on the basis of applications, preference being given to those who had previously imported. With few exceptions the annual applications for licences to import from non-scheduled countries were less than the total national quota.[35] All licences expired on 31st December of each year, and fresh applications had to be made by importers for the ensuing year.

Textiles which were imported for re-export to foreign countries and not for sale in Malaya or Sarawak were exempted from the quota if they were placed in one of the Government re-export depôts which were established on 20th June, 1934, at Singapore and Penang. They were released to the owner for re-export at such times and in whatever quantities he requested. Still further to facilitate the re-export trade, licensed private depôts were permitted which included the premises of *bona fide* merchants dealing in regulated textiles and of *bona fide* warehouse-keepers acting on behalf of a number of merchants. By this regulation importers were enabled to retain on their own premises textiles intended for resale abroad as they did before the Quota Ordinance was passed, and to re-pack or otherwise re-arrange the contents of crates in order to fill the orders received.* The licenced depôts had to be abolished at the

* The re-export trade was conducted partly in whole cases as received from the manufacturer and partly in split cases to fill smaller orders, which came principally from the minor ports of the Netherlands East Indies. For the split-case trade, cases were

end of 1936 owing to the very great difficulty experienced in controlling them in connection with the smuggling of textiles into Malaya which developed to evade the quota. The Singapore and Penang Harbour Boards established trans-shipment re-export depôts at the wharves. Goods passing through the Colony on a through bill of lading or landed merely for trans-shipment abroad could thus be stored close to the docks and were exempt from quota regulations.[36]

Reduced quotas were issued in 1934 since the Ordinance only had effect as from 7th May; but textiles ordered prior to this date were admitted even if they exceeded the allowance for the year. Imports in excess of the 1934 quota amounted to 10,544,147 yards from Japan and 108,653 yards from the Netherlands East Indies. They were liquidated in 1935 by reducing the Japanese and East Indian quotas for that year by the above amounts. The first normal quota year was therefore 1936, and each scheduled country received its full twelve months' quota without deductions based upon its percentage share of the Malayan market during the basic years 1927 to 1931. Japan received a quota of 34,668,423 yards, which was 39.29 per cent. of the net imports of 88,305,000 yards of regulated textiles in 1933. The Chinese quota of 12,190,559 yards was considerably in excess of the export of 8,872,000 yards of regulated textiles to Malaya in 1933. The quota for the Netherlands East Indies was 3,302,185 yards, the imports for 1933 having been 2,549,000 yards. The Netherlands quota was 3,225,819 yards compared with imports of 662,000 yards in 1933, and the corresponding figures for Italy were 3,581,209 and 106,000 yards. Comparison of the quotas for China, the Netherlands, the East Indies, and Italy with their sales in 1933 shows how heavily Japan had cut into their shares of the market in 1927 to 1931. All non-scheduled countries received the same import quota of 2,919,455 yards for each full year, an allotment which proved to exceed the imports from any of them. French India was the only country which exported almost up to the amount of its quota; while Russian exports which had been 3,039,000 yards in 1933 and over 900,000 in 1935 suddenly fell to 68,821 in 1936. In 1936 the United States exported 171,250 yards, Germany 160,497 yards, and Switzerland 138,044 yards.[37]

re-packed with assorted piece goods and sometimes other commodities in accordance with the order received from the dealer abroad, who paid for his consignment by remitting the Straits produce he had collected. Although the public re-export depôts had facilities for opening and repacking cases, they were obviously less suitable than a merchant's own store, and for this reason licensed depôts on private premises were legalized.

The effect of the quota upon United Kingdom trade is shown by the following table of the imports of cotton piece goods, which were by far the most important group of textiles placed under the quota system.

	Total Imports	*From United Kingdom*	*From Japan*
1933 .	145,900,000 yards	17.7%	68.1%
1934 .	144,500,000 ,,	20.06	68.65
1935 .	103,600,000 ,,	32.23	51.93
1936 .	114,400,000 ,,	33.30	46.32
1937 .	141,802,000 ,,	37.51	36.0
1938 .	114,994,000 ,,	40.52	18.6

The decline in United Kingdom imports was abruptly reversed, and by 1936 sales were rather more than they had been in 1930 although far below the 52.2 per cent. of 1927. Their continued rise in 1937 and 1938 was due to the Chinese boycott as well as the quota: in the latter year the total quantity imported from Japan was only 26,408,000 yards or about half what it had been in 1937. The United Kingdom percentage would have been even higher if it had not been for the remarkable growth of imports from India. Japan's percentage actually increased in 1934 owing to the heavy imports in excess of the quota which have been already mentioned, and the abrupt fall in 1935 was due to the compensating reduction of the quota for that year. Her percentage for 1936 was slightly more than twice the 23 per cent. of 1927, the last normal year before the Chinese boycott of 1928 and 1929 and the sudden expansion of her sales which began in 1930. In other words the Quota Ordinance enabled British manufacturers partially to recover lost ground and nominally reduced Japanese imports to about the yardage of the basic years 1927 to 1931. The qualification "nominally" is important since the clandestine entry of Japanese piece goods in 1934 to 1937 is believed considerably to have altered the official statistics. One other conclusion is also evident—that the beneficial effect of the Quota Ordinance was far from being confined to the United Kingdom. Cotton piece goods from the British Empire, principally India, were free from the quota and also enjoyed the same Imperial Preference as those from the United Kingdom. Their share of the market rose from 1.24 per cent. of the total in 1934 to 18.26 per cent. in 1938. Imports from China and the Netherlands East Indies expanded to within a few hundred yards of their quotas. Those from Holland

and particularly Italy also increased largely, despite the temporary suspension of the Italian quota during the period when sanctions were in force.[38]

Cotton sarongs, slendangs, and kains were also regulated; and the effect was to restore a condition roughly approximating to that which had prevailed prior to the sudden growth of Japanese competition. The principal beneficiary was India, which increased its exports to 36.31 per cent. of the total in 1938, or somewhat less than its share of the market prior to the depression. Javanese exports also recovered; while imports from Japan fell to 9.2 per cent. The quota on artificial silk piece goods prevented Japan from completing her conquest of the Malayan market and reduced her share to 78.9 per cent. of the 14,728,000 yards imported in 1938. United Kingdom sales continued to fall—to 4.0 per cent.—owing to the much higher price. As with sarongs, the benefit was reaped by Japan's Asiatic competitors: China's share of the imports rose to about 4.7 per cent. in 1938 and that of India and Hong Kong to 7.2 per cent. The quota also raised Italian artificial silk from the virtual extinction of 8,000 yards in 1933 to 553,000 yards in 1938. Artificial silk sarongs were also subject to quota and in 1938 Japan's share of the yardage imported was 66 per cent., about what it had been in 1933. Hong Kong and India benefited, and their share of this limited market rose from virtually nothing in 1933 to a third of the total in 1938.[39]

The table on page 155 gives the total imports of the separate categories of cotton and artificial silk piece goods and sarongs which have already been discussed. The figures in the table and in the preceding analysis are for gross imports, i.e. the total import both for sale in Malaya and for re-export.[40]

The rise in total imports in 1937 reflected the partial return of prosperity to Malaya's basic industries, and the decline in 1938 was caused by the fall in sales of tin and rubber, particularly in the United States. The shrinkage of Japanese imports was the result of the Chinese boycott; and the reduction of those from the United Kingdom was due to the lessened purchasing capacity of the population. They turned to the cheaper Indian and Hong Kong textiles, which slightly increased their share of the market in 1938. Comparison of the returns shows the devastating inroads which Japan made into the sales of all other countries both European and Asiatic prior to the imposition of the quota. Japanese imports in 1933 exceeded those of 1927–31 by approximately 81,000,000 yards, of

	Total Imports.	*United Kingdom.*	*British Empire.*	*Japan.*	*Other Countries.*	*Total Re-exports.*
	yds.	yds.	yds.	yds.	yds.	yds.
1927–1931 (Average) .	157,912,000	59,002,000	15,117,000	45,795,000	37,998,000	48,630,000
1933	182,969,000	26,392,000	5,413,000	126,939,000	24,225,000	55,916,000
1934	173,337,000	29,468,000	5,600,000	119,662,000	18,617,000	56,660,000
1935	125,123,000	33,932,000	9,417,000	65,195,000	16,579,000	50,539,000
1936	143,282,000	38,635,000	16,658,000	67,524,000	20,465,000	47,316,000
1937	175,808,000	54,938,000	31,626,000	69,068,000	20,176,000	45,057,000
1938	137,623,000	47,436,000	31,778,000	38,964,000	19,445,000	38,187,000

which about 56,000,000 represented displacement of British and other textiles, and 25,000,000 an expansion of the market. The imports for 1937 more nearly approached the distribution of the market in the basic years than they had previously done. Japanese imports were rather more than half what they had been in 1933, although half as large again as in 1927–31. The import of United Kingdom textiles was nearly twice what it had been in 1933, and was within measurable distance of the share of the market held in the basic years. The recovery was made chiefly in cotton piece goods and not in the other categories of regulated textiles. The imports in 1937 from the British Empire, principally India and Hong Kong, were nearly six times what they had been in 1933 and twice their average during the basic years. The total imports from other countries in 1937 were less than in the earlier years, although as already pointed out this was not the result of the quota. Some of them markedly increased their sales, but none succeeded in exporting up to their maximum allowance. Imports from Russia suddenly declined by almost 3,000,000 yards, and virtually disappeared from the market. Study of the gross totals confirms the impression produced by examination of the separate categories. The benefit of the Quota Ordinance was by no means confined to United Kingdom goods: it also enabled Empire and foreign countries to regain a varying part of the market from which they had been driven. The effect of the quota upon Malayan consumption cannot be accurately determined. Comparison of the figures for 1937 with those for the basic period shows that total imports increased while re-exports declined, and that the quantity of textiles retained for the Malayan market increased by 21,469,000 yards. These statistics took no account of the extensive smuggling of Japanese textiles into Malaya, which was estimated in 1937 to bring in perhaps an additional 7,000,000 yards a year. The conclusion would appear to be that the restricted quantity of the cheaper Japanese goods allowed to enter Malaya and the partial substitution of the more expensive British textiles did not affect the Asiatic consumer injuriously. This conclusion is strengthened by the fact that in the Federated Malay States the annual purchase of piece goods per head of population increased from under seventeen yards in 1933 to nineteen in 1937.

An important problem connected with the quota was the proportion of British and foreign textiles retained for consumption in Malaya and the percentage of each which was re-exported. No satisfactory answer could be given, for, while the countries of origin

of the gross imports were noted, complete records were not kept of the nationalities of textiles exported from Malaya in all vessels. Owing to the "almost uncontrollable use of small craft *ex* Singapore, it would be impossible to give anything more than what almost looks like wild guessing". The books of the re-export (including the trans-shipment) depôts of course gave the quantity and nationality of the textiles released for re-export, and showed that practically the whole amount thus disposed of was Japanese. The volume however was less than the total textile re-export by over 11,000,000 yards a year in 1935 and 1936 owing to shipments from private re-export depôts; and no record was kept of the nationality of these exports. A "reasonably accurate" statement gave the quantity retained for the Malayan market in 1937 as about 73,000,000 yards of British and 54,000,000 of foreign origin, and in 1938 as approximately 62,000,000 and 42,000,000 yards. The only certainty was that United Kingdom and British Empire textile imports to Malaya were both considerably increased by the quota, and that their sales in Malaya were enlarged to an important degree. The reports for 1935 to 1938 on the effects of the quota in the Federated Malay States stated that the sale of British textiles had grown. The purchasing power of the population had increased due to the improved condition of tin and rubber, the price of Japanese textiles was somewhat higher, and also "the Chinese community in these States is now buying more high class cottons than in previous years". With the gradual return of higher incomes the overwhelming attraction of cheapness was losing some of its force; and with the outbreak of the Sino-Japanese war the boycott greatly increased the sale of British textiles.[41] The effect of the quota system upon the re-export trade of Singapore and Penang with Asiatic countries cannot be exactly determined. At first glance it would appear to have been serious since reference to the above table will show that the total textile re-exports fell from 55,916,000 yards in 1933 to 38,187,000 yards in 1938. On the other hand, from 1933 onwards the Netherlands East Indies which had been the principal market cut down their import of textiles from Malaya by a series of Ordinances, and other Asiatic markets also raised barriers against Japanese textiles. In view of these developments the fall in textile re-exports was no greater than was to be expected. An additional cause of the decrease in 1938 was that the Chinese boycott was in force throughout South East Asia.*

* Statistics collected by the Singapore Chamber of Commerce showed that of the re-exports of the Straits Settlements in 1933, 47·7% were sent to the Malay States, Brunei, and Sarawak, and 52·3% to Asiatic countries (Netherlands Indies, Siam,

The effect of the quota was offset to an important extent by increased imports of Japanese "Produce of the British Empire" from Hong Kong, by a growing demand for Japanese textiles and made-up articles not subject to quota, and also by fraudulent customs declarations and smuggling. It has been estimated that perhaps 7,000,000 yards a year were smuggled into Malaya, principally at Singapore. Very little, apparently, was smuggled direct into the Malay Peninsula: a small quantity crossed from Siam to Kelantan but it did not get further south into the more densely populated areas. Means of communication with the rest of Malaya were so few that they could be successfully watched. These developments made their appearance in 1934 on a modest and experimental scale which burgeoned with increasing exuberance in the following years.[42] Japanese silks of low quality appeared from 1934 onwards and to some extent took the place of cotton goods of the more expensive grades. The import of ready-made articles of silk or cotton from Japan and Shanghai, such as shirts, trousers, sheets and mosquito nets also rapidly increased. Eventually it became necessary to extend the quota on 1st January, 1938, to cover made-up garments of cotton and artificial silk. Their exemption from the quota was subjected to rather excessive strain when Japanese sheets were imported which were about half the size of a room. They were made of strips of piece goods sewn together in such a way that they could be unstitched without injury to the fabric. One firm was prosecuted for this peculiar style in bedlinen; but the learned judge was convinced by the arguments of the defence that some customers were addicted to sheets of these dimensions and dismissed the case. This form of evasion was finally checked in other ways. Another variety of smuggling which was suspected but not proved was the import of textiles in cases marked "electric light bulbs" which had a few protective layers of bulbs on the top. There is reason to believe that the press learned of the intended search by the customs authorities and gave it so much publicity that the Malayan importers were able to warn the Japanese exporter to suspend operations until a more auspicious occasion. A number of fraudulent customs declarations were also detected, e.g. an importer declaring as pure silk a consignment which on examination proved to be 20 per cent. pure and 80 per cent. artificial silk.

Philippines, North Borneo, India, Burma, Ceylon, Mauritius, French India, Aden, and other ports round the Indian Ocean), and in the first half of 1934, 49·9% and 50·1% respectively. For Singapore the proportions were, in 1933, 42·1% local and 57·9% foreign, and in 1934, 44·1% and 55·9% (*Report on the Working and Effects of Quotas . . . 7 May to 31 December, 1934*, p. 7).

The Riau Archipelago in 1935 became a very active and ingenious centre for evasions of the Quota Ordinance. The islands are numerous, have a small population, and while forming part of the Dutch Empire are outside the Netherlands Indies customs zone and are not under effective control. Consequently the Dutch, while sympathetic, have not been able to give much help in solving the problem. The Archipelago is visible from Singapore and tiny British islands lie within a few miles of it, so that it may be truly said that all things have worked together for good! In 1935 a number of Chinese tailors migrated from Singapore to the Riau Archipelago, and shortly thereafter the shipment of textiles from the Singapore re-export depôts to the islands began to increase. It increased thirty-fold from 21,520 yards in January, 1935, to 618,183 yards in February, 1936, although thereafter it very slowly declined. It began to appear that the islanders were developing a most unprecedented appetite for piece goods. Very soon ready-made apparel of original design began to appear in Singapore—shirts with tails four yards long or trousers with cuffs which when unrolled proved to have legs twelve yards in length. Bolster and pillow cases and mosquito nets of equally capacious dimensions also arrived: the logic was incontrovertible when one considered the brobdignagian proportions of customers who required four-yard shirt tails. The mosquito nets were of unusual but in a way undeniably effective pattern: they were made not of net but of double thicknesses of cotton or artificial silk and contained about forty yards of piece goods. They would undoubtedly have excluded even the smallest mosquito; but the unfortunate sleeper would have been equally cut off from the entrance of air or of any breeze of lesser intensity than a typhoon. Moreover these made-up articles all shared the peculiarity that the lengths of piece goods which composed them were not cut or shaped, and were so loosely tacked together that they could be unstitched without damage. Some indication of the extent to which regulated textiles from the re-export depôts re-entered Singapore as made-up goods may be gathered from the fact that in the single month of February, 1936, 855 dozen mosquito nets each composed of about forty yards of piece goods arrived from the adjacent Karimon Islands. These evasions of the quota were facilitated by the fact that since Singapore was a free port a rigorous examination of imports was not usually made, except of goods which the importer himself declared as coming under the Textile Quotas Ordinance. Some time therefore elapsed before these ingenious devices were dis-

covered. As fast as one subterfuge was found out another took its place; but eventually all the above practices were put down by confiscating the piece goods and punishing the offenders.

In 1936 and 1937 however the earlier expedients were replaced by a more open and at the same time more successful method which had the additional merit of requiring less work from the Chinese in the Riau Islands. Regulated textiles in small quantities of e.g. 1,000 yards were released from the re-export depôts and duly exported in a perfectly legal manner to one of the islands. There they were cut up into lengths of fifty to 400 yards and returned to Singapore without the irksome formality of making them up into outsize shirts or mosquito nets. Chinese hawkers from Singapore habitually visited the adjacent British islands to trade and it was almost impossible to prevent them from crossing the three or four miles of water which separated them from the Dutch islands. They returned to Singapore with the piece goods on board and if arrested asserted that they bought the material in Singapore for sale in the British islands. They would deplore the depressed state of trade and say that they hoped to sell what was left of the piece goods the next time they visited their customers. The story was exceedingly hard to disprove even though it was virtually certain that the fabric came from a Singapore re-export depôt. For one thing a hawker was certain to have a friend in Singapore whose corroborative detail added artistic verisimilitude to an otherwise bald and unconvincing narrative. For another, exports to the Riau Islands were very largely in coastal boats few of which made out accurate manifests of cargo. Nobody knew the textile consumption of the Riau islanders nor, in the absence of effective Dutch control, was there any way of ascertaining it. A problem composed almost exclusively of unknown quantities was not susceptible of a solution which would convince a court of law; and the only certainties were that the textile exports to the Riau Archipelago had most notably increased and that a curiously large yardage of textiles was returning to Singapore from there or thereabouts. A steady stream of small captures was made, but the only effective method of prevention would have been an extensive and expensive police motor launch patrol of the channels between the British and Dutch islands. The Chinese boycott solved the problem: traders and consumers refused to accept Japanese goods, and the Singapore tailors returned home. In 1938 the textile exports to the Riau Archipelago were 494,000 yards, a tenth of the quantity in 1936.

Apart from the Quota Ordinance, foreign trade with Malaya has been affected to a moderate degree by the preferential duties established in March, 1932, and extended in October as the result of the Ottawa Conference. Malaya is not a unit in customs matters, the Straits Settlements, the Federated and the various Unfederated Malay States having separate tariffs. The real distinction is between the Malay States and the Colony: the former rely increasingly on customs duties as a source of revenue while the latter, like Hong Kong, imposes few duties from fear of injuring the entrepôt trade. The Straits Settlements in 1937 obtained 32.7 per cent. of their revenue from the duties on imported alcoholic liquors, tobacco, and petroleum. Imperial Preference has been granted on the first two items and, in addition, foreign but not British motor cars have had to pay a registration fee of 20 per cent. of the value. This was reduced to 15 per cent. by the Anglo-American Trade Agreement of 1938. The Malay States have a much more extensive list of dutiable articles; and in 1937 the Federated Malay States derived 52.2 per cent. of their revenue from their tariff. They form a customs union but the five Unfederated Malay States have separate and sometimes differing lists of dutiable articles and customs rates. The amount of preference given to British Empire products also varies. Speaking generally the principal articles upon which import duties are levied are alcoholic liquors, tobacco, petroleum, textiles, apparel, rubber shoes, cement, cycles and motor cars. *Ad valorem* duties vary on foreign goods from 10 per cent. to as high as 50 per cent. on a few articles like cosmetics, and on Empire products from 5 per cent. to 25 per cent. To cite a few examples: silk, cotton, artificial silk and other piece goods in all the Malay States pay 20 per cent. *ad valorem* or five cents a yard whichever is higher if of foreign origin, and if Empire products 10 per cent. *ad valorem* or two and a half cents a yard. The only exception is Johore where Empire piece goods enter duty free. Wearing apparel when dutiable pays 20 per cent. if of foreign and 10 per cent. if of Empire origin. Rubber shoes pay fifty cents a pair if of foreign and usually ten cents if of Empire origin. Foreign motor cars pay the same registration fee as in the Colony; and machinery is usually duty free.[43] The rates are low when compared with tariffs in Western countries, and the moderate degree of preference has usually proved insufficient to counterbalance the far lower price of Japanese goods. For this reason the preference was re-inforced by the textile quota; but it has not been extended to other commodities.

The establishment of Imperial Preference to some extent affected the re-export trade of the Straits Settlements to the British Empire. Empire goods reshipped from the Colony to the Federated Malay States were granted the preferential rate of duty only if they were in the original unbroken case and with the original documents, and if trans-shipped at a Colony port on a through bill of lading. The result was "that some goods which are entitled to receive preferential treatment do not receive it". The principal sufferers were Chinese middlemen who from the smallness of their orders were unable to forward unbroken cases to the Federated Malay States. Where Empire goods were imported in large quantities the tendency towards direct shipment to Port Swettenham instead of to Penang or Singapore was encouraged, so that the Colony's merchants lost a certain amount of their former trade. The business community strongly urged that the Federated Malay States relax their regulations and allow the preferential rates on broken cases where their identity was established, as was the custom in the Unfederated Malay States. The force of the argument was somewhat weakened by the admission that the result in the latter case was that "some goods which ought not to receive preferential treatment probably do receive it"; and the request was refused by the Government of the Federated Malay States. Straits exporters also complained that reciprocal preferences had sometimes been refused, particularly by India and Australia on betel nuts and copra. The reason was that by long-established custom Malayan and foreign produce were blended to produce the necessary grades; and in the past no attempt had been made to keep track of origin which was immaterial. The blended produce however was not eligible for preference, and when the Australian and Indian Governments discovered that they had sometimes unwittingly granted it they became increasingly stringent in their demands for proof of Empire origin.[44]

Sir Cecil Clementi, the Governor, strongly urged a Malayan customs union in 1931 and 1932. He considered that the declining importance of the foreign entrepôt trade meant that the Straits Settlements would have to rely increasingly on their Malayan market. The Malay States were more likely to increase their tariffs than to abandon them; and owing to their establishment of Imperial Preference they must require proof of Empire origin to protect themselves from loss of revenue on foreign goods. He predicted that "British goods imported under preferential agreements into the Malay States are likely in future to avoid the ports of the Colony

because if bulk is broken here preference will be lost". The Governor also feared that the exports of produce from the Malay States, "our safest and most promising channel of commerce", might be diverted from the Colony to Port Swettenham. Preferential treatment by other parts of the Empire "will be limited to articles whose Empire origin can be proved", and this might not always be possible for exports from the Colony owing to the trade practice of blending Empire and foreign produce.[45] The Governor's proposals were almost unanimously condemned by the business community of all nationalities; and the committee which he appointed to investigate the question reported strongly against it in 1932.[46] The members entirely agreed that it was absurd to have six separate tariffs and customs administrations for a population of about 4,345,000 living in an area of 50,900 square miles. In addition to the duplication of staff and expense they were "no more than an inconvenience to trade". The principal sufferers were the various small industries of the Straits Settlements which could never be certain of the permanence of their market owing to the increasing reliance of the Malay States on customs revenue. The committee agreed that the Colony's trade with the Malay Peninsula was a much higher proportion of the whole than it had been in the nineteenth century. Nevertheless Singapore and Penang depended for their prosperity primarily upon their entrepôt trade with the "area stretching from the Madras Coast to China", and the greater must not be sacrificed to the less. "General tropical produce . . . of every variety are imported into Singapore and Penang and there are sorted, graded, conditioned and treated. To a very large extent payment is made in cottons, hardware, cutlery, agricultural instruments and the miscellaneous stock in trade of the typical 'sundry' shop which are purchased in Singapore and Penang for export. This produce exchange trade is then an industry in itself. It is in fact a primary industry of the Colony and gives employment in one form and another to a large part of the population . . . it is the backbone of the country." Chinese dealers were the mainstay of the trade, and the committee feared that the imposition of customs duties with their attendant regulations and delays might drive many of them away from Singapore. They therefore opposed a customs union unless the Malay States would accept the Straits Settlements' import tariff and abolish most of their export duties. They admitted this to be impracticable since the economic and fiscal interests of the Colony and the Peninsula were fundamentally different. The Straits Settlements were primar-

ily an entrepôt dependent upon free trade; while the Malay States were a mining and agricultural dependency to which "a revenue tariff is an easy, valuable and legitimate method of taxation".

Sir Cecil Clementi's arguments were by no means lacking in cogency: the relative importance of the foreign as opposed to the peninsular re-export trade had been declining for many years. This had been brought about by the expansion of Malaya which resulted from the growth of mining and agriculture, and the simultaneous falling off of the foreign markets. If the Governor had spoken a few years later he could have pointed to a still further decrease as the result of the Crisis Import Ordinance in the Netherlands East Indies. He was also correct in his warning that the establishment of Imperial Preference would to a limited extent injure the exports of the Straits Settlements both to the Malay States and the Empire overseas. On the other hand the failure to obtain Empire preference affected only a small portion of the trade. Tin and rubber, the two staple exports, entered other parts of the Empire duty free whether they were of British or foreign origin; and furthermore the bulk of Malayan exports were sold in foreign countries and not in the Empire. The inducements to enter a Malayan customs union were therefore not very strong, and working against them was the passionate conviction for which very strong arguments could be advanced that free trade was the primary cause of the Colony's prosperity. In spite of the growth of the peninsular market the foreign entrepôt trade was still the more important, although it is impossible to determine exactly the value of each of them. The trade statistics do not distinguish between domestic exports of British Malaya and re-exports of imported produce, nor between imports for local consumption and imports for re-export. What was described as a "reasonably accurate" estimate for 1935 placed the exports of the Straits Settlements to the Federated and Unfederated Malay States at $87,121,000 or 15 per cent. of the total, and the imports from them at $189,565,000 or 30 per cent. of the total imports.[47] The committee which reported against a Malayan customs union collected information on the value of the entrepôt trade in merchandise with the Netherlands East Indies, India, Burma, Siam, British Borneo, and the Philippines. In 1930 this was estimated to be 61.4 per cent. of the Straits Settlements' imports and 22.6 per cent. of their exports. The imports were double those from the Peninsula and the exports half as large again. The same investigation showed that the relative importance of this field of foreign trade had been

declining for many years. In 1910 the exports had been 28.4 per cent. of the total, in 1921 they had risen to their maximum of 39.4 per cent., and from that date the general tendency had been downwards. Imports from the same countries had been 45.3 per cent. of the total in 1910, rising to a maximum of 66.6 per cent. in 1925 and thereafter trending downwards.[48] Unfortunately, figures later than 1930 are not available to show the effect of e.g. Netherlands East Indies quotas upon the exports of the Straits Settlements and the diversion of tin ore from Singapore to Holland upon their imports. If economic trends continue to develop as they have done during the past thirty years it is possible that the Governor's proposals may eventually be adopted; but given the existing situation they were premature.

The more limited proposal for a customs union restricted to the Malay States was investigated by another committee which reported in 1933.[49] Peninsular trade consisted almost exclusively of the export of local raw materials to foreign markets and the import of foreign products for local consumption. Inter-state trade was limited and there was no entrepôt trade. Practically all the foreign trade was concentrated at the three ports of Singapore, Penang, and Port Swettenham, with a few minor exceptions such as the limited traffic by land from Siam, from Malacca to Sumatra and from the Trengganu iron mines to Japan. An extensive system of roads and railways radiated from these three ports; and of recent years motor transport was increasingly supplementing and supplanting the railway. One point which emerged from the investigation was the extent to which the trade between the ports of the Colony and the Federated Malay States, Kelantan and Trengganu was carried on in costal steamers, and would therefore not benefit by a peninsular customs union. Much too of the land traffic had to pass only one customs barrier en route to the Colony. A peninsular customs union would benefit the trade between Singapore and Kelantan, part of that by road and rail between the Colony and the Federated Malay States, and also the limited amount of inter-state commerce. So far as rail traffic was concerned, through registration of freight would reduce the customs barriers to one. The committee decided that a peninsular customs union "would confer limited benefits" so far as freedom of trade was concerned. One wonders however whether it under-estimated the amount of freight carried by motor lorry which would of course profit by an elimination of customs barriers. A minor benefit of the customs union would be a limited saving in

expenditure through the avoidance of the present duplication of staff. As against the advantages, the Unfederated Malay States had very strong objections to entering a union. Furthermore the poorer States were more dependent upon customs revenue and therefore imposed heavier duties than a wealthy State like Perak, so that agreement upon a uniform tariff would be difficult to attain. The committee considered that the objections outweighed the limited advantages of a peninsular customs union and did not recommend it. The question was revived in 1933–4 in the form of a proposal that Malacca, Province Wellesley, and the Dindings should be severed from the free trade area of the Straits Settlements and added to a peninsular customs union. Malacca had no entrepôt trade to lose, and its merchants who were engaged in trade with the Federated Malay States complained that business was increasingly hampered by their import duties. Other Chinese firms who were more interested in trade with Singapore opposed the proposal, stressed the serious results of the loss of free trade with the latter and proved that only 17 per cent. of Malacca's trade was with the Federated Malay States. The commission of inquiry decided that each side had a strong case and that when arguments were so evenly balanced it was advisable to retain the *status quo*. Province Wellesley had "no serious trade" with the adjoining States of Perak and Kedah, and there was therefore no reason for transferring it from the free trade area of the Straits Settlements. The position of the Dindings was different: geographically and economically it formed part of Perak and not of the Colony, and as a free trade area "separated from that State by a wholly artificial frontier it serves as a base for smugglers". The district had originally been taken over in 1874 to facilitate the suppression of piracy; but that purpose had long since been accomplished. The committee advised that "the advantage to the Dindings could be better obtained by the re-incorporation of that territory in the State of Perak".[50] In 1935 the Dindings was retroceded to Perak with "full sovereign rights and title".

Malayan industries with a very few exceptions are of minor importance; and, as in Hong Kong, their prospects of expansion are not promising. The one outstanding exception is tin-smelting: a high percentage of the world's tin is smelted in Singapore and the ore comes from territories as far apart as Uganda and Alaska. Engineering is also important, particularly ship repairing and building at Singapore. Pineapple canning is a minor but expanding industry; and the product is one of the few Malayan exports which

is sold principally in Empire markets and has benefited from Imperial Preference. Apart from a few coconut-oil mills which receive Imperial Preference the other Malayan industries are dependent almost entirely on the local market. The most important are factories for the manufacture of shoes, tyres, belting, and other rubber goods. The largest enterprise, which employed 4,000, also manufactured sweets, medicines, hats, shoes, biscuits, bricks, and soap, and went bankrupt during the depression. No other is on so extensive a scale but there are a considerable number of small Chinese factories principally in Singapore, ranging in size down to Chinese shophouses where a few workmen live and work together on the same premises. They produce a wide variety of articles including beer, aerated waters, ice and foodstuffs, furniture, building materials, etc. There are also a few small factories in Penang and the Federated Malay States.

Singapore has certain advantages as a manufacturing centre, such as its geographical position, an adequate supply of labour, ample water and electrical power, moderate taxation, and a stable currency. Its drawbacks however have counterbalanced them, the principal being that the Malayan market is too limited to support any save small-scale industries such as those which exist. A large factory would have to dispose of the bulk of its products in the foreign markets which exist in tantalizing profusion from India to China. All of them however have protective tariffs or quotas or both, intended to keep out foreign manufactures and liable to be progressively increased until that object is attained. Rubber-soled shoes for example were excluded from China by raising the duty from 5 per cent. to 30 per cent., from the Philippines by increasing it from 25 per cent. to 100 per cent., and heavy duties also closed the markets in India, French Indo-China, and Java. Imperial Preference was of little assistance, since India, South Africa and Australia refused to grant any preference to colonial manufactures, and the Canadian preference was for some time counteracted by an exchange dumping duty. The Dominions were no more willing to admit Straits Settlements than Hong Kong manufactures owing to their much lower costs of production; and the United Kingdom was one of the few Empire markets in which Malayan manufacturers really enjoyed Imperial Preference. They were thus in the main thrown back upon the small Malayan market in which they were sometimes undersold by Japan. "In the Colony" he is "exposed to the full blast of competition and has no protection against foreign

goods. . . . In those Malay States where any protection is given he receives no special advantage and is treated on the same level as the United Kingdom or Hong Kong manufacturer." The Straits Settlements manufacturers were therefore advocates of a Malayan customs union and the establishment of protective duties. Their economic importance however was far too small to outweigh the arguments against it. The future of industrialization in Singapore would seem to be even less hopeful than in Hong Kong, which has the advantage of a more extensive and cheaper supply of labour. Large-scale industries are unlikely to develop owing to the difficulty of ensuring entrance to foreign markets; but small industries which limit their ambitions to the Malayan markets are likely to continue.[51]

The nationality of the shipping engaged in the trade of Malaya includes most of the mercantile countries of the world, though the preponderant element has been British. The net tonnage of merchant ships over seventy-five tons entered and cleared from Malay ports in 1937 which were engaged in foreign trade and the British percentage were as follows:—

	Number	*Net Tonnage*	*% of Tonnage*
British . . .	4,307	11,302,000	33.6
Dutch . . .	5,028	8,005,000	23.8
Other European .	2,256	8,132,000	24.1
Japanese . .	1,241	5,272,000	15.7
Other nationalities .	466	850,000	2.8
Total .	13,298	33,561,000	100.0

If steamships engaged in local trade and native craft in local and foreign trade be added, the total net tonnage entered and cleared from Singapore, Penang, Malacca, and Port Swettenham in 1937 was 56,625,000.[52] Dutch shipping is naturally extensive since practically all the steamships from Europe call at Malayan ports, in addition to the local Dutch ships which ply between the Colony and the East Indies. German steamships made up a large and growing part of the other European shipping. Compared with earlier years the percentage of British tonnage engaged in foreign trade had declined. The fall was not serious if statistics of tonnage only were considered; but the situation was distinctly different if one regarded the shipping from the point of view of whether a full cargo were carried or not. If that test were applied it would be found that many British vessels left with their holds partly empty

while Japanese steamers especially did not. The growth of Japanese competition has been most marked on the trans-Pacific routes, the carrying trade between India and the Far East and that between Singapore and South Africa. On those routes they have captured a large part of the trade; but so far they have not begun the same intensive competition between Japan and Europe. Most of their ships in this trade are small and old; but as they are replaced the same situation will doubtless develop.

British and also American steamship companies were particularly affected by the capture of a considerable part of the shipments of rubber and tin to the United States, their principal market. The inroads began about 1934 when new and very fast Japanese cargo boats were placed on the route from Singapore to Los Angeles and New York. In 1933 British ships carried 57 per cent. of the rubber shipped to the United States; but in 1936 the percentage had fallen to 30. The amount carried by Japanese ships rose from .3 per cent. in 1933 to an average of 28 per cent. for the whole of 1935, though it was 43 per cent. of the total in the last quarter of the year, and in 1936 it fell to 26 per cent. Figures for American firms are not available but it is known that they also suffered severely. The spectacular success in capturing a large part of the rubber shipments diverted attention from the inroads into the tin shipments to the United States, which until about 1931 were made in British and American vessels. In 1936 about 17 per cent. of the smelted tin sent from the Straits to the United States was carried in Japanese ships. It was rumoured that in addition an approximately equal amount was controlled by the Japanese, although it was transported in non-Japanese vessels owing to the inability of the existing Japanese ships to carry the whole amount. The Japanese thus controlled rather more than a third of the total tin shipped to the United States although they owned very few of the mines in Malaya and bought the tin from the smelters in the Straits Settlements. The outbreak of the Sino-Japanese War diverted part of the merchant marine to war purposes and in 1938 Japanese vessels carried from 10 per cent. to 15.3 per cent. of the rubber shipped from Singapore and from 17.5 per cent. to 39.5 per cent. of the tin at different periods of the year. British ships carried 43 per cent. of the rubber and 27.2 per cent. of the tin, and American ships 28.1 per cent. and 44.8 per cent. respectively. In the first half of 1939 Japanese vessels carried 18.7 per cent. of the rubber and 19.8 per cent. of the tin, while the British and American shares were somewhat larger than in 1938.

The heavy losses suffered by British and American shipping companies and brokers led to threats of a rate-war on trans-Pacific freight routes, demands that the Government impose a quota on rubber shipments, and exhortations to growers patriotically to refuse to sell their rubber to the Japanese who offered a fraction of a cent per pound more than competiting buyers. Whereof the result appears to have been precisely nil. The Government of the Straits Settlements announced that business interests must act first, and wondered whether the inability to cope with Japanese competition were not due to too rigid adherence to long-established practices. It suggested that British merchants, shippers and bankers should subordinate their desire for greater individual profit and act in concert. Apparently the only measure adopted by the British and American interests affected was to carry on negotiations with the Japanese shipping companies with no result, since the latter refused to make any concession. The Straits-New York Conference, of which all major shipping lines are members, lowered the standard freight rate charged by all members from gold $12.75 to gold $8 per ton of rubber shipped. The lower rate was in force from 1936 to April, 1937; and the only effect upon the Japanese was that they turned their principal efforts to securing other and more profitable cargo, although the amount of rubber they carried to the United States never fell below 20 per cent. of the total. The reduced rates were even less profitable to the British and American companies than to the Japanese since their wages and other operating expenses were higher. The result was that growers found it hard to ship their rubber, stocks began to accumulate in the ports, and on 1st April, 1937, rubber freight rates to the United States were restored to the former level of $12.75 a ton. The Japanese policy of wait and see had apparently won.

Speculation was rife as to the reasons for Japanese success, and particularly how it was that they could afford to buy Malayan rubber for about half a farthing a pound more and yet sell it in New York in a competitively favourable position. The exact reasons are not absolutely certain for Japanese firms do not volunteer information. Opinion in Malaya did not believe that the whole explanation lay in the government subsidy paid to shipping companies, although this was doubtless a contributory factor. The much lower cost of operation of Japanese companies due e.g. to lower salaries and less frequent furlough was also of assistance but was not regarded as the primary cause. The real explanation was considered to be that all

the Japanese companies engaged in the trade were organized in a very extensive vertical combine which was opposed to separate and competing British and American firms. The rubber trade has many stages between the grower and the consumer, which include buyers and brokers, shippers, firms who insure the shipments, bankers who finance the transaction, shipping companies, and sellers who dispose of the rubber in the United States. The British firms engaged in each stage of the transaction were separate companies each intent on making its maximum profit. The general opinion in Malaya was that in practice each was more concerned with maintaining its own independent existence and making its own particular profit, than in imitating its Japanese rival by co-operating with British firms engaged in other stages of the rubber trade and accepting reduced profits.

The Japanese shipping companies were believed to co-operate with or more probably to control the Japanese firms engaged in the other stages of the trade, and thus be able to offer a slightly higher price to the rubber grower. The Japanese banks worked in close collaboration with them in financing the rubber business. Originally the rubber was bought through Chinese agents but by 1937 much less was being obtained through them, possibly because the Japanese had created their own purchasing organization. Whether the various companies showed a profit at each stage of the transaction was unknown and in any event immaterial. It would seem however that the only means by which the profits could be obtained to make the scheme feasible was from the Straits-New York Conference freight rates of $12.75 a ton. This apparently provided compensation for small profits or perhaps losses at other stages. It was rumoured that the shipping companies gave the rubber exporters a secret rebate on the Conference freight rates. Opinion was divided on the subject; but such a distribution of profits, while illegal, would really be a mere book-keeping transaction, a transfer of profits from one department to another of the same vertical combination. Doubt was sometimes expressed whether such immense combination were really efficient. European experience was that the economies achieved in operating expenses were more than counterbalanced by losses due to the difficulty of controlling effectively too large a consolidation. The opinion of British and American firms in the rubber trade however was that so far their Japanese competitors had shown no such refreshing signs of weakness, but rather a most unwelcome efficiency and success. If their view were correct

it would seem that drastic changes will have to be made by Western firms in their traditional methods of transacting business. It is useless to appeal to the rubber grower to "Sell British" so long as he believes that he is being asked to forgo a higher price in order that separate and competing companies may make their accustomed profit. It is equally useless to appeal to Government to intervene as long as business interests show no disposition to help themselves. No one would advocate the doctrines of *laissez-faire* in a world where governments control and assist private enterprise to an ever-increasing degree; whatever one's theoretical views on the ideal economic state, as a matter of practical expediency government assistance is frequently unavoidable in a world of intense economic nationalism. Such assistance however cannot be claimed as of right and certainly not until the claimant can show that it has done all in its power to cope with the new conditions unassisted.

Economically British Malaya falls roughly into three divisions: the Straits Settlements, the comparatively developed States on the west coast, and the East coast States which are the field of future expansion. The Straits Settlements are primarily interested in the foreign entrepôt trade, though the relative importance of the peninsular market has been rapidly increasing. So far as one can foresee, however, they will continue for a long time to come to concern themselves first and foremost with their traditional field of re-export trade in South Eastern Asia. The economic interests of the Federated Malay States, Johore, and to some extent Kedah, are bound up with the world demand for tin and rubber and their other lesser exports. Regarded from the point of view of imports they are a limited but valuable market for the foodstuffs of adjacent countries and the manufactured goods of the industrialized nations. Despite their very remarkable development, however, the Peninsula still remains to a large degree a potential market, when one considers the extent of population and development compared with the possibilities for expansion which still remain. This applies particularly to the East coast States of Trengganu and Kelantan and in varying degrees to Kedah and Pahang. The import and export trade of British Malaya is worldwide and there are few countries which do not in some measure buy its products or supply its requirements. Despite the moderate degree of Imperial Preference and the textile quota the Malayan market is relatively speaking open—far more so than most Western countries and many colonies. Comparisons with Hong Kong and the Netherlands East Indies suggest

themselves, particularly in that commerce is passing through a period of transition where new competitors and new methods of conducting business have made their appearance. The older industrialized countries are losing part of their traditional fields of trade to more recent rivals like Japan, and are faced with the urgent necessity of adapting and modernizing their methods if they are to avoid being virtually driven out of one branch of trade after another. Distasteful as the process may be, the methods of business are no more sacrosanct than the principles of economics. To reconquer all the ground lost is neither possible nor desirable: Asiatic manufactures produced under Asiatic standards of living fill a real want for Asiatic customers with an Asiatic purchasing capacity. It would be unfair and also it has never been attempted to compel the population of Malaya to buy only British goods. Furthermore the maintenance of peace requires that some compromise be effected in dividing markets between the older and the newer industrialized powers. So far the negotiations have had little success: the Japanese have shown themselves intransigent and overweeningly self-confident. Very wisely the Government of Great Britain has refused to take any sweeping measures against them and the question still remains unsolved. British Malaya is only one phase of a worldwide situation, the problem of adaptation of long-established economic interests in a changing world.

CHAPTER V

TIN AND RUBBER

Tin

Malaya was famous for its export of tin long before the first rubber estate was planted. Tin was mined on a small scale hundreds of years ago, and in the earlier nineteenth century was the one important export of the Malay States. Only during the last twenty-five years has the enormous expansion of rubber-growing dethroned it from its place as the premier export. Over nine-tenths of the tin is from the Federated Malay States, particularly Perak, the remainder coming from the Unfederated Malay States, with the exception of about fifty tons from Malacca Territory. Prior to the establishment of British control in the peninsula the export of tin was limited owing to the anarchic condition of the country and the obstacles raised by the Malay chiefs against Chinese development. Some of the mines were owned by Malay chiefs and worked by Chinese labourers in return for a share of the proceeds; while others were owned and operated by the Chinese themselves. They entered Perak and Selangor in considerable numbers especially after about 1850 and developed the tin fields at Larut and around Kuala Lumpur. The civil war which broke out between the two factions of miners in the Larut District of Perak was one reason for the British intervention in 1874. The trouble spread to Penang where each faction had Chinese supporters, and it also led to piratical attacks on native trading craft from the Straits Settlements. The establishment of settled conditions induced some of the leading Chinese in the Colony to invest money in mining; and it was they and not Europeans who were the pioneers in developing the tin industry. The first European mines were opened in the early 'eighties, in the Kinta District of Perak. One company composed of English merchants was formed in Shanghai while the other was French; and a little later two Australian companies began mining in Larut. With a few exceptions however European investors refused to risk their money in Malayan tin; and it was not until about the end of the century that they began to take a prominent share in the industry.

The Malay States obtained the greater part of their revenue from the export tax on tin; and from the beginning the British Residents encouraged the entrance of Chinese tin miners. The tin deposits were in the river valleys around the foothills of the main range of mountains from ten to thirty-five miles from the sea. Once peace had been established the first necessity was to provide roads by which the tin could be brought to the coast. At the date of the British occupation there was only one road, about twelve miles long, in the whole of Perak, from the Chinese mines to the navigable estuary of the Larut River. The only other road was a few miles of rough cart track in Selangor running from the Chinese town of Kuala Lumpur on the Klang River to the mining camps in the vicinity. Apart from these there was nothing except rough jungle tracks which were used as little as possible because of their difficulty. The sole real means of communication were the rivers along which the villages of the Malays were built. Sir Frank Swettenham has described from his own experience the conditions of travel at that time. "The country folk moved about but little, for they knew the difficulties too well. A boat journey of a hundred miles down river would take a week and back again a month or more. When people of consideration had to journey by land they travelled on elephants if they could get them, and cut their way through the jungle. Pedestrians had to foot it as best they might; over the roots, through the thorns, wading or swimming rivers and streams, ploughing through miles of bog and mud in the heat and rain, stung by everything that stings (their name is legion), and usually spending two or three nights in the jungle with any kind of shelter that a chopper and the forest could supply." One of the first acts of the British Residents was to clear the rivers, since many of them had been rendered impassable by great trees which had fallen across them, and by the bed of the stream being blocked by the accumulated timber of ages. Simultaneously all the money which could be borrowed from the Colony and all the surplus revenue were spent on the construction of roads from the mining fields to the nearest water navigable by small steamers. A few years later in 1884 the first railway was built to connect Taiping, the mining centre of Larut, with Port Weld eight miles distant on a deep water inlet of the Larut River. At the same time a railway twenty-two miles long was built from Kuala Lumpur to Klang. The reduced costs of transport brought about by the roads and railways made it economically possible to develop additional tin areas, and so in turn provided the revenue with which

further extensions of the road and railway system were built. In 1895 a railway was completed from the port of Teluk Anson to Ipoh in the Kinta Valley, the richest tin field in the world. By 1900 899 miles of road and 150 of railways had been built. The advent of rubber created an additional urgent demand and at the same time provided more revenue for construction. During the first decade of the new century the existing mileage was more than doubled, and by 1920 there were 1,969 miles of road and 805 of railways. The main line of the railway from Penang to Singapore gave access to most of the principal mining centres. Branch lines such as that from Kuala Lumpur to Port Swettenham linked the mining areas with the various ports on the west coast. By about 1930 2,565 miles of metalled and 2,000 miles of unmetalled roads and bridle paths connected all the more important mining areas with one another and with the railway. Sir Frank Swettenham has made clear the debt which Malaya owes to tin and rubber. "Up to the year 1900 it may fairly be said that the prosperity of the Malay States was due to the enterprise and labour of Chinese, whether as miners or in a much less degree as planters. From the beginning of the present century the position as regards agriculture has been completely changed by the planting of over 2,000,000 acres of rubber plantations at the expense of British investors employing Indian labour. The old tin mining industry has also been revolutionized by the introduction of British capital for the installation of machinery and the practice of scientific methods of mining under European direction. These two facts explain the enormous increase in the revenue of the Malay States during the last twenty-five years. . . . Speaking generally it may be said that up to the year 1900 the progress made in development was due to local effort and Asiatic capital; since that date foreign—mainly British—capital, energy and skill have changed the face of the country and increased the revenues of the States to astonishing figures."[1]

Tin in Malaya is usually mined in the alluvial deposits in the river beds. The ore varies in size from pieces the size of a pea down to the finest flour. It generally occurs in layers of detrital gravel eroded from the granite which forms the mountains of the main range, combined with quartz and white clay and overlaid with alluvial soil which may or may not contain tin ore. Tin is also found in the mountains both in the granite and in the surrounding rocks. There is an extensive deposit of lodes on the east coast of Pahang which is worked by the Pahang Consolidated, one of the

largest tin mines in the world. The underground workings have reached a depth of over 1,218 feet; and there are also a few other lode mines. The vast majority of the mines however are excavations in the river valleys. Some of these are of immense size: one company for example has two open-cast mines adjoining each other which together have an area of thirty-seven acres and a depth of 200 feet. Over 5,000,000 cubic yards have been excavated by hand since 1912. A deep Chinese mine with its hundreds of coolies working far below the surface irresistibly suggests a very badly damaged ant hill.

Various methods of mining are employed, the oldest and simplest of which is the Chinese. Prior to the advent of the Europeans they used very primitive methods and relied on hand labour. The top layer of alluvial soil was first removed and the tin-bearing strata were cut by hand labour with a form of hoe. The ground cut was put into flat baskets which were hung on either side of a pole and carried by labourers up a notched log to the surface. The ground was then washed in the cleaning sluices, coffin-shaped boxes into which flowed a stream of water, in order to separate the ore from the sand and gravel. The Chinese showed great skill and ingenuity in bringing water in bamboo pipes from the mountain streams to their mines, and also in designing Heath Robinson but fairly effective machinery such as a wooden chain pump to pump out the water from the mine. Their method had the merit of cheapness of operation but failed to extract all the tin. The mines were often liable to flooding and to keep very large excavations free from water was frequently beyond their resources. In some instances they abandoned the struggle before the bottom of the tin-bearing strata had been reached and used the mine as the receptacle for the top layer of alluvial soil from a neighbouring excavation, thus burying again quantities of ore. In later years profits were made by reworking abandoned Chinese mines with machinery. As most of the richer deposits were exhausted it became necessary to work lower grade deposits, and to do this at a profit was only possible by the use of labour-saving machinery. The industry is passing from the primitive stage of hand labour—sometimes several thousand coolies to a single mine—and simple appliances to that of elaborate and expensive equipment with its accompaniment of heavy initial capital expenditure.

The primitive form of open-cast mining is still practised, but the Europeans and some of the Chinese have introduced Western

machinery. For example, in excavating, a steam navvy has taken the place of a hoe, and the tin-bearing ground is brought to the surface by means of trucks hauled up an inclined plane. An alternative method is that water ejected under pressure from a monitor, which is like a fireman's hose jet on a large scale, is played upon the face of the mine. This cuts it down with ease and the resulting mixture flows down a ditch or wooden sluice where the tin ore is concentrated. The most recent method introduced by Europeans is that of the bucket dredge. In 1929 105 dredges were at work but the number considerably decreased during the depression. In 1930 the total amount of issued capital invested in dredging was £13,099,432. The whole of the machinery is mounted upon a steel or wooden pontoon which floats in the mine, and the position can be altered by means of head and side ropes. Steel buckets are attached to an endless chain mounted on a steel "ladder", at the upper end of which is placed the receiving hopper. The buckets scrape along the bottom, fill themselves with ground, and are carried up to the hopper into which they drop their contents. The ground drops from the hopper into a revolving cylinder, into which water is fed under pressure, and the mixture passes through a series of sluices in which the tin is separated from the sand and gravel. This method of mining has become very popular in Malaya, since it is cheap, and much ground of low value which would otherwise have been left untouched is being worked profitably. The most common form of power to drive the machinery is obtained from steam engines burning mangrove wood or Malayan coal. Diesel engines are also very popular; but of recent years the use of electricity has increased considerably with the development of hydro-electric power.[2]

The total area alienated for tin-mining in 1938 was 184,237 acres. Land leases must be approved by the British Resident of the State and the usual rent is $1 per acre per annum. The lease carries no rights over streams and water-courses, all of which remain under the absolute control of Government. This prevents mines near the head of a valley from depriving those further down of their fair share of the water which is essential to all of them. The lease is liable to forfeiture unless work is commenced within six months with a specified number of labourers, or if it is suspended for more than a year. The mining regulations are enforced by the Mines Department with its staff of Wardens and Inspectors, who are graduates of approved Schools of Mines and must have had at least three years' actual mining experience. One section of the regula-

tions empowers the inspectors to approve the arrangements made by the miners to control tailings, i.e. the silt carried away by the water in which the ore has been washed. In the aggregate the volume is very large and in some instances dams and other expensive works are required.[3] In the latter part of the 'twenties the Government realized that the measures adopted had sometimes been inadequate, so that rivers had silted to a serious extent and floods had been aggravated. The original site of the town of Kuala Kubu had to be abandoned because the river bed had been filled to above the level of the surrounding country. Much more stringent regulations to control tailings were enforced and the newly established Drainage and Irrigation Department built river works where necessary at the expense of the mines.

The tin mines have brought to Malaya its one important industry, tin smelting. The Straits Trading Company was founded in 1887 to take over a small tin smelting business established a few years earlier at Kuala Lumpur, which had a smelter at Teluk Anson. The company bought the ore from the local miners and gradually established buying agencies throughout the Malay States. About 1887 it built a smelter at Singapore and in 1902 another at Butterworth in Province Wellesley. An American attempt about 1900 to transfer the smelting to the United States and eventually obtain complete control of Malayan tin production was frustrated by imposing a prohibitive duty on the export of tin ore and giving an equivalent rebate on all ore smelted in the Straits Settlements. Tin ore exported from the Malay States for smelting, save to the Straits Settlements, Australia or the United Kingdom, pays the ordinary export duty and in addition a duty of $30 per picul (113⅓ lbs.). At the present time all the ore with the exception of a small amount smelted locally by a Chinese company is sent to Singapore or Butterworth. The smelters are owned by the Straits Trading Company and the Eastern Smelting Company. The companies pay the miners for their ore in accordance with the purity of the assay and the current price of tin less export duty, smelting charges and cost of transport. The Straits Trading Company is the more important of the two and its smelters are the largest and most modern in the world. Its product, Straits tin, is refined up to 99.85 per cent. In addition to that from Malaya, ore is sent to Singapore from Siam, French Indo-China, Burma, Australia, China, and Central and South Africa.[4]

The expansion of tin mining is shown by the growth of the exports from 26,029 tons in 1889 to 51,733 tons in 1904. This was

56 per cent. of the total world output, the highest percentage ever attained.[5] Production continued to increase owing to the introduction of machinery but Malaya's share declined to 36.3 per cent. in 1929, as a result of the development of mining in Bolivia and Nigeria. Mining was begun in the Unfederated Malay States on a small scale, but about 95 per cent. of the total production continued to come from the Federated Malay States. By 1929 the industry both in Malaya and elsewhere was suffering from overproduction, a condition which grew steadily more serious and led to the introduction of restriction in 1931. The world output in 1929 was as follows:—[6]

Malaya	69,366 tons
Bolivia	46,338 ,,
Netherlands East Indies . .	35,235 ,,
Nigeria	10,734 ,,
Siam	10,517 ,,
Burma	2,649 ,,
Others	16,000 ,,
Total . .	190,839 ,,

Production had been rising fairly steadily since 1921 when it had been 113,455 tons. The principal cause had been increased output in Malaya and Bolivia; and since consumption did not increase in proportion there was a steady growth in surplus stocks. The average London price per long ton reached its peak of £284 7*s.* 7*d.* in 1926. Thereafter it rapidly declined to £206 8*s.* 11*d.* in 1929 and £120 9*s.* 1*d.* in 1931, while, simultaneously, production and surplus stocks mounted higher and higher. In 1929 the Governments of Malaya adopted a new policy, and announced that no application for mining land or for the conversion of agricultural to mining land would be sanctioned. Within the mining areas the same policy would be followed unless an application could be shown to be essential for the efficient development of existing mines. Attempts were made to limit production by voluntary co-operation by the mines in the various countries. These efforts had only a very partial success: the world production in 1930 was 175,000 tons, surplus stocks were greater than ever, and the average London price per ton had fallen to £143 17*s.* 7*d.*[7] This was below the costs of production even of the small number of Malayan mines which could

operate at a particularly low figure owing to a combination of efficiency and of unusually rich deposits. It was far below the costs of the great majority in Malaya and in other tin-producing countries.

Towards the end of 1930 the Tin Producers Association which represented the mines in the four richest areas, Malaya, Bolivia, the Netherlands East Indies, and Nigeria, submitted to their governments a scheme for compulsory restriction of output. The plan which went into force on 1st March, 1931, had as its object the adjustment of production to consumption and the reduction of surplus stocks by the restriction of output in the four countries named above. An International Tin Committee representing the four governments took as the standard tonnage of each country its actual production in 1929, and decided each quarter the percentage of the total amount which it was permitted to export. The weak point of the arrangement was that it omitted the minor producers like Siam, the Congo, and French Indo-China. To some extent it repeated the mistake of the Stevenson rubber plan: the potential production of the countries left out was limited and was not capable of the immense expansion of the rubber districts in the Netherlands East Indies. The areas excluded had contributed about 15 per cent. of the world's tin in 1929 and their output now began to mount. They realized the strength of their position and exacted very favourable terms before they would join the restriction scheme. Siam was brought in in September, 1931, with a fixed quota of 10,000 tons per annum not subject to reduction. This was practically the whole of her production in 1929, whereas the quota for the four principal countries was at one time as low as one-third of their standard tonnage. French Indo-China, the Belgian Congo, the Portuguese colonies and other minor producing countries were also induced to join the scheme on favourable terms; and Siam, France, and Belgium were given representation on the International Tin Committee. There was a good deal of criticism in Malaya that the Tin Committee admitted them "practically on their own terms"; but in reality it had no alternative. The failure of the Stevenson rubber restriction plan was a warning against leaving a minority of producers outside a scheme the object of which was to raise prices by reducing export. The rise in price from which they benefited would stimulate mining and would in the end jeopardize the success of the plan. They were in an unassailable strategic position and knew it; and since they refused reasonable terms their assent had to be bought by giving them an excessive quota. Restriction was renewed for

three years in 1934 and again in 1937, Malaya's percentage of world production being fixed at 37.19 per cent.[8]

World consumption continued to fall heavily and stocks increased, so world production in 1932 was drastically reduced to about 100,000 tons, the export quota from July, 1932, to the end of 1933 being only 33⅓ per cent., with a moderate increase the following years. Surplus stocks were thereby reduced and consumption increased somewhat in 1933. In 1935 consumption mounted and stocks decreased rapidly owing to the economic revival in the United States. One cause of the larger demand was the partial replacement of beer bottles by cans. The London price per ton recovered to an average of £225 7*s*. in 1935. To assist the operation of the scheme a buffer stock of 8,282 tons of tin was formed in 1934 by the mines in Malaya, the Netherlands East Indies, Bolivia, and Nigeria. It was operated by the Tin Committee and the stock was finally sold by September, 1935. The price fluctuated violently in 1937 from £311 10*s*. in March to £170 in the autumn; and the range of prices in 1938 was almost equally wide. The reason was a sudden unexpected increase in the American demand followed by an equally sudden falling off with the renewal of the depression. Since about half the world's tin is sold in the United States the alterations in demand there have had a very marked effect upon the price. This in turn has reacted upon the mining industry, for periods of high prices have been accompanied by rapid expansion of output followed by a glut of supplies and depression, thus causing wide variations in the price of tin, and alternate booms and slumps. The price fluctuations of 1937–8 show one weakness in the method of control: the Tin Committee was unable to prevent violent short-term alterations. The reason was that demand increased very quickly and unexpectedly; but time inevitably passed before additional tin could be produced and brought on the market. In 1937 the sudden rise seems to have been largely due to excited and unnecessary buying by legitimate consumers who thereby forced up the price: while at other times the fluctuations have been the result of buying or selling by speculators. There has been much controversy as to the possibility of minimizing short-term fluctuations by means of a buffer stock of tin, since its operations would be much quicker and less cumbersome than the expedient of altering the percentage of the export quota. In July, 1938, the Tin Committee decided to repeat its earlier experiment and established a buffer stock of 15,000 tons of

tin. This maintained a stable price of between £200 and £230.[9]

The allocation of standard tonnage under the five-years agreement of 1937 was as follows:—

Malaya	71,940	long tons	
Bolivia	46,120	,,	,,
Netherlands East Indies	36,330	,,	,,
Siam	18,500	,,	,,
Belgian Congo	13,070	,,	,,
Nigeria	10,890	,,	,,
French Indo-China	3,000	,,	,,
Total	199,850	,,	,,

The potential output of Malaya is about 100,000 tons per annum. The growth of European and chiefly British investment in tin mining is shown by the fact that their share of the output has risen from 20 per cent. in 1912 to 66 per cent. in 1935, while the Chinese share has fallen from 80 per cent. to 34 per cent. The production of tin ore in 1937 was 77,224 tons of which 75,077 came from the Federated, 2,075 tons from the Unfederated Malay States, and seventy-two tons from Malacca. Although imports of foreign ore have considerably declined owing to the diversion of Dutch shipments to Holland, 31,169 tons were imported in 1937; and the total export of smelted tin from Malaya was 93,106 tons.[10] No complete statistics exist of the amount of capital invested in tin or of the nationality of ownership. Roughly speaking the bulk of the Western capital is British, the remainder coming from various European countries, particularly France, and from the United States; while the Asiatic capital invested is chiefly Chinese. The nominal value of the external capital outstanding in Malayan tin companies on 31st December, 1936, was £11,167,000, and of the Straits Dollar capital £2,622,000, a total of £13,789,000. These figures included capital accumulated out of reserves and issues of vendor's shares. They excluded capital which had been invested in Malaya and subsequently lost, and made no allowance for the fact that the market value of the investment might be very different from its nominal value. Also the first figure included only capital which was denominated in sterling.[11]

Rubber

The earliest forms of plantation agriculture in Malaya were the cultivation of spices and gambier on Penang and Singapore Islands

and the adjacent mainland. Pepper was the most important crop; but by the middle of the nineteenth century exports had become unimportant. Penang had valuable plantations of cloves and nutmegs until 1860 when plant diseases almost destroyed them. Meanwhile sugar growing had been introduced in Penang and Province Wellesley in the 'thirties and became important about 1860. It held a position of importance for about forty years but was finally abandoned owing to the greater profits to be made in rubber. It was "never a highly profitable industry" and received its "first setback in 1906—the time of the first rubber boom, and by 1910 it was doomed. We decided to abandon it in 1911", but grew it as a catch crop with rubber until 1913, when the last sugar refinery ceased operating. Coffee cultivation was begun about 1875 in Perak and Selangor and showed that there were other products in the Federated Malay States besides tin and gold. Previously there had been few planters in Malaya, but its success attracted many from Ceylon where the coffee industry was being destroyed by a blight. The export reached its maximum in 1905, but the cultivation was ruined by a combination of plant disease and wild fluctuations in price. The failure of coffee roughly coincided with the success of rubber and the great majority of planters substituted the latter. In 1934 coffee was cultivated on about 17,528 acres, largely by Chinese and Malay small holders, and usually interplanted with some other crop. A trial plot of 317 acres planted with Arabian coffee had also been established by the Agricultural Department in the Cameron Highlands.[12]

The introduction of rubber took place in 1877 when two cases of seedlings from the Royal Botanic Gardens at Kew were sent to the Botanic Gardens at Singapore. Some were planted there and others in the grounds of Sir Hugh Low's Residency at Kuala Kangsar. They formed part of the consignment which Mr. (later Sir) Henry Wickham had brought back with him from his mission to Brazil, which at that time was the principal source of supply. They were grown successfully at Kew and then sent out to the Botanic Gardens at Singapore and Ceylon. Out of the two cases twenty-two plants were successfully grown in Malaya and a few in Ceylon. The progeny of this consignment is seen to-day in the millions of acres under rubber in Malaya, the Netherlands East Indies, Ceylon, Indo-China, and Siam. In 1882 Sir Hugh Low reported that seeds and plants from the trees in the Residency gardens had been distributed to Java, Singapore, Ceylon, and India. Government nurseries were

established and the seedlings offered to Malayan planters without much success. They were interested in the established cultivations; but a few trees were planted by District Officers to assist the Department of Agriculture in its experiments. Between 1896 and 1899 some of the estates began to interplant with rubber as the price of coffee fell and caterpillars also attacked the trees. By 1897 only 345 acres were under rubber; but the pioneers had proved the suitability of the soil and climate and the proximity of India and China ensured abundant supplies of cheap and efficient labour. By 1905 the rubber acreage had grown to about 50,000 and the export was 200 tons. At the same date the world production of jungle rubber was 62,145 tons of which over half came from South America and the remainder from Central Africa and other tropical countries. The development of the motor-car immensely increased the demand for rubber; and after 1905 the acreage rapidly increased. Planting was also stimulated by a well-engineered Brazilian coup in 1905 and 1906 which took advantage of the growing demand to force up the price from about 2*s.* 10*d.* to 6*s.* a pound. Brazilian speculators again fostered the growth of the industry when in 1910 they again took advantage of the ever-increasing demand to raise the price from 3*s.* to 12*s.* a pound. Immense profits were realized by the existing plantations during the boom of 1910–12 and a very large number of new rubber companies were floated in London. By 1914 the output of plantation exceeded that of jungle rubber, since systematized production with settled labour conditions proved the more economical. Malayan plantations could deliver rubber in New York for less than it cost to collect and ship wild rubber from the Amazon. Moreover the plantations could assure a regular supply while the collectors of wild rubber could not. Land was available on easy terms and until the slump of 1920 cultivation was extended more or less uniformly each year by Europeans and Chinese. The Malays were increasingly attracted to rubber and showed an appreciable tendency to substitute it for the traditional but far less profitable padi (unhusked rice) and fruit. By 1920 the export of rubber was 196,000 tons or about 53 per cent. of the total world production. The rubber industry was "responsible for opening up the country and reclaiming vast areas from jungle for cultivation. It has transformed the States from a little-explored region to one of the best supplied with means of communication . . . in the East. It has led to the establishment of numerous subsidiary industries and attracted capital from many countries . . . it has given an

impetus to the development of the States the importance of which it would be impossible to over-estimate". The rapid development of the Federated Malay States and of Johore* also brought increased prosperity to the Straits Settlements. Practically the whole of the export was shipped from Singapore and Penang; and the imports into the Colony rose owing to the expansion of the market in the Peninsula. The growth of the Malayan market had of course begun much earlier with the development of the tin mines; but the process was immensely accelerated by the establishment of the rubber industry. In addition to the demand for estate machinery, equipment for the extension of roads and railways, etc., it almost doubled the population between 1901 and 1921 through the introduction of hundreds of thousands of Chinese and Indian labourers.[13]

The early rubber planters were pioneers not one of whom, probably, had seen a mature rubber tree. Their problem was to acclimatize on Malayan plantations a tree which grew wild in the valley of the Amazon, and to discover the best methods of cultivation and tapping and the causes and cures of the various diseases as they showed themselves. As a result planting in the early days was experimental, and the principal method employed was that of trial and error. Most of the estates were established on land which had been cleared of dense jungle, and sometimes the roots of felled trees were not removed until it was discovered about 1917 that the stumps caused root disease in the rubber trees. Young rubber trees were planted at a density of 400 or more to the acre, whereas the proper number was from 100 to 200, depending on the class of land. "Clean weeding" dominated the industry until 1919: the soil was zealously scraped bare of every vestige of vegetation although the Department of Agriculture had since 1906 been strongly urging the use of cover crops. Many of the early planters however had previously been tea planters and applied their accustomed methods to their new cultivation. The result especially on hilly land was loss of fertility due to heavy rainfall causing soil erosion and high temperatures producing sterilization of the soil and rapid loss of humus owing to oxidation. The effects of excessive tapping became evident about 1916 in the form of failure of the latex or the production of an uneconomic yield from each cut; and in addition the bark was removed too rapidly to obtain satisfactory renewal. Other problems were the

* The extension of cultivation in Johore began in 1910, when a new land-law gave security of title. There was a rapid influx of small holders as well as planters, and between 1912 and 1915 over 10% of the area of the State was taken up (*Report of the Survey Departments of Malaya 1935*, Part iv, Appendix I, pp. 55–6).

suitability of various soils and elevations and the best methods of preparing the latex so as to obtain the highest quality of rubber for the market.[14]

Tropical agriculture is one of the most recent of the sciences, and in British Malaya its development has taken place principally in the twentieth century. One reason for this was the persistence of the earlier tradition that the planters solved their own problems as they arose. Another was that the smallness of the government appropriation greatly hampered research and failed to provide a field staff to bring the results of the investigations to the planters' attention. The Government Botanic Gardens at Singapore had proved that rubber could be successfully grown in Malaya and had for years endeavoured to interest planters in it.* Having dealt with the problem of acclimatization the Director and his small staff turned their attention to other problems of the European planter, and in the 'nineties published a series of useful articles. In Perak Sir Hugh Low had established Experimental Gardens about 1875; but most of them were abandoned after his departure in 1889, those which survived being placed under a Superintendent of Government Plantations. He was unable to do much to assist planters in the State, which is not surprising when one reflects that as late as 1908 the Agricultural Department of the Federated Malay States had an appropriation of only $76,181 and a staff of six. The Department had been established in 1905 owing to the recognition of the necessity for scientific assistance to the rubber industry. Test plots were formed at various elevations and an Experimental Plantation was created at Kuala Lumpur most of which was planted with rubber. During the next few years however expansion was moderately rapid, and in 1914 the Department had a staff of twenty-six, omitting native subordinates, and an annual appropriation of about $350,000.§ This was divided between the research and field staff, the latter having been established in 1913 to enforce the regulations regarding the treatment and control of agricultural pests and diseases. It also tried by lectures and demonstrations to bring agriculturists into closer touch with the results of the investigations carried out at Kuala Lumpur on rubber and coconut cultivation. The accommo-

* The Botanic Gardens at Singapore and Penang had also been the first to introduce and acclimatize in Malaya coffee, tea, nutmegs, cloves, cocoa, cinchona, and various fibre plants.

§ The staff in 1914 consisted of the Director, five chemists, three mycologists, three entomologists, one botanist, two agriculturists, two agricultural instructors, seven agricultural inspectors, and two superintendents of Government plantations. A school for training Malay subordinates of the Agricultural Department was established in 1918.

dation of the laboratory and the size of the experimental farm at Kuala Lumpur were very inadequate and hampered research; and the number of the field staff was too small for proper liaison between the Department and the agriculturists. The Department had also published since 1912 a monthly Agricultural Bulletin (since 1921 the *Malayan Agricultural Journal*) which was written for the benefit of planters. There were neither men nor money adequately to deal with the problems of Malay agriculture, and the distinct tendency was to concentrate primarily on those of the European rubber planters. Some attention however was given to the Malays' crops of padi and coconuts; and prior to that date no colonial government had made so "thorough-going and sustained an effort to control the insect pests of the palm and the general sanitation of coconut holdings". The Great War seriously retarded development, and by 1918 the staff was depleted owing to inability to replace the members who had left for war service. Still others had resigned to enter the service of rubber companies that offered far more attractive salaries and prospects than the Government. In 1918 the estimated expenditure of the Department of Agriculture was about $500,000 or £58,000. Inadequate though this was, it compared not unfavourably with contemporary agricultural expenditure in India, which ranged from £57,000 to £36,000 in the various provinces and amounted to £350,000 for the whole country. A report on the Department which was published in 1919 advised few additions to the staff, and these primarily for research and field work in the crops of native cultivation such as padi and coconuts. Additional Experiment Stations were required for this work as well as demonstration plots to give visual proof to the Malays of the value of improved methods. Finally the report advised that the Agricultural Department in the Federated Malay States and the Botanic Gardens in the Colony should be amalgamated, the latter continuing their valuable work of acclimatizing foreign plants. In accordance with this Report a joint Department for the Straits Settlements and Federated Malay States was established in 1919. Johore had already been assisted to establish its Agricultural Department, and in subsequent years similar aid was given to the other Unfederated Malay States.[15]

Research was also carried on from about 1910 by four of the rubber planters' associations. They employed altogether four chemists and six mycologists, but the laboratories were usually inadequate and they had no field staff to assist the planters. In 1917 there was some abortive discussion of the amalgamation in a Rubber

Research Institute of the scientists employed by the companies and the members of the Agricultural Department who were engaged in rubber investigations. It was proposed that the Institute should be jointly controlled by the Government and the planters, and should be financed by a tax upon all rubber exported.[16] The situation in 1919 was that the research carried out by Government and private agencies had been of great value, but had not kept pace with the needs of the industry. The funds allotted were too small and the four years of the Great War had seriously retarded progress. To some extent the planters in Malaya were to blame for the scientific backwardness of rubber cultivation, although many welcomed the work of the Agricultural Department and followed its advice. A large number however failed to profit from it, but the fault would seem to have lain not so much with the actual planters as with their boards of directors in England and the visiting agents in Malaya who enforced their instructions.

Until 1920 the history of rubber cultivation had been one of expanding markets, prices of at least 2*s.* per pound, and increasing acreage. There had been no urgent need for economy, and this had often led to methods and expenditure which would to-day be regarded as impossibly extravagant. Experience had not yet shown that the world price was subject to sudden and devastating fluctuations. By 1920 however production had outstripped consumption and surplus stocks were still further increased by the depression of 1920–2. Purchases by the motor-car industry were sharply curtailed particularly in the United States which normally required 72 per cent. of the annual world production. By the end of the year the standard grade of crude rubber sold for as little as 10*d.* per pound, and during 1921 and 1922 the average London price was slightly over 9*d.* This was below the costs of production on many estates and the industry was faced with an acute crisis. A voluntary attempt to restrict production in 1920–1 broke down, partly because small holders would not conform and also because many estates were confronted with the alternatives of bankruptcy or of production at full capacity irrespective of the price of rubber in order to meet their more pressing liabilities. In June, 1922, the price fell to a little over 6*d.* a pound, so that many estates were threatened with bankruptcy. To some considerable extent the industry was itself to blame for its own predicament. During the previous period of prosperity too many estates had contemned the need for scientific cultivation and had paid more attention to large annual dividends

than to economical management. There were far too many small, independent companies each with its expensive organization of board of directors, resident estate manager, and visiting agent. The latter was employed by the directors to supervise and report on the work of the manager. British estate managers while probably superior to Dutch in the handling of labour were on the whole less scientific in their methods of cultivation. Reorganization on a larger scale, economy and scientific cultivation were in the long run the only remedies; but their results would take time to show themselves and the plight of the rubber industry was steadily becoming more serious. Moreover the successful application of these remedies required money to tide the estates over the period of reconstruction and in very many instances reserves were conspicuously lacking.

Most of the planters were convinced that Government restriction of output was the only way to save a high percentage of the estates from ruin; and deputations interviewed the Governor to press upon him the necessity of this policy. He refused to impose restriction, on the ground that the situation must right itself, but agreed to consider any definite proposals put forward by the industry providing they were supported by the majority of those engaged in it. In February 1921 a committee of planters' representatives submitted a draft Bill for the restriction of production and export. It was supported by the planters and the unofficial members of the Legislative Councils in the Colony and the Federated Malay States, and was forwarded to the Secretary of State for the Colonies in July, 1921. The Governor advised that Malayan rubber export should be restricted if Ceylon and the Netherlands East Indies would take part.[17] In the same year the Stevenson Commission of Inquiry was appointed in Great Britain, and in their first report of 19th May, 1922, they regarded Dutch co-operation as essential to the success of any scheme for restriction. The Dutch however refused and in October, 1922, the Commission recommended that Government control of exports be introduced in Malaya and Ceylon alone. The British Government adopted the report, and restriction was introduced in 1922. The refusal of the Dutch Government to co-operate was a fatal weakness in the Stevenson plan and brought about its ultimate failure. In the Commission's first report indeed they had regarded Dutch co-operation as vital to success; but in the second and final report they advocated single-handed British restriction. Of the various plantation rubber producing countries British Malaya and Ceylon together produced at that date 70 per cent. of the world

supply, and an additional 25.5 per cent. came from the Netherlands East Indies. Part of it was grown on large estates owned by Dutch or British companies and the remainder on small native holdings. The Dutch Government refused to introduce restriction because it was confident that the Dutch planters or at any rate those who were most efficient and scientific would survive the depression without assistance. Moreover the policy was to encourage rubber growing by small holders in order to improve their standard of living and so increase their contentment and loyalty. The majority of British planters in the Dutch colonies however had agreed voluntarily to restrict their output, so the Commission concluded that the British controlled about 75 per cent. of the annual world production. The members greatly underestimated the very large area which was already planted by native small holders and its potential output, and they also failed to realize that there were hundreds of thousands of acres in Sumatra suitable for extensions of rubber growing. Dutch planters and native cultivators would have every incentive to make use of them since they would benefit from any increase in the world price which British restriction produced and were unfettered by an export quota. The object of the Stevenson plan was to stablize prices at the moderately profitable level of 1*s.* 3*d.* per pound (raised to 1*s.* 9*d.* on 1st May, 1926) by a system of variable export quotas. Estimates were made of the total world production, existing surplus stocks and consumption of rubber; and the percentage of production which might be exported was restricted to a quantity which would raise the price to 1*s.* 3*d.* The production of each estate was ascertained for the year 1st November, 1919, to 31st October, 1920, and was the Standard Production or 100 per cent. The Exportable Percentage initially fixed at 60 per cent. was raised or lowered according to whether the average London price of standard quality smoked sheet during the preceding quarter had been above or below 1*s.* 3*d.* An Advisory Committee in London was appointed to assist the Secretary of State for the Colonies in operating the scheme. A nominal export duty was levied on the Exportable Percentage; but exports in excess of this were subject to a graduated and prohibitive duty. The situation was reviewed each quarter in the light of world demand and the amount of decrease in the accumulated surplus stocks, and the Exportable Percentage was raised or lowered so as to maintain the desired stability of price.[18]

Ordinances to enforce restriction were enacted in the various parts of Malaya in October, 1922, and were strongly supported by

those connected with the rubber industry. In the Legislative Council of the Colony the wisdom of restriction was questioned by some members, although they voted for it since the great majority of the planters declared it was essential to save the industry. The opposition was due to dislike on general principles of Government control of business, coupled with the belief that the proper remedy was for the industry to save itself without invoking Government intervention. These general arguments were natural in a stronghold of free trade; but a more concrete reason was also advanced. It was pointed out that consumption of rubber was again beginning to increase with the lessening of the depression and that a natural price recovery would therefore occur in any event.[19] The allotment of an Exportable Percentage to each grower based upon his Standard Production was an exceedingly complicated process: in the Federated Malay States alone there were about 340,000 agricultural holdings, and rubber trees old enough to be tapped were grown on about 140,000 of them. The division of the Standard Production between estates and small holdings showed that 27.16 per cent. was produced by cultivators, principally Malays with holdings of less than twenty-five acres, another 6.79 per cent. by Malay and Chinese owners of holdings of from twenty-five to 100 acres, and the remaining two-thirds by estates, mainly European, of over 100 acres. The Standard Production for the whole of Malaya was placed at 274,000 tons in 1923, while the actual exports were 177,644 tons. The figure for Standard Production was believed to be "far below the potential output".[20]

Restriction was enforced for six years until 1st November, 1928. During the first two the average annual price was kept fairly stable in the neighbourhood of 1*s.* 3*d.* per pound, although there was considerable fluctuation over shorter periods; and the increased price enabled planters to sell at a profit. It can be put to the credit of the Stevenson plan that it saved many of the rubber companies from bankruptcy, although it is equally true that in considerable measure their predicament was of their own making. The growing demand for rubber owing to the recovery of the motor car industry in the United States caused the price to rise rapidly in 1925 to over 4*s.* per pound. In 1926 the effect of ignoring the Dutch began to show itself: the price fell to about 1*s.* 8*d.* and continued to fall during the following years. In 1928 when restriction was abolished the average price was 10*d.* per pound and "left only a small margin over cost of production". When rubber restriction was debated during these

years in the Legislative Councils it was invariably supported by the British and Chinese planters' representatives as vital to the survival of the industry. The tone was very different from that of the 'thirties when restriction was revived. Unofficial members then referred to the Stevenson plan as an example of "how not to do it", and condemned the rubber representatives who had controlled the Advisory Committee in London for their greed in fixing too high a price and for their shortsightedness towards Dutch competition. During the period of the Stevenson plan almost the only unofficial member who was sceptical of ultimate success was Mr. Lowther Kemp. In 1924 he pointed out that information showed that the Stevenson Commission had based its recommendations upon a serious underestimate of the world's potential production. By 1924 British interests controlled 60 per cent. and not 70 per cent. of the production as they had estimated, and foreign sources of supply showed "a constant and alarming tendency to rapidly increase their percentage". Above all Mr. Kemp was gravely perturbed by the increase of production by native small holders in the Dutch colonies: this he rightly regarded as the most serious aspect of the situation. The European companies had secured the adoption of a policy whereby the price of rubber was determined by their costs of production plus a reasonable dividend. There would be no objection to this "if the European planter with his large capital, Directors, Secretaries, Agents and expensive organization generally were the only pebble on the beach". His costs of production however were about £1 per ton while those of the native small holder were "practically nil". The latter spent little on cultivation and had no elaborate organization or labour expenses, since he and his family collected the rubber. As a result the price of 1*s*. 6*d*. per pound which yielded a moderate profit to the European company gave the native cultivator a "fabulous profit" and encouraged him to plant additional land. Mr. Kemp strongly urged an inquiry into the question of the native small holder, whom he regarded as the "forgotten man" of the Stevenson plan. The other unofficial members who replied were unanimous in their support of restriction, Mr. Tan Cheng Lock stating that the cost of production was between thirty cents and thirty-five cents a pound while the price of the moment was only 9*d*. or about thirty-three cents per pound.[21]

In 1928 Mr. Ormsby Gore, the Under-Secretary of State for the Colonies, visited Malaya, Ceylon, and Java and recommended the abolition of restriction.[22] The high prices brought about by re-

striction in Malaya and Ceylon had encouraged European and especially native production in the Netherlands East Indies. It had also fostered the use of reclaimed rubber in the United States, which retarded the reduction of the excessive stocks of rubber on the market. Restriction was becoming ineffective for the purpose of regulating world prices and was likely to become increasingly so the longer it continued. To maintain a world price of 1*s.* 9*d.* or even 1*s.* 3*d.* per pound would require still further reduction of the existing British Exportable Percentage below 60 per cent. "with every prospect that" the British share of world rubber exports would grow progressively smaller while the Dutch increased. When the Stevenson Commission made its estimates of world production there were no official statistics as to the area controlled by native small holders in the Netherlands East Indies. It had largely" ignored" this unknown factor and had gravely underestimated the acreage under native rubber. The members had been correct in believing that in 1922 75 per cent. of the planted area of estate rubber was under British control; but this was by no means the same thing as 75 per cent. of the total production. "In fact it now appears that the increased exports from the Netherlands East Indies during the operation of restriction, which have rendered it increasingly ineffective for the purpose of regulating world market prices, have been predominantly native rubber, and that this rubber has been produced on areas planted in 1919 and 1920 before the restriction scheme came into force." The enhanced price obtained by British restriction had naturally stimulated growers to tap their trees to capacity. The result was that "the output of the Netherlands East Indies has increased during restriction by about 145 per cent., while the increase in net exports from Malaya and Ceylon combined has been only about 13 per cent." By 1927 the share of Malaya and Ceylon in total world exports of crude plantation rubber had fallen from 70 per cent. in 1922 to 52 per cent., while the Dutch colonies had increased their share from 25 per cent. to over 40 per cent.

The Stevenson committee had not merely underestimated the existing rubber acreage; in addition they had successfully stimulated its increase by British and Dutch rubber companies and particularly by native small holders.* In 1920 the planted area

* The total planted area on estates in the Netherlands East Indies and its increase during the period of restriction was as follows:—

1915	. .	239,123 hectares
1922	. .	377,984 ,,
1928	. .	525,646 ,,
1933	. .	582,363 ,,

owned by native small holders in Sumatra and Borneo was about 180,000 hectares (1 hectare=2.47 acres). There was virtually no addition until the end of 1922 when the price began to rise owing to restriction. From that date the planted area sharply increased until in 1927 it amounted to about 600,000 hectares, and the growth in acreage would continue so long as the price of rubber acted as an inducement. The rubber tree could not be tapped until it was between five and six years old and it required ten years to come to maturity. The oldest of the trees planted since 1922 were about ready for tapping, so that as they progressively matured rubber from them would make it increasingly more impossible to maintain the price of 1*s.* 3*d.* per pound. Mr. Ormsby Gore concluded that native rather than plantation rubber was the chief obstacle to restriction, and that the longer it continued the smaller would become the British share in world exports and the larger that of the Netherlands East Indies. He also pointed out that altogether apart from expansion of acreage the benefits of the enhanced price accrued to the Dutch rather than to the British plantations. The former were able to produce at maximum capacity and minimum expense, and received a far greater aggregate profit from which to finance research which would still further augment their output. Since British planters were allowed to export only a portion of their potential capacity their profits were correspondingly reduced and their costs of operation increased. Moreover they had less funds with which to finance research; and Mr. Ormsby Gore gave it as his considered opinion that this was sorely needed.

His strictures on the inferiority of British as opposed to Dutch methods of rubber cultivation may have been unduly severe and would have applied with even greater force ten years earlier. The exhortations of the Malayan Department of Agriculture* had introduced improvements, and any sweeping statement would be unfair to a large number of individuals. On the whole however the Dutch planters were the more scientific in their methods of cultiva-

The tappable area at the end of 1932 was 396,746 hectares divided among about 1,060 estates. The area under native rubber was unknown, but some idea of its importance can be gleaned from the fact that exports of native rubber were 32% of the total from the Netherlands East Indies in 1923, and between 39% and 45% in 1925 to 1929 (Cecile Rothe, *Restriction of Rubber Production in Netherlands-India*, *Pacific Affairs*, March, 1935, pp. 67–8).

* Apparently the earlier reports of the Department were couched in such technical language that the planters were justified in their complaints that they were only semi-intelligible to the laymen for whom they were intended. This fault has long since been remedied, and in addition to reports intended for brother-scientists, which are worded in suitably obscure scientific terminology, those intended for planters are clearly expressed in non-technical terms.

tion. Mr. Ormsby Gore considered that the fault often lay with the boards of directors in London and their visiting agents in Malaya, rather than with the estate managers, many of whom were keenly interested in scientific improvements. He instanced the clean weeding leading to soil erosion upon which the directors had insisted until about 1919. The actual planters were usually powerless because in most cases they did not own their estates but were employees of a company. The London directors and shareholders, unlike the Dutch, were not interested in research because it was costly and in the past they had made high dividends without it. The estate agents whom they employed to inspect and report on their properties in Malaya were each in charge of a considerable number of plantations. This often made them hesitate to allow the adoption of new methods of cultivation since if these failed it would injure every estate for which they were responsible. Mr. Ormsby Gore also pointed out the costliness of the organization of the companies, with their "complicated and expensive mechanism of directors, agent firms, visiting agents, managers and shareholders". From such information as he could obtain he believed that costs of production were unduly high compared with Java. His investigations were confined to a limited number of estates; but they indicated that Dutch estates could produce rubber at a cost of *4d.* to *5d.* per pound f.o.b., while in Malaya the costs were *7d.* to *9d.* for the majority, with a few large estates producing at *6d.* per pound. Mr. Ormsby Gore's conclusion was that in 1928 some boards of directors were altogether too prone to ignore scientific research and "look to Government for assistance in fixing prices on the basis of what the least efficient estates consider a reasonable level". He therefore advised the abolition of restriction since it "was tending to undermine efficiency, to handicap scientific development, and to discourage a progressive attitude to the problem of higher yields and improved methods of cultivation".[23]

He was led particularly to this conclusion by the growth of native rubber cultivation, which he regarded as a serious threat to the survival of the European estates "with their high overhead charges and costly management". The expenses of the latter virtually forced them to continue tapping whatever the price of rubber, since their fixed charges remained irrespective of the state of the market. The native small holder on the other hand could afford to tap or not as it suited him. Once his trees were planted he had little expense, for his methods of cultivation were generally inferior to those of the

European plantation and his labour was usually supplied by himself and his family. Also part of his land was usually planted with food crops which supplied all or most of his actual necessities. Rubber was an additional source of income and, roughly speaking, he tapped his trees when the price was high and ceased tapping when it fell to a figure which did not appeal to him. The quantity of native rubber which appeared on the market was therefore to a large extent governed by the price; while the amount of estate rubber was determined by the area planted with trees mature enough to tap. The native small holder with his low costs of production was thus a serious competitor to the European estate with its complicated organization and its heavy expenses; and there was the risk that rubber growing might become predominantly a native industry. The best hope of survival for the estate was to reduce its costs and increase its yield—in other words to become as scientific as, e.g. European tea planting in Ceylon. The estates in the Dutch colonies on the whole were decidedly in advance of the British in this respect, particularly in the development of budgrafting.

The Stevenson plan was abolished in 1928, and within little more than a year the rubber industry was engulfed in the Great Depression. It had little time to prepare for the slump after its eight years of alternate depression and restriction; and it is therefore important to try to estimate how far it was ready to face the most serious danger it had yet encountered. In 1919 the Government decided to expand the Agricultural Department with a view especially to research and field work in padi and other native crops which had been decidedly neglected. Simultaneously it discussed with the Colonial Office and the various planters' associations the formation of a Rubber Research Institute which should combine the work previously carried on by government officers and by specialists employed by various private companies. Expansion of the staff was postponed owing to the reduction in revenue caused by the post-war depression.* At the same time the plans for a Rubber Research Institute encountered difficulties owing to differences of opinion over such questions as the method of financing and the relative

* In 1920 only eighteen out of thirty-six appointments for European officers were filled. Plans for recruiting up to full strength and for the creation of new posts were seriously retarded first by the shortage of trained specialists caused by the Great War and subsequently by the fall in revenue. The result was that the actual number of agricultural officers was thirty in 1921 and only rose to thirty-eight in 1928 (*Annual Reports of the Department of Agriculture, Straits Settlements and Federated Malay States, 1920–1928, passim*).

degree of control to be exercised by the Government and the planters. After several years of discussion all concerned were brought into agreement in 1924, the Board of Directors was appointed in 1925 and the Rubber Research Institute was officially opened on 1st November, 1926. The work however did not really get under way until about 1928 primarily owing to the discordant views of the planters' representatives on the Board as to the proper work of the Institute and other questions connected with it. Delay was also caused by the time taken to engage the additional staff and build the laboratories and experiment station. The Rubber Research Institute at Buitenzorg in Java with a staff of nine scientists was established in 1913 and took over most of the rubber research of the Agricultural Department. Malaya began the study of budgrafting and related problems under a considerable handicap as regards time. Rubber research and field work among planters and small holders continued to take up most of the time of the Agricultural Department until about 1927, when the creation of the Rubber Research Institute at last set it free to deal with other crops. Valuable progress was made in some directions: about 1925 for example the Department began the experiments which later developed into the "forestry method" of cultivation that was widely adopted in the 'thirties. Instead of planting cover crops to protect the soil the same result was attained by allowing the growth of the indigenous Malayan vegetation, only those plants such as lalang grass which were known to be injurious being removed by selective weeding. During the 'twenties the standard of cultivation on estates had improved e.g. in methods of tapping and prevention of soil erosion. At an earlier date many estates had been guilty of over-tapping which in the end lessened the flow of latex. The enforced restriction of export enabled the trees to recover and replace the bark which over-tapping had removed faster than Nature could restore it. Owing to the post-war depression the management of estates had become somewhat more economical, and as a result of the higher prices secured by restriction some estates had accumulated financial reserves. The improvement on Malay small holdings was decidedly less than on European estates although the enforced diminution of tapping produced the same general results. Then as now the standard of cultivation was lower, over-tapping far more prevalent, and the enforcement of Ordinances regarding pests and diseases much more difficult.[24]

The Rubber Research Institute was responsible for all rubber

research with the exception of the discovery of new uses for rubber. Investigation in this field was carried out in Great Britain by such agencies as the research departments of the various rubber companies and the British Board for Rubber Research which was evolved as one of the results of the present International Rubber Regulation Scheme. The advisory branch of the Institute assisted planters on request either by letter or where necessary by a personal visit, and also helped to improve the native small holders' methods of cultivation. It trained and paid a field staff of Asiatic Rubber Instructors whose work was controlled, however, by the Agricultural Department's Field Officers. The Department also remained responsible for the enforcement of Ordinances dealing with the prevention or control of rubber pests and diseases. The Institute was controlled by a Board of three official and seven unofficial directors, the three officials being the Director of Agriculture, the Treasurer of the Federated Malay States and the Director of the Rubber Research Institute who was *ex-officio* the chairman. The High Commissioner nominated two Malay members to represent the small holders and selected five others to represent the large estates. The three planting associations of Malaya, composed of the European and Chinese rubber companies and planters, nominated members to a panel from which the High Commissioner made his appointments. The work of the Institute was financed by a cess of ten cents on each picul (133⅓ lbs.) of rubber exported from any part of Malaya. This was in addition to the export duty, the proceeds of which formed part of the ordinary revenue of the Malay States.*

Apart from estate management, which was still far from economical in 1928, the principal defect was the backwardness of the industry in adopting higher-yielding strains of rubber. Individual rubber trees vary greatly in yield: while the average over the whole of Malaya may be taken as between 350 and 450 pounds per acre per annum, the yield from budgrafted trees has been shown to be

* The cess was not collected until the abolition of restriction in 1928, since under the Stevenson plan a tax of two cents per pound was charged on all rubber exported from Malaya as part of the Exportable Percentage (*Proceedings Federal Council of F.M.S.*, 1924, p. B. 102). To preserve its free trade orthodoxy the Straits Settlements did not impose the cess on rubber exports, but instead collected the same amount on each picul of rubber produced in the Colony. The Institute gradually accumulated a considerable surplus since the receipts from the cess proved to exceed its expenditure. For this reason and because of the heavy fall in the price of rubber during the 'thirties the Malay States and the Colony in 1936 temporarily reduced the cess to ·05 cents per pound (about 7 cents per picul) until the surplus had been diminished. In 1937 this produced an income of about $600,000 a year.

capable of exceeding 1,000 pounds. It may perhaps in some cases run to 1,500 pounds, but yields of such magnitude have not yet been fully proved. Variation in yield is sometimes due to the poor methods of cultivation or unsuitable soil; but the most important cause is heredity. It has been proved that 30 per cent. of the trees on a given area produce about 70 per cent. of the crop. To increase the yield it is necessary that all the trees planted on an estate should be grown from buds obtained from parent trees which had been proved to give a high yield. The process is known as budgrafting and the progeny of a parent tree raised by means of this process as a clone. The first step is the establishment of reliable high-yielding "mother" trees, which is done by carefully measuring the yield over a period of several years. Buds are then cut from the smaller branches of the parent tree and grafted on near the base of ordinary vigorous seedlings, so that the shoot from the bud becomes the main trunk of the tree which is to be tapped. Not all high-yielding "mother" trees transmit their desirable properties to their offspring, so that the clone must be grown for five or six years before the planter can ascertain by tapping whether it is a credit to its ancestry. Still further refinements are that the progeny of a "mother" tree may show undue liability to damage by wind, irregular or fluted stems, or other undesirable characteristics. The establishment of a proved clone therefore requires about ten years; and some of the early failures in Malaya occurred because the demand for budgrafts was so large that they were at times taken from clones which had not been fully proved.[25]

Budgrafting of rubber trees was first successfully accomplished in Java in 1917, and in 1928 the plantations in the Dutch colonies were decidedly ahead of those in Malaya in practising this form of propagation. The headstart of the Dutch was partially because, unlike that of the British, their research was not handicapped by loss of staff and inability to secure replacements during the Great War. The addition of a Geneticist to the Agricultural Department was sanctioned in 1919 to carry on experiments in budgrafting. Shortsighted economy due to the depression left the post unfilled, and when the industry gradually recovered, the appointment was still kept vacant because it appeared that the establishment of the Rubber Research Institute was imminent. Some investigations were carried out by other Agricultural Officers; but Malayan research was decidedly behindhand with this work. The attitude of the planters varied: some were keenly interested and others sceptical. Beginning about 1922 some

estates imported budwood from selected "mother" trees in Sumatra; but it was only from 1928 onwards that it was imported on a large scale and that some estates began to develop their own clones.[26]

The termination of rubber restriction in 1928 did not at first have any marked influence on the price, which averaged between 10*d.* and 11*d.* in 1928 and 1929. Production mounted sharply and outstripped consumption more and more, since estates resumed their full output and at the same time the areas planted in the Dutch colonies after 1922 progressively came into bearing. World production of rubber rose from 616,000 tons in 1927, the last full year of restriction, to 868,000 tons in 1929. During the same period world consumption also increased from 596,719 to 805,121 tons but increasingly lagged behind production. Surplus stocks, to reduce which had been a principal object of the Stevenson plan, had mounted in 1929 to 328,690 tons, the largest quantity on record and more than double their minimum of 1925. After 1929 the flooding of the world's markets continued and at the same time consumption abruptly fell owing to the economic crisis. Surplus stocks soared and the London price of rubber in 1930 fell sharply to an average of slightly less than 6*d.*, the lowest in the history of the industry. This led to a reduction in the output of rubber by small holders in 1930 to 1932 since they are much more sensitive than estates to fluctuations in price. Unfortunately this decrease was more than counterbalanced by estate rubber: the price for many of them was below their costs of production, but heavy fixed charges impelled them to tap to capacity. The heavy excess of production over consumption forced the London price still lower to a yearly average of 3*d.* and less in 1931 to 1933 inclusive. No conceivable economies could cope with such figures, and the plight of the industry was infinitely more serious than in 1920–22.*

* D. H. Grist, *An Outline of Malayan Agriculture*, p. 77. The rubber statistics for 1929–1934 were as follows:—

	World Production. Tons.	*World Consumption.* Tons.	*Surplus Stocks.* Tons.	*Average London price per lb.* d.
1928 . .	662,600	676,315	247,362	10$\frac{3}{4}$
1929 . .	868,000	805,121	328,690	10$\frac{1}{4}$
1930 . .	824,800	713,711	453,269	5$\frac{28}{32}$
1931 . .	799,800	679,386	589,295	3$\frac{1}{8}$
1932 . .	708,700	684,832	589,153	2$\frac{31}{32}$
1933 . .	849,800	809,388	616,370	3$\frac{1}{4}$
1934 . .	1,027,572	923,249	677,701	6$\frac{7}{32}$

The net exports of rubber during this period were as follows (*Annual Report of Dept.*

During the first part of 1930 European estates in Malaya continued their importation of budwood from the Netherlands East Indies, and the larger ones maintained their normal standard of upkeep almost throughout the year. An attempt to improve the price of rubber by a "tapping holiday" failed because while it was very generally observed by the large estates the smaller holdings did not support it. The price continued to fall and by the end of the year was half what it had been in 1929. A considerable number of small holdings and some estates discontinued tapping; and many European managers and plantation coolies were discharged. The falling price led to renewed interest in economy, and by the end of 1930 a large number of estates had reduced their costs of production to ten-twelve cents (about 3*d.*) per pound. This however left little margin of profit and allowed nothing for improvements. The following year the price continued to fall, and only a limited number of estates showed a favourable balance by means of drastic economies. Tapping was entirely discontinued on some properties, a few of which were abandoned and the rest placed on a care and maintenance basis in charge of a watchman with occasionally a few labourers to keep down the growth of rank lalang grass. At the same time it is noteworthy that some estates continued their investigations upon budgrafting and the area planted with budgrafted rubber increased. There was considerable interest in the forestry method of cultivation, i.e. allowing the growth of selected natural vegetation instead of planting cover crops. Among the small holders those with other resources, particularly rice land, only tapped their trees intermittently to supplement their income. A considerable number of Malays however had substituted rubber for food crops and having no other source of livelihood their tapping was continuous and excessive.* In 1932 the average London price sank

of Agriculture S.S. and F.M.S., 1933, p. 5, op. cit., 1934, p. 5):—

	Malaya.	*Netherlands Indies.*
	Tons.	Tons.
1928 . .	258,906	232,000
1929 . .	418,000	285,000
1930 . .	420,985	241,000
1931 . .	393,603	257,000
1932 . .	385,961	211,000
1933 . .	405,297	280,800
1934 . .	465,765	378,125

* The area under rubber in Malaya in 1931 was estimated to be slightly over 3,000,000 acres, or 43% of the world total. About 1,440,000 acres or 47% were tappable, and the total area planted with bud-grafted rubber was 138,000 acres or 4·5% of the whole. Estates of over 100 acres, mainly European, amounted to about 1,850,000 acres or 60%; the remainder was owned almost entirely by Chinese and Malays (*Annual Departmental Reports of the Straits Settlements for the Year 1931*, p. 381).

even lower to a little over 2*d.* The exports of the Federated Malay States, principally rubber and tin, were about one-fifth of what they had been six years earlier and were less than in any year since 1909. Rigorous economies were carried still further in methods of cultivation and reduction of the labour force; and the estates discovered that production could be carried on at costs which would have been considered incredible four years earlier.* A few estates actually succeeded in getting through the year without a financial loss by reducing their costs to from four to five cents (about 2*d.*) a pound f.o.b. This was only possible when yields were particularly favourable and when sacrifices were made which in the long run would be detrimental to the estate. Few plantations had any money for experiments in improving the yield; but a limited number of the larger properties were able to continue their work on budgrafting. They held that in a war of attrition the estates with the highest yield were most likely to survive. In 1933 the average price of rubber rose by a fraction of a penny owing to the increase in world consumption, with the usual result that native production increased greatly both in Malaya and in the Dutch colonies. So far as European estates were concerned the rise in price enabled them by the strictest economy to avoid loss or sometimes make a small profit, but not to keep the property in good condition.[27] Government intervention was necessary if the industry were to cope successfully with its difficulties.

The first suggestion of restriction was made as early as 1929, and the abortive "tapping holiday" of May, 1930, was arranged by a joint committee of British and Dutch planters. Its failure showed that voluntary restriction by the European estates was ineffective unless similar measures were imposed upon small holders. Dutch as well as British planters therefore urged their governments to limit the export of native as well as of plantation rubber. The attitude of the Dutch was very different from what it had been at the time of the Stevenson plan. At that date the majority had opposed restriction, feeling confident that they could survive the depression by superior methods of cultivation. The unprecedented and catastrophic fall in price, combined with the ominous significance of the great area under native rubber with a potential output believed to exceed 300,000 tons, convinced them that the doctrine of the survival of the fittest meant ruin for all concerned. The Netherlands

* The average cost of production on efficient estates in 1932 was 9 cents per pound or 11⅛ cents (3¾*d.*) if ocean freight and home charges were included. This was more than the average London price of 2⅜*d.* (*Proceedings of Fed. C. of F.M.S., 1932*, p. C55).

Indian Government however refused to limit native production, since its policy had been to foster it and also because of the very great practical difficulties. The Government had no certain information as to the planted area, potential output or number of native growers, particularly in Sumatra, and did not see how exports could be controlled by any scheme which would be both effective and fair. The British Government refused to adopt single-handed restriction and pointed out that French as well as Dutch co-operation was essential. Large areas in Indo-China were suitable for rubber cultivation and France was subsidizing their development. British and Dutch planters continued to urge an international scheme of control and their Governments carried on negotiations which failed to reach an agreement. By 1933 the position of the industry had become so serious that intervention was inevitable; and in the same year the Netherlands Indies Government ascertained that in general native growers were convinced of the necessity of restriction. Protracted negotiations thereupon ensued between the British, Dutch, and French Governments and representatives of the rubber industry.[28] While they were in progress an episode occurred which showed the necessity of limiting exports. The average London price rose to slightly over 6*d.* in 1934, owing partly to recovery in demand but also to the expectation of restriction which caused a rise not justified by the state of the market. For while world consumption increased to 923,249 tons in 1934, production promptly rose even faster to 1,027,572 tons, with the result that surplus stocks reached a new maximum of 677,701 tons. Native growers had resumed tapping owing to the rise, and the large amount of rubber with which they inundated the market threatened to force the price down to the former unremunerative level.[29]

On 7th May, 1934, the Governments of Great Britain (representing Malaya, Ceylon, India, Burma, Sarawak, and British North Borneo), the Netherlands Indies, and Siam signed an Agreement to restrict the exports of rubber from 1st June, 1934, to 31st December, 1938. Basic quotas were fixed for each country, the amount increasing each year to allow for the acreage under young rubber which would gradually reach the stage of production. The basic quotas for 1934 were 504,000 tons for Malaya and 352,000 tons for the Netherlands East Indies. French Indo-China signed the agreement on a special footing: no basic quota was fixed and no restriction was placed on exports so long as they did not exceed 30,000 long

tons in any one year. An International Rubber Regulation Committee, the members of which were appointed by the governments to represent producers and consumers, was to fix for each quarter the permissible exportable amount, i.e. the percentage of the basic quota which each country might export. Expansion of the acreage already under rubber was prohibited with the exception that for experimental purposes an area might be planted which did not exceed one-quarter of 1 per cent. of the total at the date when the Agreement came into force. The export of rubber seeds and propagating material was prohibited, as was replanting, save that a grower might replace old trees to the extent of 20 per cent. of the acreage held by him at the beginning of the period of restriction. The governments were invited to levy a cess on net exports to finance research on new uses for rubber; and were left free to adjust production to permissible export in any way they saw fit.[30]

The Governments of Malaya enacted Ordinances of a similar pattern to carry out the terms of the Agreement. Acting on the experience gained during the Stevenson plan drastic rights of search and seizure were taken by Government to prevent the smuggling of rubber from Singapore or Penang. A cess of two cents a pound was levied on all rubber exports, to finance research into new uses and to cover the cost of administering restriction. Apportionment of the quota and control of exports was placed in the charge of the Controller of Rubber for Malaya, who was assisted by Deputy Controllers and by a central and local advisory committees of civil servants and European and Asiatic growers. The apportionment of the quota was an exceedingly complicated task. The Straits Settlements had never kept records of the quantity of rubber exported and its statistics for acreage planted were "gravely suspect". The small holders' acreage in Johore and Kedah admittedly was underestimated, and in Kelantan, Trengganu and Brunei it was "simply not known". In the Federated Malay States alone the figure for export and acreage were approximately reliable. Export of rubber could not be retarded until a thorough and necessarily lengthy survey had been made of each separate estate and small holding. Provisional quotas based on estimates of productive capacity which were in reality "extremely accurate" guesses were assigned to all growers within a few weeks, those for the small holders being made by the District Officers. A thorough and detailed assessment of each holding and estate was then undertaken and completed in 1935. Serious errors could easily have been made

in the original estimates; but in fact there were few complaints or instances of miscalculation. "In quite a number of cases managers of estates refused to be convinced that the provisional credits given them were merely a guess and were not based on an actual assessment, and in consequence rather resented being asked for further information." Estates were credited in the ledgers of the Controller with the quantity which they were entitled to export; while small holders received coupons stating the amount allotted to them. The owner might either export it or sell his coupons to a rubber dealer who thereby acquired the export rights. Slightly less than two-fifths of the quota were assigned to native small holdings and the rest to estates of over 100 acres of which about three-quarters were owned by Europeans.[31]

The Dutch had no difficulty in apportioning the quota so far as European estates were concerned, an export licence being issued to each according to its output. The Government however had no exact information as to the extent and productive capacity of the very large area under native rubber in Sumatra and Borneo. To assess each holding and give a separate export licence to each small holder was considered impracticable owing to the time it would have required. Production was therefore limited by imposing upon all exports of native rubber in excess of the assigned quota a heavy export duty on a sliding scale which rose to as much as 90 per cent. of the market price. The export was very considerably curtailed, but still exceeded the quota by about 20,000 tons. To cover the excess the Government bought from the estates export licences for an equal amount of rubber and withdrew it from the market. The Government therefore undertook the task of assessing the capacity of each holding and largely replacing the export tax by issuing a separate export licence to each of the cultivators, who were found to number 788,438. For 1937 the export tax on native rubber was reduced to 10 per cent. of the value plus a temporary 2 per cent. additional tax. The adoption of restriction had also revealed that the extent of native rubber cultivation had been considerably underestimated. The International Rubber Regulation Committee therefore considerably increased the quota of the Netherlands East Indies for 1936 and subsequent years, the whole of the addition being assigned to native production. Whereas the allocation of the original quota had been in the proportion of 100 to estate rubber and 71½ to native growers, that of the enlarged quota was 100 to the former and about ninety-one to the latter.[32]

In 1935 the net world export of rubber was 873,130 tons, about 150,000 less than in the preceding year, and the consumption 930,876 tons or slightly more than in 1934. Surplus stocks began to decline and the price remained at about 6*d.* which enabled estates to produce at a profit. Part of the reduction which had been made in salaries and wages was restored and to some extent improved methods of cultivation were resumed. Certain of the older areas where the trees showed a declining yield were replanted with bud-grafted rubber. The importation of budwood and selected seeds was forbidden by the rubber Agreement; but ample supplies were available from high yielding clones already established in Malaya. The native grower also profited from restriction, though an increasing number preferred to leave their holdings untapped. Owing to the high price which they could obtain from dealers for their export coupons they preferred to sell their export rights rather than tap their trees and sell the rubber with coupons attached. Incidentally their preference improved their holdings since the reduction in tapping promoted bark renewal.[33] The improvement continued into the first part of 1937, and in March rubber for a short period sold for as much as 1*s.* 1¾*d.* per pound. Among the causes were the armament race and the partial recovery of the American motor car industry. The renewal of the depression in the United States, as always, reacted severely upon the industry and the price began to fall. The American demand contracted rapidly and unexpectedly; and by the end of the year the price had fallen to less than 7*d.* In March, 1938, it went as low as 5*d.*, but subsequently with the improvement in economic conditions and the reduction of the export quota to 45 per cent. it rose to 8½*d.* The Malayan rubber exports in 1938 were 372,000 tons out of a total world export of 889,300 tons.

The renewal of the International Rubber Agreement for five years in 1939 was in the interests of both producers and consumers. The consumers' representatives were increased to four, of whom two were from the United States. The Netherlands East Indies and particularly Malaya were vitally dependent for their prosperity upon the export of rubber, and it had revealed itself to be a commodity subject to sudden and violent fluctuations of price. Periods of extraordinary prosperity alternated with others of abysmal depression; and European estates with their labourers, native cultivators, and the Government revenue all suffered from the consequences. The state of the industry during the Great Depression was due to the fact that export had outstripped consumption, at least as much as

to the fall in the world demand. Moreover the excess of production would increase as recently planted areas became old enough to tap. The free play of economic forces could not be depended upon to effect a cure; each rise in price would evoke additional supplies of native rubber and again force it down. The effect of the catastrophic fall in price upon Malaya has already been described: estates drastically curtailed their operations, wages were reduced and scores of thousands of estate labourers dismissed, and small holders who were dependent upon rubber for their livelihood were in great distress. They felt the full impact of low prices without any balancing element like the plantation company's reserve fund to help them. The consequences were equally severe in those parts of the Netherlands East Indies engaged in rubber growing. "So long as plantation products . . . find ready buyers among other countries of the world there is prosperity in the Netherlands Indies. When they fail to find buyers or have to be disposed of at prices which mean no more than a starvation living to those working on the estates, the colony though it may be counted rich in resources is in fact poor. The drop in prices of plantation products during the period 1929–32 was nothing less than catastrophic. The quarter of a million tons of rubber exported annually from the Netherlands Indies fetched 10*d.* a pound in 1929 and less than 2*d.* in 1932. Fluctuations of these dimensions render orderly economic and social progress practically impossible."[34] There is sometimes a tendency to regard restriction as for the benefit solely of the European estates: it is overlooked that when the price fell to 2*d.* a pound it caused widespread distress and lowered standards of living to hundreds of thousands of Indians, Malays, Chinese, and Javanese estate labourers and small holders. The British and Dutch Governments also suffered, since they were dependent directly or indirectly for a large part of their revenue upon their staple products such as rubber and tin. Apart from the export taxes levied upon them they looked to import duties to provide much of their revenue. The volume of imports however depended upon the purchasing capacity of the small holders, the rubber companies, and their employees. Receipts from the rents and taxes upon land were also dependent upon the ability of the growers to pay: in Malaya for example the rate had to be lowered during the depression. The amount of government revenue roughly reflected the fluctuations of the staple industries. It was large during the 'twenties and both the British and Dutch Governments spent lavishly and perhaps sometimes extravagantly on social

services. The depression brought sudden and stringent economies along with the need for additional expenditure to assist the unemployed. Stability of price was essential to the welfare of all concerned. Of the two causes of instability the enormous fluctuations in demand in the great industrial countries were beyond the control of the producing countries. They hoped that the second reason, the excessive production which had developed since the Great War, could be eliminated by international regulation of supply. The remedy was not ideal; but it was better than unrestricted competition. A stable price was also preferred by consumers, provided that it was not excessive yet at the same time allowed reasonable remuneration to the growers. Manufacturers normally had in stock four months' supply and their practice was to revalue their stocks downwards but not upwards. If the market price rose they did not increase the value of their stocks, but if it fell they wrote down the value and themselves stood the loss. Sharp and sudden fluctuations meant uncertainty in calculating the cost and sale price of their manufactures. For this reason they preferred certainty and a price that was reasonable and above all stable rather than an abnormally cheap market. They objected to an excessive price not only because they were overcharged but also because they knew from experience that it meant instability, since production was stimulated and the price forced down. Consumers were equally opposed to too low a price since in that event production was curtailed, prices rose sharply, and the market was again unstable They did not object to a London price of around 9*d.* per pound, which would allow a reasonable profit to the growers, provided that the market remained constant at that figure.

The Rubber Regulation Committee which represents consuming as well as producing interests has tried to stabilize the price at this figure. The method adopted has been to estimate the probable world demand in the light of economic conditions and existing stocks and to regulate supply accordingly by raising or lowering the rubber export quota. So far the desired stability has not been attained, owing, it would seem, to the unstable economic conditions in the United States, which is the principal market. The sudden rise in price in the early part of 1937 was because American consumption showed a sudden and unexpected increase. Export quotas were enlarged but towards the end of the year the American demand fell off with equal rapidity and lack of warning, so that quotas had to be drastically reduced. Fluctuations in demand in the manufacturing

countries are beyond the Rubber Committee's control, and all that it can do is to counteract them by expanding and contracting export. Here it is under the disadvantage that the remedy takes time to operate and cannot affect the quantity available for immediate consumption. The situation is the same as in the case of tin, and the committee has not been able to prevent somewhat violent short-term fluctuations of price. Conditions however would have been worse if international control had not been in existence, for in that event the rise in price in 1937 would have been followed by large additional exports. These would have increased the surplus stocks when the demand declined later in the year, thus depressing prices still further and creating more serious fluctuations than those which actually occurred. The League of Nations Committee which investigated the problem of raw materials approved the system of international control of supply. It reported that "the governmental regulation schemes relating to raw materials now in operation have, generally speaking, been an important factor in the improvement in economic conditions experienced in producing countries during the depression, as well as in the development of international trade".[35]

Quite apart from restriction the rubber industry in Malaya was in a much healthier condition in 1938 than it had been ten years earlier when the Stevenson plan was abolished. The staff of the Rubber Research Institute had been temporarily reduced during the depression; but by 1937 it had been increased to about thirty scientists, and was the largest institution in the British Empire where investigation was confined to a particular crop.[36] A great deal of very valuable work had been carried out on budgrafting, fertilizers, methods of cultivation and manufacture, and on pests and diseases. It could no longer be said that Malaya was vastly inferior to Java in rubber research. Of the estates some had gone bankrupt, especially small private properties; but the majority had contrived to survive and learnt much in the process. They were able to operate at a cost which would have been considered impossible in 1929 and were as keenly interested in scientific methods of cultivation as the Dutch. They continued to make great progress in budgrafting despite the depression and the subsequent restrictions on replanting; and in 1937 the total area planted with budgrafted rubber in Malaya was 219,925 acres. On estates with mature trees forestry methods of cultivation were widely adopted to improve and conserve the soil with the strong approval of the Research Institute. There was

growing interest in fertilizers and in new methods of preparing the rubber for shipment. An increasing quantity of latex and concentrated latex has been exported in liquid form with the addition of a small amount of ammonia as a preservative. It has been discovered that latex is preferable to smoked sheet or crêpe rubber for the manufacture of certain articles.[37] The visiting estate agents acted as additional liaison officers between the Rubber Research Institute and the planters by informing them of its latest discoveries. As regards costs of operation, expenses were reduced in many ways, such as by decreasing high salaries and reducing the unnecessarily large number of European assistants. An important development was the amalgamation of some of the smaller estates into larger units, though this process could be extended with advantage, and could also be carried further to include the many small independent companies, with a consequent decrease in the number of London directors. Nevertheless, while further economies were possible, the British planters were now able to hold their own against the Dutch both as regards scientific methods of cultivation and economical production.* Native rubber was also less of a threat to the estates than formerly owing in part to the adoption of budgrafting. Almost equally essential was the restriction imposed by the British and Dutch Governments upon the extension of the planted area. As a rule native rubber continued to be inferior in quality because of less careful methods of manufacture, and also very variable, so that the buyer had not the certainty that went with the standardized estate product. At the same time the Rubber Research Institute had improved the small holders' output. In 1934 it established a staff of

* It is difficult to make an accurate comparison between the Malayan and Sumatran costs of production, since the estates carefully preserve these as a jealously guarded secret. The opinion of a rubber company which had estates in both colonies was that wages in Sumatra were lower than in Malaya, but that in the past this had been roughly counterbalanced by the cost of bringing indentured labour from Java at about 100 guilders (£11 7*s.*) apiece. The firm also considered that the British and Dutch standard of estate medical services and accommodation for the coolies was similar. Rents were higher in Malaya where the great majority of estates paid an annual rent of $4 per acre. In the Dutch colonies the normal rent was one guilder (2*s.* 2*d.*) per hectare (2·47 acres), but taxes were much heavier, amounting since 1933 to 20% of their net profits. There was no income tax in Malaya, the attempt to impose it in the Straits Settlements after the Great War having been abandoned owing to the impossibility of collecting it. When the average price of Java standard sheet rubber was less than 20 guilder cents per ½ Kg. the Dutch export duty as revised and lowered in 1937 was nil: when the price was between 20 and 21 cents it was ½ cent, and it increased by $\frac{1}{10}$ cent per ½ Kg. for each full cent rise in price. In November, 1936, an additional export tax of 2% of the export value was temporarily imposed. The Malayan export tax of 2½% *ad valorem* was replaced in 1936 by duties on a sliding scale which increased from 1% when the price of rubber was under 20 cents a pound to 3¼% (the maximum) when it was 35 cents and over. The usual rate of increase was ¼% for each rise of 2 cents in price. In addition a cess of ·05 cents per pound was collected for the Rubber Research Institute.

ten Asiatic Rubber Instructors who worked under the control of the Agricultural Department's Field Officers. By 1937 the number had grown to twenty-four and it was decided to increase it to forty-eight. The Instructors gave lectures and demonstrations on all aspects of rubber production, paying special attention to tapping, control of diseases, and preparation of the latex. The Institute invented a small and inexpensive smokehouse costing about $6 which considerably improved the quality of the smoked sheet and was adopted fairly widely. In some districts growers are unwilling to adopt it because the premium paid by buyers for good smoked sheet is too small to cover the extra cost and labour. The Government has been considering the introduction of a price-grading scheme which would compel buyers to pay an adequate premium, and would thereby encourage the small holder to improve the quality of his rubber. The Institute has effected a noticeable improvement in methods of tapping, preparing the rubber, and disease control. Its success has been least in methods of cultivation: the small holders decline to do the amount of hard work which is necessary if European estate methods are to be adopted. By 1936 budgrafting had been carried out on a few small holdings.[38]

In 1937 the acreage planted with rubber in Malaya was 3,302,170 of which 2,026,348 was owned by estates and 1,275,822 by small holders. The area of budgrafted rubber, practically all on estates, was 219,925 acres;* and the total estate acreage of tappable rubber was 1,883,250 acres of which about a quarter was not being tapped. Of the estates 75 per cent. or 1,526,692 acres were owned by European companies, 16 per cent. by Chinese, 4 per cent. by Indians, and 5 per cent. by other Asiatics. The total area of Asiatic estates and small holdings was 1,775,478 acres or 53.7 per cent. of the whole.§ Add to this the 351,404 Indian and Chinese labourers

* According to information supplied by the Rubber Research Institute of Malaya, bud-grafting in Malaya began about 1922 or slightly earlier, the area in that year being 5,277 acres. By 1927 the bud-grafted area was 46,819 acres, compared with 40,483 hectares (99,993 acres) in the Netherlands East Indies. Bud-grafting in Malaya rapidly increased from 1927 to 1930, and continued to grow more slowly thereafter. In 1935 the total bud-grafted area was 200,009 acres in Malaya and 147,850 hectares (365,189·5 acres) in the Netherlands East Indies.

§ The Rubber Research Institute of Malaya gave the geographical distribution of the estates and the nationality of ownership on 31st December, 1935.

Area	*European*		*Chinese*		*Indian*		*Others*		*Total*	
	No.	*Acres.*	*No.*	*Acres.*	*No.*	*Acres.*	*No.*	*Acres.*	*No.*	*Acres.*
Federated Malay States . .	690	849,777	422	122,528	219	53,132	40	14,563	1371	1,040,000
Straits Settlements	80	129,230	180	63,166	54	13,219	8	1,911	322	207,526
Unfederated Malay States . .	246	506,078	497	166,226	103	30,451	51	71,688	897	774,443
Total Malaya .	1016	1,485,085	1099	351,920	376	96,802	99	88,162	2590	2,021,969

Half the area under rubber in Perak, Selangor, and Negri Sembilan, a quarter in

who were employed on the estates in 1937 and it is clear that the Asiatic stake in the prosperity of the industry was very great. It is also evident that the Asiatic share has been growing, for in 1924 it was somewhat more than 34 per cent. The production in 1937 was 503,494 tons, of which 314,658 tons came from estates and the remainder from small holdings.[39]

The majority of the European estates are owned by British companies with their head offices in London, but a minority are the property of local British Malayan companies. The majority of the Chinese estates belong to Chinese resident in Malaya, although some are controlled by companies incorporated in China. No complete and accurate statement can be made as to the amount of capital invested in rubber; but several estimates covering part of the ground can be given. The nominal value of the external capital outstanding in Malayan rubber companies on 31st December, 1936, was £53,599,000. This included capital accumulated out of reserves and issues of vendor's shares, but excluded money invested and subsequently lost. It made no allowance for the fact that the market value of the investment might be very different from its nominal value. Also the figure included only capital which was denominated in sterling, in which connection it must be remembered that appreciable amounts of capital for Malaya were issued in the United States, France, and Shanghai. The capital outstanding in Malayan rubber companies on the same date which was denominated in Straits dollars was £1,672,000. This included an

Johore and most of the remainder in Kedah, Province Wellesley, and Malacca. Very little was grown in the East coast States and Pahang. The most important component of 'Others' was the Japanese estates in Johore. Only a few thousand acres were owned by Malays, who were almost entirely small holders. The average area of the estates owned by the different races shows that the European estate was nearly 1,500 acres, almost five times the size of the Chinese and six times that of the Indian estate. An investigation made in 1931–32 showed that 55% of the total area of 3,090,366 acres was under Asiatic ownership, which was a slightly higher percentage than in 1937 Four hundred and ninety companies (all European save eleven) had estates of 1,000 acres and over, and owned altogether 1,127,417 acres. This was 58% of the total estate area and 36% of the whole planted area in Malaya. Asiatics, principally Chinese, owned 25% of the estates; but only a small number were over 1,000 acres, while the remainder had an average size of 200 to 300 acres. There were also several hundred small European estates. In spite of this qualification, however, the general rule was that the large properties were European and the small ones Chinese. This was important in view of the economies in cost of operation which came from production on a large scale. The other outstanding difference was that limited liability companies owned the great majority of the European estates, while most of the Chinese properties were privately owned. Indians owned a limited number of small estates, and there were also thirty-six Japanese companies with a total area of 57,651 acres. Malay ownership was insignificant save among the small holders with less than 100 acres. At least half of these were believed to be Malays and perhaps a quarter Chinese (D. H. Grist, *Nationality of Ownership and Nature of Constitution of Rubber Estates in Malaya, Dept. of Agriculture, S.S. and F.M.S., Economic Series No* 2, 1933, *passim*)

undetermined amount of foreign as well as of local Malay investment. The value of the new issues in London by Malayan rubber companies from 1903 to 1936 was £38,574,000. This differed from the foregoing figures in that it included capital which had been invested and lost, and excluded capital accumulated out of reserves and issues of vendor's shares.[40]

Oil Palms

The oil palm came originally from West Africa and was first grown in 1875 at the Botanic Gardens in Singapore from seed received from Peradeniya in Ceylon. For the next forty years it was cultivated as an ornamental tree and it was not until the present century that it was grown as a plantation crop. In 1912 several acres were planted with oil palms as an experiment by the Agricultural Department and by various rubber companies in Selangor. Since that date the Department has carried on research in the best methods of cultivation, improvement of the yield by selection and breeding, and the treatment of pests and diseases. In 1929 it built a factory at the Experiment Station of Serdang to enable experiments in manufacture to be carried out. The establishment of the oil palm as an estate crop in Malaya has been due to the work of the Department of Agriculture. The planters have followed its advice more closely than have rubber growers; and their present high standard of efficiency is in large measure the result of this. The first plantation was established in 1917 by Monsieur H. Fauconnier in the District of Kuala Selangor. There was no great increase in the area planted until 1926, in which year there were nineteen oil palm estates; but since then steady progress has been made. The oil palm is the only crop which is grown entirely on large estates. The machinery for extracting the oil is far too expensive and the process of manufacture too complicated for the small holder. An area of 2,000 acres is considered the minimum which can be worked successfully by a company. The cost of bringing such an estate into full bearing may be about £40 an acre when fully equipped with adequate transport system (trucks or a light railway to bring the fruit to the factory), machinery and buildings. The oil is extracted from the pericarp or outside portion of the fruit and from the hard kernel and is used in the manufacture of oleomargarine, soap, candles, and tin plate, or as fuel for internal combustion engines. The kernels from which the oil has been extracted are made into feeding cake for animals.[41]

Malayan palm oil obtained a higher price in the Liverpool

market than oil from Africa, which in the middle 'twenties supplied about nine-tenths of the world's production. The reason was that the West African oil was largely the produce of negro cultivators and was of lower quality than the carefully manufactured plantation product. The price was attractive, varying between 1921 and 1929 from £31 to £42 a ton, while the kernels brought from £21 to £22 a ton. The Department of Agriculture continued its efforts to interest planters and the acreage doubled between 1927 and 1932. Simultaneously the palm oil industry was being established in Sumatra, where the planted area was almost three times as large as in Malaya. By 1932 Malaya and Sumatra supplied about 30 per cent. of the total world demand. The principal markets were the United States for the tin-plate industry, Great Britain, and Germany. In Malaya the export rose from 195 tons of oil and fifty of kernels in 1923 to 3,211 tons of oil and 485 of kernels in 1930. The estimated area cultivated in the latter year was 45,247 acres; and by the end of 1932 it had increased to 61,025 acres of which 17,974 were in bearing, divided between thirty-three estates. The palms do not commence to bear fruit until their third year and harvesting is usually postponed until the fourth. As the areas planted in the late 'twenties came into bearing, production rapidly increased, and by 1934 the export of oil was 15,851 tons, or nearly five times as much as in 1930.[42]

During these years of rapid expansion the price of palm oil and kernels suddenly began to fall. At the beginning of 1930 it was £38 per ton of oil but by December it was only £16 12*s*. The decline continued and in 1934 the average price was £12 9*s*. 3*d*. while for many estates the costs of production were about £14 10*s*. Meanwhile the industry had begun to reduce expenses by shipping the oil in bulk instead of in barrels. Under the older method fir staves were imported from California and made into barrels on the estates, which added about £4 to the costs of production and freight. In 1931 the estates began to send their oil to Singapore either by rail in tank wagons or by sea in a special motor vessel provided with tanks. Storage tanks were built in Singapore close to the docks so that the oil could be piped aboard ship. This method of shipment, which has now become almost universal, has reduced costs of production to £10 10*s*. per ton. In 1934 however only part of the industry had adopted the new method, so that for many companies the costs of production were more than the market price. Moreover, neither of the above estimates of cost makes any allowance for

interest and sinking fund on the capital invested in the estate.[43]

The Governor in 1934 appointed a Commission of Inquiry into the palm oil and coconut industries, both of which were suffering from the same "disastrous fall in prices". It decided that a primary cause of the situation was the greatly increased production in the post-war period. Immediately after the war there had been a shortage and in 1920 the United Kingdom price for both palm oil and copra had been over £60 a ton. The result had been a large increase in planting in Malaya, Sumatra, and the Congo, soya bean cultivation in Manchuria, and whaling in the Antarctic. The last alone supplied about 350,000 tons of oil a year. Increased production had coincided with diminished consumption due partly to changes in diet and also to economic nationalism. In the period 1922–33 the consumption of butter in the United Kingdom increased by three-fifths while the imports of margarine had dropped from 50,000 to 2,000 tons. In the United States the production of margarine fell from 164,000 tons in 1920 to 90,000 tons in 1932. Moreover, various governments by means of tariffs, quotas, and prohibitions were fostering the production of domestic fats and oils in order to replace foreign vegetable oils. The United States for example had formerly been the largest importer of coconut and palm oils, but the processing tax of 1934 was in reality an import duty and would heavily increase the cost of importing both commodities. The Committee saw no prospects of success in attempting to regulate the production of palm and coconut oil, since the cultivation was so widespread throughout the tropics and was to a very large extent in the hands of native small holders. Restriction moreover would have to include soya bean oil, animal fats, and whale oil. The only recommendations it could make were the remission of the export duty on copra and the reduction of quit-rents on lands planted with coconuts or oil palms.[44]

A measure of relief came from unforeseen causes, notable among which was the prolonged drought in the United States. This considerably reduced actual and potential supplies of oils and fats and thereby increased the immediate demand for palm oil and copra.

The price rose and in 1937 was £22 3*s.* 4*d.* for oil and £12 14*s.* 5*d.* for kernels. At the end of 1937 the total planted area was 68,925 acres almost equally divided between the Federated Malay States and Johore, of which 88.7 per cent. was in bearing. Out of the thirty-six estates nine were over 2,000 acres in size. Extension of acreage had been checked by the fall in price; but by 1937 the ex-

ports of oil were 42,787 tons. The palm oil plantation has been established as an important minor industry conducted with a high degree of scientific skill. A considerable area is available for fresh planting—the existing estates alone have acquired 35,332 acres which are not yet planted—but expansion must wait upon the prospects of palm oil in the world market.[45]

CHAPTER VI

CONDITIONS OF LABOUR

British Malaya has been confronted by the problem common to most tropical colonies of securing an adequate and assured supply of labour for development. In 1937 the Malays were estimated to number 2,169,072 out of a total population of 5,137,474, and were far too few to develop a country of 53,240 square miles.[1] Moreover they did not share the almost inhuman industry displayed by the Chinese and, to a decidedly lesser degree, the Indian. By custom and inclination the Malay was a peasant farmer or fisherman: he made a good soldier, sailor, or policeman, but he did not approve of fixed hours of labour day in and day out. He would work on occasion and spend his money when he had it; but since he preferred leisure and independence to wealth and a dull routine of manual labour he was undependable. Also the Malay like the Javanese did not care to leave his native village and settle in another part of the country. The planters, miners, and government departments were compelled to import labour from China and India, where centuries of over-population and the struggle for survival had produced an unlimited supply of industrious coolies. The same conditions had created a similar hard-working population in Java; but Javanese have been used to only a very small extent in Malaya. The amount of skilled factory labour required has been comparatively small and has been drawn largely from China. The tin mines have been worked chiefly by Chinese and the estates by Indians; and in the government departments as a general rule construction work has been done by Chinese, and maintenance and upkeep by Indians. In some of the Unfederated Malay States where the Malay population is more dense the public services have been carried on very largely by them and they have also been employed in larger numbers on the estates.

Indian Labour

The Indian connection with Malaya began early in the nineteenth century, since the regiments forming the garrison came from Madras. South Indian labourers were brought in by the sugar and

coffee planters at their own expense and under indenture to work for three years at a wage agreed upon at the time when the labourer was engaged. The great majority of the Indians have always been Tamils and the remainder Telugus and Malayalese. At first immigration was uncontrolled, but after the Straits Settlements were separated from India and became a Crown Colony in 1867 the Indian Government exercised varying measures of supervision. The Government of the Straits Settlements also established a depôt at Negapatam in the southern part of the Madras Presidency where labourers were housed and fed while awaiting their ship. Indian control was not a success and in 1897 all restrictions were removed and the Indian Government transferred complete charge of immigration to the Government of the Colony. Indentured labour proved unsatisfactory: apart from the objection on principle that the coolie was compelled to serve for the period of his contract, it had the defects that labour was expensive and insufficient in quantity. The cost of importation was heavy and planters in need of labourers crimped or induced their neighbours' coolies to desert by the offer of higher wages. The exasperation of the planter who had paid the cost of the coolies' passage was understandable; but his only remedy was unsatisfactory to all concerned. If the absconder could be discovered he was fined or more probably imprisoned, since he rarely had money to pay his fine, and then was required to serve the unexpired balance of his time on the estate which had brought him to Malaya. This meant that for the duration of the prison sentence the employer and the coolie were both penalized. Another objection was that professional recruiters were employed to obtain labour in India, receiving a fee for each recruit. Since their sole interest was to earn as much as possible, their account of conditions in Malaya sometimes displayed the same high standards of untrammelled imagination as Irish folklore. The defects of the system were serious enough in the nineteenth century when estates were few and only a moderate number of labourers was required: from 1880 to 1904 the average number of arrivals was usually about 20,000. The expansion of rubber planting however caused a rapid increase in the demand for labour and from 1911 to 1920 arrivals from India averaged 90,000 a year. The unprecedented demand intensified the shortcomings already noted, and it became clear that some alternative system must be devised if agricultural development was to continue.[2] A variant of indentured labour which differed from it in some important respects had been growing up since 1898.

This was known as the kangany system. A kangany was a recruiting agent sent over from Malaya by a planter to obtain labourers for the estate, and paid a fee for each man whom he induced to volunteer. At times he succumbed to the same temptation to paint an unduly optimistic picture of conditions in Malaya which thirty years ago coloured the propaganda of some of the land-settlement companies in their attempts to attract European immigrants to North America. The kangany advanced to his recruits the cost of their journey and recovered it from them out of their wages on the estate. Kangany differed from indentured labour in that the Indian coolie was not bound by contract to serve for a stipulated period on a particular estate. He was employed on a month to month basis and the cost of importation was about three-quarters that of contract labour. The defects were that it was very difficult to prevent the kangany from making misrepresentations or "squeezing" the coolies who were in his debt when they were employed in Malaya, and that the evil of crimping continued unabated. Kangany or free labourers rapidly increased, and in 1907 the Indian immigrants into Malaya were 5,500 contract and 24,700 free labourers.[3]

The recruiting problem was solved by the establishment of a new system in 1907. The Indian Immigration Committee was created to control the recruitment of Indian labour for the Colony, the Federated Malay States, and Johore. Its operations were later extended to include the whole of Malaya except Trengganu, in which there are very few estates. At present the six official members are the Controller and the Deputy Controller of Labour Malaya, the Directors of the Medical, Public Works, and Irrigation Departments, and the General Manager of the Federated Malay States Railways. The unofficial members are the President of the United Planting Association, representatives of the planters in Kedah, Province Wellesley, Perak, Selangor, Negri Sembilan, Malacca, Johore, and Kelantan, a prominent business man usually from Penang, an Indian representative from the Colony, and another from the Federated Malay States. An Ordinance empowered the Committee to levy an assessment upon all employers of Indian labour including the Government, which was by far the largest single contributor. The payments made up the Indian Immigration Fund, which was controlled by the Committee and was used to defray all costs connected with the recruitment of Indian labour. The assessments took the place of the heavy expenses formerly incurred by the separate employers in recruiting. The amount was not based upon the

number of coolies employed but upon the number of days' work performed, and at the present time is equivalent to an addition to the daily wages of $1\frac{1}{4}$ cents. for men and $\frac{1}{2}$ cent. for women.* The new arrangement did not abolish crimping but it removed one great incentive for it because an employer could no longer reduce operating expenses by poaching on his neighbours' labour force instead of importing his own. Since he was assessed according to the amount of employment he provided it was to his interest to receive value for his money by informing the Indian Immigration Committee of his probable requirements. From the Fund were paid the general expenses of recruiting, the principal items being the cost of the train fares of emigrants from their homes to the Malay Government's emigration camps at the ports of Negapatam and Avadi near Madras; food and medical attention while at a camp awaiting shipment; the steamer passages to the Straits; the cost of quarantine on arrival at Penang, Port Swettenham or Singapore; the cost of travel to the place of employment in Malaya; and recruiting allowances to the employers by whose agents or kanganies the labourers had been recruited. The amount paid in 1936 was $10 for a man and his wife and $8 for an unaccompanied man. This covered all legitimate costs to the employer together with a margin just sufficient to induce him to recruit up to his full requirements. Whereby the attraction of Naboth's vineyard was diminished. The Fund was also used to encourage the growth of a new class of Indian immigrants, viz., free labourers who came to Malaya at their own expense without being recruited. They could receive free steamer and railway tickets to their destination without any obligation to labour for any particular employer, if they made application to the Emigration Commissioner in charge of a camp. Other expenses covered by the Fund included the cost of repatriating destitute labourers to India and the maintenance at Kuala Lumpur of a home for decrepit Indians who wished to remain in Malaya.[4]

The new system proved so satisfactory that in 1910 the recruiting of indentured Indian labour was abolished. Meanwhile the Indian Immigration Committee had begun to eradicate abuses which might

* Each employer must submit a check roll stating the number of days of work performed on his plantation, etc., throughout the quarter. The unit of assessment for some time has been seventy-two days' work per quarter, since the employer is required to provide a statutory minimum of twenty-four days' work per month for each labourer. The Immigration Committee determines how much is to be paid for each coolie, e.g. of recent years 90 cents for men and 36 cents for women. The amount of each employer's assessment is determined by the formula: number of days worked divided by 72 and multiplied by 90 or 36.

arise from the use of kanganies. In 1908 free passages from India were granted to all labourers who applied for them, which eliminated part of their debt to the kangany who had previously advanced to them the cost of the journey. The employer was granted from the Fund the cost of the kangany's recruiting expenses in India. In return it was enacted that the coolies must be landed in Malaya free from debt, and that no deductions must be made from their wages as had previously been done to reimburse the kangany for advances which he declared he had made to them. Methods of supervising his actions in India were gradually built up in the light of experience. From about the beginning of the century all kanganies had been required to have a Malayan Government licence, and after 1908 these were issued at the request of the employer by the Deputy Controller of Labour at Penang. After the appointment in 1923 of an Agent of the Government of India in Malaya all licences were countersigned by him. To prevent the engagement of professional labour recruiters it was stipulated that the kangany must be a South Indian of the agricultural classes who had worked for at least three months at the place of employment for which he intended to recruit. The kangany's licence was usually valid for six months, he was permitted to recruit only twenty persons, from his own village, and he might receive from his employer a maximum of Rs.10 for each labourer. The smallness of his commission was to prevent him from subletting his recruitment to professional recruiters: he received enough to give him a free holiday in India and a small amount in pocket. On arrival in India the kangany must register his licence at the office of the Malayan Emigration Commissioner in Madras or Negapatam before it was valid. He might then recruit labourers in his own village and must supply inquirers with a copy of the official pamphlet giving information about Malaya, obtaining their receipt for it. Before recruits could leave the village the headman must interrogate them and decide that there was no valid objection to their emigrating. To ensure that the kangany recruited only from his own village he must entrain at the nearest railway station. The Fund employed Recruiting Inspectors at the more important stations to prepay the cost of the fares and check the number of coolies accompanying the kangany. On arrival at the embarkation depôt of Avadi or Negapatam the coolies were fed, housed, and given medical attention if needed until their boat arrived. Each depôt was in charge of a Commissioner or an Assistant Commissioner of Emigration who was an officer of the

Labour Department of the Malayan Civil Service and spoke one of the South Indian vernaculars. The recruits were also questioned by the Protector of Emigrants, an official of the Madras Government, to make sure that no misrepresentation or other unlawful tactics had been employed. On reaching Malaya the kangany's recruits must go to the plantation for which they had volunteered; but as soon as they had arrived they had the right to give a month's notice. The Malayan Government has done everything in its power to ensure that recruitment by kanganies shall be safeguarded from the misrepresentation and deception which are likely to occur when dealing with uneducated and credulous peoples.[5]

Indian immigrants of a type distinct from either contract or kangany labour gradually appeared. These were non-recruited labourers who came to Malaya of their own volition. Usually they were men who had previously worked there and who eventually returned from their villages in India. Often they were accompanied by friends or relatives whom they had persuaded to emigrate by their tales of the great superiority of Malayan to Indian rates of wages. In 1920 12.18 per cent. of the total of 70,600 adult entrants into Malaya were non-recruited while the remainder were brought in by kanganies. The number of adult Indian immigrants in 1926 was exceptionally large, and 20.03 per cent. of the total of 127,800 were non-recruited. The percentage of kangany recruits continued to decline, and in 1929 36.98 per cent. of the adult Indian immigrants were non-recruited. During the depression immigration was suspended and an extensive repatriation of unemployed labourers took place. When the restrictions were relaxed in 1934 the prevalence of voluntary labour was much more marked. Out of the 47,500 adult Indians who entered Malaya in 1937 88.8 per cent. were non-recruited, and only 5,300 were brought in by kanganies.* These percentages show almost a complete revolution in the method of recruitment in seventeen years: in 1920 about 12 per cent. of the labour was voluntary and 88 per cent obtained through kanganies, while in 1937 89 per cent. was non-recruited and only about 11 per cent. brought in by kanganies. The immediate but not the real explanation was that by 1937 the majority of the rubber planta-

* Indian labourers have shown a growing tendency to bring their families with them; and if the figures for wives and children were included the above statistics would be considerably enlarged. In 1937 for example the total number of South Indian immigrants who arrived at Penang, the principal but not the sole port of entry, was 123,732. This included 17,589 "traders and others", but the rest were labourers with their wives and children. (*C. Reps. No.* 1863, *Annual Report on the . . . Straits Settlements*, 1937, pp. 12-13.)

tions had found that they could rely on non-recruited labour and had no need to employ kanganies. It was true that they never knew how many labourers would materialize or exactly when they would arrive; but on the other hand the greater certainty of the kangany system had been purchased at an additional cost of about $6 to $8 a head. Some of those who still employed kanganies were palm oil and tea planters whose estates had only been established a few years. They had not had time to build up a connection with a recruiting ground in India and still needed kanganies as advertising agents to inform the South Indians of their existence. The others were rubber planters who had been accustomed to draw their labour from the more remote districts of the Madras Presidency, far from the ports of embarkation at Avadi and Negapatam. Non-recruited labourers were entitled on application at the camp to a free steamer and railway ticket to their destination in Malaya as well as a gift of $2 to provide food while seeking employment there.* They had however to pay their own railway fares from their villages to the emigration camp, a considerable expense to the Indian labourer; and in these instances the kangany was a real boon since he advanced the cost of travel in India itself.[6] The real reason for the weakening of the kangany system was the reputation which Malaya had earned amongst the labouring classes of Southern India. In 1938 recruitment by the kangany was abolished by the Government of India.

A trifling incident told by an eye-witness shows their opinion as vividly as pages of statistics. A group of kangany recruits were being questioned prior to their embarkation by an Indian Collector to make sure that they understood the conditions of their agreement. He sneered at the promise of forty cents pay a day, as the rate then was, and implied that they were simple souls who were being beguiled by a European exploiter and his hanger-on the kangany. One of the coolies replied that the kangany was his uncle, that his father was in Malaya, and that six of the recruits had already worked there. He also pointed out that forty Straits cents were equivalent to seven Indian annas and that he would be employed continuously throughout the year, whereas in his native village his daily wage had been $3\frac{1}{2}$ annas for the four months when he was needed on the land and thereafter nothing. The South Indians look upon Malaya

* Of recent years an increasing number of non-recruited labourers have paid the whole of their own expenses of travel to Malaya. The reason is probably that all assisted labourers are detained for a week at the quarantine station in Malaya, while unassisted are not. (*Annual Report of the Labour Dept. Malaya*, 1937, p. 7.)

as a country where wages are high and where conditions of labour are not only excellent in theory but also strictly enforced in practice. The great majority of employers can depend upon their reputation for an assured labour supply; and kanganies are needed only by the newly-established industries or by those whose source of labour is so remote from Madras that recruits need an advance for travel. In a few years Malaya will probably have to restrict immigration to prevent unemployment.

Conditions of employment are regulated by the Malayan Labour Code. Originally there were separate Ordinances for the protection of Chinese, Indian and Javanese labourers; but they were consolidated in the Federated Malay States by the Labour Code of 1912 and in the Colony by the Labour Ordinance of 1920. Subsequently the Code in the Federated Malay States was amended and amplified no less than twelve times, and in 1923 it was completely revised both there and in the Colony as a result of negotiations with the Indian Government. The main provisions were later enacted in the Unfederated Malay States. The present Code has been gradually built up over half a century for the protection of labourers of all classes on estates and other places of employment. It is enforced by the Department of the Controller of Labour which replaced in 1912 the earlier Indian Immigration Department formed in 1907 by combining the separate Departments of the Colony and the Federated Malay States. Until 1925 the jurisdiction of the Controller was confined to the Straits Settlements and Federated Malay States. In January, 1925, his title was changed to Controller of Labour Malaya and the separate Labour Departments of the Unfederated Malay States were co-ordinated with his Department. He is the head of each State Labour Department and the local Labour officers act under his instructions. This ensures the application of a common labour policy throughout Malaya regarding wages, housing, sanitation, hospitals and medical attention, water supply, labour agreements, and general conditions on places of employment. Officers of the Chinese Protectorate were appointed Deputy or Assistant Controllers of Labour to deal with questions affecting Chinese labour. Differences of custom, point of view, and language sharply differentiate Chinese from Indian labour and require distinct methods of supervision, though the provisions of the Code apply to Chinese as well as to Indian and Javanese coolies. In practice therefore the Chinese is quite distinct from the Indian branch of the Labour Department and is administered by the Secretary for Chinese Affairs

as part of the Chinese Protectorate. In dealing with labour matters, however, its officers exercise their powers under the Labour Code and are required to keep in touch with the Controller.

The headquarters of the Controller are at Kuala Lumpur and as *ex-officio* Chairman of the Indian Immigration Committee he administers the Indian Immigration Fund. The Deputy Controller of Labour at Penang is Secretary and Treasurer of the Fund, and the bulk of the business connected with Indian immigration is transacted at his office. Eight Deputy and Assistant Controllers are stationed at Singapore and the principal towns of the Federated Malay States, Johore and Kedah. They are members of the Malayan Civil Service, speak Tamil or Telugu as well as Malay, and have spent a year in India studying a vernacular and Indian customs. In Kelantan, Trengganu and Brunei the number of Indians and Chinese is limited and the powers of a Controller of Labour are exercised by a District Officer. There are also five Indian Extra Assistant Controllers of Labour in the principal towns of Malaya. The Agent of the Government of India, first appointed in 1923, has his headquarters at Kuala Lumpur. He has the right to inspect places of Indian employment but has no executive powers, and is required to bring to the notice of the Controller any irregularities which he may discover. A separate Health Branch of the Federated Malay States Medical Department was formed in 1910 to deal with the health of estate labourers, and similar branches were later established in the Colony and the Unfederated States. The Labour Code includes sections regulating medical and sanitary conditions, which are enforced by the Controller of Labour on the advice of Health Officers, and acting in concert with the Medical Department. The principal requirements are that the employer shall provide housing which conforms to an approved standard design; that the water supply shall be wholesome and the labourers' quarters kept in a sanitary condition: that appropriate anti-malarial measures shall be maintained; and that the estate shall provide medical attendance and a hospital. A number of small adjacent estates are permitted to substitute dispensaries and send serious cases to a group hospital which they maintain, or to a Government hospital if within reasonable distance. In 1937 there were 149 estate and eighty-three group hospitals in Malaya. The Code also requires the establishment of a school on any estate which has ten or more children between the ages of seven and fourteen; and officers of the Education Department enforce these provisions under the authority of the Controller.

Officers of the various Departments periodically inspect the estates to make sure the Code is observed, and, in addition, labourers have free access to them at all times. With very few exceptions infractions of the Code are few in number and of a minor character, and usually concern petty or Asiatic employers. The majority are settled by the Department, only a few being prosecuted in the courts.[7]

The growth of Nationalism in India led the Indian Government in 1922 to investigate the conditions of labour in Malaya. As a result a revised Labour Code was enacted in 1923. No changes of moment were made in the methods evolved by the Malayan Government for controlling the recruitment of labour, but several important alterations were introduced in the laws governing conditions of labour in Malaya. An Agent of the Government of India was appointed to safeguard the interests of Indian labourers in co-operation with the Labour Department. Employers were required to pay maternity allowances to female labourers and give them two months' holiday. All hospital expenses of a labourer or his dependants must be paid by the employer. A crêche with food and attendants must be provided for all children under three; children under ten must not be employed, and estate schools must be provided. No labourer might henceforth be fined or imprisoned for any labour offence. Hitherto these penalties had applied to such actions as absconding without giving one month's notice or damaging estate property through carelessness. Under the new Code the employer could still bring a civil suit for damages, but this remedy was really worthless, since, even if the labourer were convicted and ordered to pay, the judgment could not be enforced if he lacked the money. Double rates were to be paid for overtime work; and the principle of a standard wage for Indian labourers was accepted. The Indian Government pressed for a standard minimum wage applying to the whole of Malaya; but the Malayan Government insisted that there must be variations since the cost of living was not uniform and, also, the more undeveloped States like Pahang had to offer higher wages to attract labour. The method adopted was to divide Malaya into zones and fix the standard rate of wages to be paid in certain key districts of each zone. Province Wellesley and the three coastal districts of Selangor were made the key districts for the easily accessible and fairly healthy zone which embraced the Colony excluding Singapore, Kedah, and the Federated Malay States except Pahang. The second zone included the parts of Malaya which were somewhat unhealthy, inaccessible, or more expensive, viz., Pahang,

Singapore, Johore, and Kelantan. Four inland districts of Pahang were selected as the key district. The standard wages fixed in 1927 by the Indian Immigration Committee were fifty-eight cents a day, for male and forty-six cents for female labour in Pahang, as against fifty cents for male and forty cents for female labour in Province Wellesley and Selangor. These were practically the same rates as those suggested by the Government of India. The fixing of wages in the key districts tended in practice to establish much the same rates in other parts of the zone, since employers found themselves compelled to conform approximately to the standard in order to retain their labour.[8] The standard wage included the following elements:—enough rice and other foodstuffs for a reasonable diet; clothing, festival expenses, and a trip to India every three years; maintenance of dependents; and monthly savings of about $1. Before determining the rate, the Committee after public notice held an investigation in the district, at which witnesses were examined and representatives of the local planters and the Agent of the Government of India presented reports. With a working month of twenty-four days the male coolie's wages in Province Wellesley were $12 in 1927; and apparently the amount required to include the above elements was in the neighbourhood of $10.

During the depression the work on the rubber estates was reduced to a minimum, considerable areas dropped out of cultivation, and many labourers were dismissed. About 190,000 for whom employment could not be found at the wages fixed by the Indian Immigration Committee were repatriated at the expense of the Fund. Assisted immigration was suspended in 1931 save for dependents of labourers employed in Malaya, and was not resumed until conditions began to improve in 1934. After inquiry the Indian Immigration Committee in 1930 reduced the standard wages in the key districts to forty cents for males and thirty-two for females in Province Wellesley and Selangor, and forty-seven cents for males and thirty-seven for females in the inland districts of Pahang. The fall in wages was largely counterbalanced by a heavy decrease in the cost of living, which sank almost to its level of 1914. For example, the price of rice, the staple article of diet, was about half what it had been in 1928. In certain districts where no standard wages had been laid down there was a marked tendency towards undue cutting of wages. This was checked by the Labour Department which insisted with the approval of the Council of the Planters' Association that a reasonable living wage be paid even in the absence of a statutory minimum.

On a few estates where inquiries were held owing to the unsatisfactory wage-level the labourers declined the offer of repatriation to India and insisted on remaining where they were. They preferred to accept the low wages since they knew that conditions at home were at the least no better, while in Malaya they could supplement their income by hunting, fishing, and growing vegetables on their allotments. By the Labour Code every estate owner is required to provide each labourer who had dependents with a small allotment for his private cultivation. Owing to the recovery in price and the enlargement of the export quota for rubber the pre-depression standard rates of wages were restored in 1937. Many of the planters had already been paying a wage of forty-five cents during 1936.[9]

In 1936–7 the Indian Government appointed Mr. Srinivasa Sastri to examine the condition of Indian labour in Malaya. The Malayan Government had been urging such an investigation for some time in view of the criticisms passed by certain Indian political leaders upon the treatment of Indian immigrants. Mr. Sastri made a careful inquiry and save in a few minor points his Report was a strong testimonial to the system which had been established by the Government and the employers.[10] Mr. Sastri's conclusions carried additional weight because of his previous experience in investigating the situation of Indians in the Dominion of South Africa, coupled with his well-known reputation for ability and impartiality. He advised that "there is no justification for preventing Indian labour from emigrating", as certain Indian political leaders had advocated. He had no criticisms to make of the work of the Indian Immigration Committee and of the means by which non-recruited assisted labour was brought to Malaya. He advised however that the kangany system should be discontinued since theoretically at least it gave openings for extortion, even though the Malayan Government had tried "to eliminate as far as is humanly possible the abuses to which such recruitment is subject". He felt also that the kangany had become superfluous as the rapid growth of voluntary Indian emigration showed that "the attractions which employment in Malaya has to offer are now fairly widely comprehended". Mr. Sastri inspected and commended the arrangements at the embarkation camps at Avadi and Negapatam, merely remarking that the former was the larger and more modern.* He likewise considered that on the two immigrant ships "an honest attempt is made to provide reasonable

* Avadi and a near-by camp could accommodate 8,000 and Negapatam 4,200 emigrants. Avadi was completed in 1933 while Negapatam was pre-1914. (*Annual Report of the Labour Dept. Malaya*, 1935, p. 6)

accommodation and ample food for the emigrant labourers as well as to protect them from abuse or unauthorized coercion by the crew", most of whom incidentally were Indians. Both ships carried male and female inspectors appointed by the Labour Department to look after the immigrants. The quarantine depôt at Port Swettenham could be improved by a few alterations of structure and by better organization of the staff; but at Penang and Singapore "the arrangements and the accommodation appeared altogether satisfactory". He suggested however that their architects had thought of usefulness rather than beauty and that shade trees and flowers would make them seem more like a home from home—a criticism which might be extended to a good many government buildings in British colonies.

Mr. Sastri's opinion of the Labour Department was that its officers "are earnest in the discharge of their duties and bring to the daily problems which confront them not only knowledge and experience but also a ready sympathy for the labourers. The control exercised by the Department over employers is real and effective". He was favourably impressed with the general conditions on estates, and in particular bore witness to the integrity of the majority of the managers and the interest they showed in planning improvements for the benefit of the labour force. This point was of great importance since the type of manager had a very great influence upon the comfort and contentment of the workmen. Mr. Sastri concluded that the Indians "are able to lead, particularly when accompanied by their wives and children, a healthy, respectable life and to aspire to a standard distinctly higher than they could attain in their own villages. No complaints were made to me of any case of physical violence or compulsion . . . throughout the country the practice of managers themselves handing over wages to the labourers is uniform, and in no case is payment left to a clerk or any other subordinate", whereby one means of extortion was cut off. Another very important point was that "every labourer is specifically informed at the time of being employed that he is at liberty to give one month's notice to his employer and seek service where he thinks it will be most congenial. This freedom of movement is not only laid down by statute, but is well-known and understood by all labourers and engenders in them a healthy spirit of independence". The "nominal day's work of nine hours which in practice is reduced to eight" was finished by 2 p.m., and any work thereafter "was in the main voluntary and was invariably paid for as overtime". Thrift

was encouraged by the estate managers and the Co-operative Department. The latter had begun work on the plantations in 1926 and by June, 1936, had established 228 societies and three unions with a membership of 36,081 and a paid-up capital of $768,624. In addition some managers had set up voluntary thrift societies to encourage their labourers to save. The manager himself received and managed the funds, in some cases allowing interest on deposits, and Mr. Sastri found that the Indians had entire confidence in him.* Mr. Sastri reported general compliance with the provision of the Labour code which required estates to provide each labourer who applied for it with an allotment of one-sixteenth of an acre for his own cultivation. In most of the estates visited the allotments were close to the lines where the Indians lived, but on the whole the use made of them was rather disappointing. One reason was that an estate could not offer permanency of tenure to a labourer who was free to leave at a month's notice. Therefore only a man who intended to remain for a considerable time would consider it worth his while to cultivate his ground with any care.§

Mr. Sastri recommended several alterations in conditions on the estates, one of the most important being the raising of standard rates of wages to their level of 1927. The Government of Malaya and many of the planters concurred, and the Indian Immigration Committee restored the pre-depression wages in the key districts in April, 1937. Mr. Sastri also reiterated the old demand of the Indian Government "that the distinction between key and non-key

* In 1935 an additional 24,009 Indians deposited their savings in the Post Office Savings Banks. The Co-operative Department has had a difficult task, since the Indian labourer has unfortunately brought with him to Malaya his trait of creating for himself a state of chronic indebtedness. "Ordinarily there is no reason why they should fall into debt, but their unthrifty habits and the tendency to spend unnecessarily on ceremonies connected with births, deaths, marriages, etc., following their old customs in India, drive them to the necessity of borrowing. The commonest form of raising small loans is by pledging jewellery, etc, at the nearest Chinese pawnshop . . . at 48 to 60 per cent per annum." The labourers also borrow from one another and from the Indian foremen and clerks, "but complaints of indebtedness of labourers to their employers are very rare." (*Annual Report of the Agent of the Government of India in British Malaya for the Year* 1935, p. 22.)

§ The Department of Labour wishes to create a permanent Indian population by building up settlements of freeholders in various parts of Malaya. It would like to see them removed from the coolie lines on the estates and living on their own small holdings. Providing these were situated near the estates they could combine plantation labour with cultivating their land when their day's work ended about 2 p.m. and thus draw income from two sources. The Indians would doubtless take more interest in the cultivation of their own land than they do in that of the present allotments. Three Indian agricultural settlements have been established, each with a few score cultivators and an area of about 250 acres. The Co-operative Department has been assisting their development by inducing the cultivators to form General Purposes Co-operative Societies to promote the comprehensive improvement of their agricultural position by joint effort.

areas should be abolished and the statutory standard wages enforced in all areas". He based his recommendation upon the possibility that employers in non-key districts might sometime be able to take advantage of their situation and pay less. His argument lost most of its force by the admission that "wages have in fact become standardized in both key and non-key areas"; and the Government declined to accept his proposal. The Report criticized the schools, in that, while most estates had established them, the teachers employed were often of inferior quality. The practical difficulty has been to secure competent teachers at adequate salaries for some 500 estate schools with an average attendance of about thirty.* Mr. Sastri also recommended that the Government should stop the manufacture and sale of intoxicants in selected areas with the ultimate object of prohibiting them altogether on estates. His argument was that if the labourers were compelled to become teetotallers they would save more money. The Tamil is much addicted to the drinking of toddy, a mild intoxicant made from fermented coconut juice, and sometimes gives rein to his inclinations with more zeal than moderation. Some but by no means all estate managers would like to see it prohibited; and opinions differ widely as to how much of his wages the coolie dedicates to Bacchus. The present arrangement is that all toddy-shops are licensed and stringently controlled by Government. Normally they are run by the estate and all profits are used for the benefit of the labourers under the control of the Department of Labour. Mr. Sastri noted that even managers who favoured prohibition in theory opposed it in practice. The difficulty is that the alternative to toddy is samsu, a drink of such peculiar potency that the Tamil feels it is well worth the extra cost. It is easily and cheaply distilled from rice by the Chinese and its sale to the Tamils is forbidden. The story of prohibition in practice is illuminated by what occurred a few years ago in the planting district of Malacca. Toddy was prohibited and Chinese illicit samsu-stills arose like mushrooms. Native excise officers are suspected of having accepted suitable remuneration: at least they were peculiarly unable to discover the bootleggers. Drunkenness greatly increased until at last the toddy-shop

* In 1937 469 estate schools received small Government grants-in-aid and 212 were unaided. The literacy rate among Indians was 376 per 1,000 in the Straits Settlements and 245 in the Federated Malay States, or almost three times as high as the 92 per 1,000 in the Madras Presidency. Some allowance must be made for the fact that about 30% of the Indians in Malaya are traders, moneylenders, clerks, and professional men, and that this is probably a higher percentage than in India, but even so the difference is striking. (*Annual Report of the Labour Department Malaya*, 1937, pp. 62–63. *Annual Report of the Agent of the Government of India in British Malaya for the Year* 1935, p. 12.)

was restored and prohibition abolished. Remembering a similar experiment in the United States one is inclined to feel that the mild devil of the coconut is preferable to his more potent brother who lurks in the rice grain.

The housing policy on estates was strongly approved, as was on the whole the excellence of the medical and health measures. The older variety of lines was a long barrack-like structure divided by partitions into separate living quarters for each family. This type was condemned some time ago by the Labour and Health Departments and is gradually being replaced by the cottage type of lines consisting of separate four-roomed houses to accommodate two families. Government regulations on such matters as anti-malarial work, sanitation and public health were obeyed by the majority of estate managers. The inevitable minority who tried to economize by neglecting them received "a sufficient stimulus" from the periodic inspections of the Labour and Medical Departments. Mr. Sastri also praised the "excellent" and "well-equipped hospitals on up-to-date lines" maintained by the larger estates. He was not satisfied however with conditions on some of the smaller estates. They were allowed to maintain a dispensary in charge of a dresser and to send serious cases to the nearest Government hospital. Mr. Sastri considered that part of the dressers were insufficiently qualified and he also objected to some of them undertaking clerical or other estate work in addition to their medical duties. He strongly approved of the practice on some estates of voluntarily feeding a labourer's dependants while he was receiving free treatment in hospital, as also of the custom in Government departments of giving Indian labourers a sickness benefit of one month's full pay while in hospital.

The immense improvement in health conditions is one of the great achievements of British rule in the tropics. Naturally Malaya is very malarial and in the early days the death rate particularly from malaria was very high. Little could be done until the causes were discovered towards the end of the nineteenth century; and then Malaya was one of the first tropical dependencies to take advantage of the work of Sir Ronald Ross and the other pioneers of tropical medicine. Furthermore, tin and rubber gave the Governments the money to undertake this enormously expensive task. In 1910 when the Estate Health Branch of the Medical Department was established the annual death rate among estate labourers of all races was 62.9 per 1,000, the great majority being Indians. By 1920 the general death rate had been reduced to 18.57, though that

of 24.09 for Indians alone was higher than the average. In 1937 the death rate among Indians in the Federated Malay States was 7.11 per 1,000, the greater part of them being labourers on estates, in tin mines and Government departments.[11] In earlier years some managers opposed the "interference" of the Health Branch and failed to realize the economic value of maintaining their labourers in good health, to put the matter on its lowest plane. For some time past however the former attitude has given place on most estates to ready co-operation.* At the present time, health conditions on the European estates are generally good; but many Asiatic-owned plantations frequently evade the regulations and have to be closely supervized by the Health Branch. They are a menace to their neighbours who have obeyed the regulations; it is of little use to carry out expensive anti-malarial measures if mosquitoes find undisturbed breeding places nearby. The Health Branch inspects estates about twice a year; but more frequent visits are impossible with the existing staff. It has also to enforce the regulations in the mines and in the kampongs (the Malay villages). The latter, along with small holders, are the worst offenders against the anti-malarial and other health measures and require constant supervision. The abolition of malaria is impossible even in a comparatively wealthy dependency like Malaya. The size is too great and the cost too heavy, especially in the sparsely populated districts. The disease has been virtually abolished in limited and densely populated areas like Singapore, and it has been diminished and held at bay by unremitting effort and expenditure in the estates and kampongs. The very great progress made was one of the changes which most impressed Sir Hugh

* The European and Asiatic rubber estates in Malacca Territory have combined since 1927 to finance an elaborate form of estate medical service. The area included in 1936 was 156,964 acres with an estate population of 21,960. The work was controlled by the Malacca Agricultural Medical Board composed of six members representing the Government and the European and Chinese planters. The estates maintained 27 hospitals with 710 beds and 47 dispensaries, while plantations which had no hospitals sent patients to the General Hospital at Malacca. The Board fixed the cess—40 cents per acre in 1936—levied upon its members to finance the annual cost of about $64,000, and engaged the staff. In 1936 this was composed of two European and two Chinese doctors and two anti-malarial inspectors, the Senior Medical Officer being Dr. A. L. Hoops who until his retirement had been the Director of Medical and Sanitary Services for Malaya. The work of the staff was not limited to attending the sick and the normal preventive measures such as estate sanitation or anti-malarial work. They also inspected and treated newly-engaged coolies—80% of the arrivals from Madras suffered from ankylostomiasis or hookworm as well as other diseases—made a half-yearly examination of the whole estate population, and gave appropriate treatment. One curious case which occurred in 1935 was that of a kangany who drank a love potion and died—of heart failure! Attempts were made to enlist the labourers' co-operation in improving their own health and to induce them to adopt a better diet by e.g. substituting undermilled for polished rice. (*Malacca Agricultural Medical Board, Reports for* 1935 *and* 1936, *passim.*)

Clifford when he returned to Malaya as Governor in 1927 after an absence of nearly a quarter of a century. "The West Coast of the Peninsula was, when I first knew it in 1883 and for many years later, unquestionably the most malarial area in the tropics in which I have ever served. As late as the year 1912 20 per cent. of the Tamil immigrant labourers imported from Southern India into the Negri Sembilan succumbed to that disease during the first year or two of their sojourn in the country. . . . The fact that they can to-day come to British Malaya annually in thousands and depart therefrom after a year or two of work, without more than a paltry percentage of their number having suffered from malarial infection, bears eloquent testimony to the transformation of the living conditions which has been wrought in the last dozen years on the rubber estates."[12]

Although the majority of the Indian labourers are employed on estates considerable numbers are also found in other employments. In 1937 the distribution was as follows:—estates, 243,999; mines, 8,680; factories, 9,297; government departments, 44,783: Total, 306,759.[13] Indians were employed in the Railway and Public Works Departments and by the Municipalities, Town and Sanitary Boards. Employment was usually permanent, housing and free attendance in Government hospitals were provided, and the wages were normally the standard rates or somewhat higher. Labour in the mines was less closely supervised than on the estates, to which the Labour and Medical Departments gave most of their attention, though the payment of wages, housing, and health were subject to government inspection. Miners, as well as estate and industrial labourers, were entitled to compensation for injuries received in the course of their employment. No amenities were provided by employers in the form of housing, education, and medical attention; but on the other hand the rates of pay were higher. One reason for the less stringent government control was that it was generally assumed that the coolie who hired himself on contract, as most mine labourers did, was sufficiently independent to look after himself. The principal cause however was that the Chinese who have always formed the overwhelming majority—51,906 out of a total of 67,318 in 1937[14]—did not welcome government intervention and preferred to regulate their own affairs. They habitually looked for everything to the contractor who employed them, and rarely asked the government officers for assistance. They are far more self-reliant than the Indians and have very clear and unchangeable ideas as to their likes and dislikes; the labour methods of the mines have been evolved to suit

their preferences. They frequently prefer to be hired *en bloc* through a contractor, and on the whole favour payment by results rather than a flat rate of wages, since this enables the more skilled or industrious miner to earn more.[15]

Mr. Sastri's Report confirms the impression formed by other observers of the general condition of Indian labourers in Malaya: they are better off than in the Madras Presidency and are well aware of the fact. The Malay Government and employers have evolved a system of recruiting and employment which is equally creditable and advantageous to themselves and profitable to the labourer. The result is that Indian labour in Malaya is now in a transitional stage. Formerly the labourer migrated to Malaya for two or three years and then returned to India with his earnings. To-day the majority still return to their villages, but increasingly they come back to Malaya, often accompanied by friends and relatives, and, even more important, wives. In recent years labourers have shown a growing tendency to bring their wives to Malaya instead of leaving them in India, and this makes for a more contented and settled population. During the past decade the number who have been born in Malaya and regard it and not India as their home has been growing. One interesting reason is that owing to the much higher sanitary standard of Malaya, Indian children born there have not the partial immunity to disease of those born in Madras. They frequently fall ill when the family returns to its native village and this circumstance has a strong tendency to make the parents go back to Malaya. On a few of the older plantations the majority of the labourers have been born on the estate. This is particularly noticeable in Province Wellesley and the same situation is gradually arising in Malacca. This is the beginning of a development which can be seen in a more advanced stage in an older planting colony like Ceylon. Here the first plantations were established a little over a century ago and on some of them the labourers are the third generation of those born on the estate. Some of them have not revisited their villages in Madras for fifty or sixty years and have lost touch with relatives there. The total Indian population of Malaya on 31st December, 1937, was estimated to be 754,849;[16] and the adults permanently domiciled in Malaya were believed to number at least 250,000. According to the census of 1931, 131,505 or 21 per cent. of the Indian population were born in Malaya. The majority were labourers in the mines, estates and Government departments. A few were small holders or owners of rubber estates: in 1937 the total area of Indian land-holdings was

312,801 acres.[17] This included 96,802 acres of rubber divided into 376 estates mostly of small size. To some extent these statistics did not represent genuine agricultural settlement, but the successful operations of Indian moneylenders who had acquired fairly considerable areas from Malay small holders who were in their debt. Part of the permanently settled population was urban and comprised moneylenders, merchants, petty traders, lawyers, doctors, and clerks in government and private employment.

Chinese Labour

The Chinese had traded with Malaya for centuries before the arrival of the Portuguese and a certain number of merchants had settled in the towns. Some of the Chinese families at Malacca have been there for over three hundred years. Emigration on a large scale did not begin until the foundation of Penang and Singapore and was due to the security for life and property provided by British rule. The Chinese settled chiefly in the Straits Settlements, only a limited number going to the Malay States as traders and tin miners. The reasons were the insecurity and disturbed conditions which prevailed there; and the entrance of large numbers did not begin until the establishment of British control in the 'seventies. From that date the Chinese poured in under the triple stimuli of the potential wealth of the country, the creation of orderly government, and the encouragement afforded by the British Government. The effect has been radically to alter the character of the population. In the Federated Malay States for example the population has grown from 373,000 in 1889, of whom the majority were Malays, to 2,052,729 in 1937, of whom 42.9 per cent. were Chinese. The rapid growth of the population has not been due to natural increase, for while the number permanently settled in Malaya has been increasing, the majority have eventually returned to China. Most of them still leave their wives in China, although the sex ratio has been changing and in 1936 roughly a third of the Chinese in Malaya were females. The volume of Chinese greatly exceeds that of Indian immigration, the maximum being attained in 1927 when 359,262 Chinese entered and 155,198 left the Colony. In 1921–9 inclusive the average number of arrivals at Singapore was 241,754 and of departures 111,405.[18]

In the nineteenth century coolies were brought from China under the indenture system. A professional recruiter engaged volunteers, paid their passages to Malaya and sometimes gave them a small

cash advance, on condition that they worked off by their labour the expenses incurred. Usually the recruiter recovered his outlay together with a profit from a broker in Singapore or Penang to whom the coolies were consigned. The broker then disposed of them to Chinese employers, making the best terms he could for himself according to the state of the market. The contract required the coolie to work for 360 days in return for food and clothing. In addition he occasionally received small sums of money for himself, as well as about twenty shillings to send to his relatives in China. If employed in the tin mines he was allowed to work overtime on his own account and might earn about $3 a month by so doing. Indentured labour gradually became less popular as the country developed; and also a system of co-operative working grew up which to a considerable extent replaced it. A Chinese capitalist (usually called the advancer) with a piece of mining land engaged a foreman and coolies. He supplied them with all their requirements and the profits from the enterprise were divided in pre-arranged shares. If the ground proved to be rich in tin the advancer made a very good profit and the overseer and coolies got a respectable share. If the venture was a failure the whole money loss fell on the advancer, and while the coolies lost the value of their labour they had been fed, clothed and housed, and had received small cash advances. Another form of co-operative mining was for Chinese with little money to club together to take out and work a mining licence. If the profits were good a licence-holder might eventually be able to take out a mining lease and hire coolies to work it for him.[19]

The abolition of the indenture system in 1914 has not altered the method of recruitment in China. The Chinese recruiter still pays the coolie's passage and makes small cash advances; and under the Labour Code the "indebted immigrant" is still liable to repay his creditor the amount of the passage money and the advances. There is power however to limit the amount of these by law, and the liability for repayment is a civil one. The coolie seldom repudiates his liability; but whether this is from innate honesty or from the extreme unwisdom of evading his Chinese creditors is uncertain. Chinese, unlike Indian, immigration includes comparatively few labourers recruited directly for estates. Practically all the Chinese come from Kwangtung and the other provinces of South China or from the island of Hainan. Of the various tribes the Hokkiens engage in agriculture and trade, Cantonese and Khehs provide the bulk of the miners, and Hailams are found chiefly in domestic

service. There are in addition the Straits-born Chinese who form a growing minority.

Two unsuccessful attempts to regulate Chinese immigration were made in 1823 and 1873, and the system of indentured labour continued with little change until its abolition in 1914. The Chinese were suspicious of Europeans and, unlike the Indians, strongly preferred to arrange their own affairs without the intervention of a paternal government. They were much under the influence of their secret societies, the object of which was to establish their own undivided control and to prevent the government from interfering with their affairs. Finally, the civil servants during much of the century were immensely handicapped by ignorance of the Chinese vernaculars and of the organization of the secret societies. Eventually in 1877 the Chinese Protectorate was established with an organization and duties similar to those of the Secretariat for Chinese Affairs in Hong Kong. The British staff of the department known as Protectors of Chinese were sent to China to study the vernaculars and customs. At first their work was largely confined to the Straits Settlements where it was very successful: the Malay States in their early years had no revenue to employ officials to supervise the large and scattered population of tin miners. For Chinese immigrants who did not remain in the Colony government supervision seems at first to have been confined to inspection on their arrival by an officer of the Protectorate. In 1883 however a Perak branch of the Protectorate was established in the tin-mining centre of Taiping, and a Selangor branch in 1890 at Kuala Lumpur. Its jurisdiction was later extended over Pahang. A Negri Sembilan branch was set up in 1914 at Seremban. No assistance has ever been given to Chinese as to Indian immigrants in the form of assisted passages; but limitations have been placed upon the amount of the coolie's indebtedness to the recruiter. During the present century the planters and the Government have attempted to organize a system to regulate and control the recruiting of Chinese in the same manner as Indian labour. About 1920 an Advisory Committee was appointed, with the Controller of Labour as chairman, to draw up a scheme. The members were unable to devise any effective means of dealing with the practical difficulties of the problem and the question was dropped.

In 1937 51,906 Chinese were employed in the mines, 75,589 on estates, 44,585 in factories, and 6,424 in government departments.[20] This was 77.6 per cent. of the total number of miners, 21.3 per cent.

of the estate and 78.8 per cent. of the factory workmen, and 10 per cent. of those employed by Government. The Chinese mine labourer is employed in one of three ways: he may work for a daily wage, or by contract, or in a small minority of cases by the tribute system. The tribute labourer usually forms one of a group who, having had their supplies advanced to them by a mining speculator, work the ground and share all profits that are left after the advancer has had his tribute paid to him. Wages may be either a fixed daily amount or by piece work: the Chinese are very partial to payment by results since it enables the more capable workmen to earn more. In 1937 about 80 per cent. of the Chinese in the mines of the Federated Malay States were engaged on piece work. The labourer is frequently engaged through a Chinese contractor who acts as interpreter, since few Europeans can speak the vernaculars, receives his men's wages and distributes them, retaining a percentage for himself. The working day is usually eight hours with extra payment for overtime, and the labourer employed on wages also receives free food and housing. The payment of wages, housing and health are subject to government inspection. Supervision is probably less effective than on estates and no wage-fixing machinery exists, though the Government is taking steps in that direction. Serious strikes occurred at the end of 1936 because the drastic reductions of wages made during the depression had not been restored although the price of tin had risen very considerably. The Government felt that the Chinese claims had much justification and negotiated a settlement which provided for an increase of wages. Chinese labour on estates is usually engaged through a contractor who receives his men's wages from the manager and pays them. In Pahang and sparsely settled districts he retains 10 per cent. of their wages and has various perquisites. He manages a store which has the monopoly of supplying their wants at more than market prices, and provides their food and a cook in the same fashion. In the populous West Coast States like Selangor his monopolies are not feasible and in compensation he takes 25 per cent. of the wages. The Chinese coolies are physically stronger than the Tamils and do about a third more work. Both on estates and mines they are employed on the heavier tasks and receive considerably higher wages than other races. In 1936, for example, when Tamil estate labourers received about forty to forty-seven cents a day, Chinese earned from fifty to sixty-five cents. Serious strikes occurred in the spring of 1937 among Chinese estate labourers who demanded seventy-five to

eighty cents an hour owing to the rise in the price of rubber. The Government and many planters approved their demands; but boards of directors in London who were enjoying dividends for the first time in several years were hard to convince. Unfortunately the Malayan Chinese Communists injected themselves into the dispute, and after their fashion tried to pervert a justifiable strike into an attack on capitalism. There were several instances of violence and the Government was forced to restore order. While doing so it made clear to the estates that its action must not be used to avoid increasing wages, and negotiated a settlement which granted the greater part of the coolies' demands. In 1937 an Advisory Committee on Chinese Labour was set up for the whole of Malaya with functions similar to those of the Indian Immigration Committee in respect of wage-fixing but without statutory powers.[21]

The Chinese furnish the bulk of the skilled and unskilled labour in Malayan industries, and wages are considerably higher than on the plantations, running from 80 cents to $1.20 a day for men. Factories and workshops are regulated by a series of Labour Ordinances which have enabled a number of International Labour Conventions to be put into effect. Hours are limited to nine a day, any overtime receiving double the normal pay, and the working week is six days. No child under twelve may be employed; and any dispute about wages may be referred to the Controller of Labour whose decision is final. Inspections are carried out by the Health and Labour Departments, which have power under the Labour Ordinance to regulate and enforce proper conditions of health and labour. The administration of the Workmen's Compensation Ordinance of 1932 is in the hands of Commissioners.[22]

Prior to 1930 no restrictions were placed upon Chinese immigration, but a change of policy became necessary owing to the very heavy unemployment caused by the Great Depression. In 1930 167,903 returned to China, many of them being labourers unable to find work. The number included some 13,000 destitute repatriated by the Secretariat for Chinese Affairs (to give the Chinese Protectorate its new name). During the same year 242,149 Chinese arrived in the Colony; and it was clearly necessary to prevent an influx of labourers who would merely add to the unemployed. The Netherlands East Indies were compelled to regulate immigration for the same reason. The Straits Settlements Immigration Restriction Ordinance which had been passed in 1928 was not enforced until 1st August, 1930, when a similar Ordinance was enacted in

the Federated Malay States. They empowered the Governor in Council with the approval of the Secretary of State for the Colonies to prohibit or regulate by proclamation the entry of manual labourers and domestic servants arriving by sea from any place outside Malaya. The Governor must be satisfied that the immigration was likely to cause unemployment and economic distress, or that it should be controlled in the public interest. Since only a few thousand a year entered by land from Siam the Ordinances established effective control over Malayan immigration. The Government imposed a quota upon the number of labourers from ports in China and Hong Kong who were permitted to enter the Colony; and direct immigration to the Federated Malay States was stopped altogether. At first the number admitted was 6,016 a month which was distributed amongst the shipping companies that had been bringing immigrants from China. It applied to adult male labourers, no restriction being placed upon the entrance of women and children. The Government promised to keep in close touch with the labour market and raise or lower the quota so that Malayan employers would not suffer from a shortage of coolies.[23] The quota was reviewed quarterly and as the depression deepened it was gradually reduced to 2,500 a month and in July, 1932, to 1,000. Many of those admitted were former Chinese residents returning to Malaya. Simultaneously there was a large and increasing emigration to China, the Government repatriating those who could not afford to pay their own way. In 1932 282,779 Chinese left Malaya and 32,925 arrived, of whom 14,609 were women and children. The Aliens Ordinance of 1932 extended the control of immigration to all adult males of all classes other than British subjects and British protected persons, but the race principally affected was the Chinese.* In 1934 conditions began to improve owing to the control of tin and rubber; the monthly quota was gradually increased to 4,000, and in addition 5,902 Chinese were admitted by certificates issued to *bona fide* employers who certified that the labour was required. In 1937 immigrants from China were 239,106 of whom over half were women and children while the emigrants were 66,502.[24]

The numbers are much smaller than prior to the depression and mirror the changed conditions in Malaya. The continuance of tin and rubber restriction has greatly reduced the demand for labour. Unless new uses are discovered which would increase consumption

* Indian immigration was simultaneously reduced greatly by ceasing to issue kangany licences and by suspending assisted passages except to Indians who had previously been residents of Malaya or to their dependents.

it would seem that the great period of expansion with its alternate booms and slumps is at an end, and that for some years at least regulation and restriction of output will be the future for both industries. In that event they will require a labour force which is both smaller than formerly and less subject to sudden fluctuations in size. A second process has been at work in Malaya which has also progressively lessened the volume of employment on the plantations and particularly in the mines. This is the use of labour-saving machinery and more economical methods of working, which have reduced costs of operation and increased production. In the tin mines, for example, the largest number of labourers employed was 229,778 in 1907 when the output was 48,429 tons. In 1929 the production was 69,366 tons but the labour employed was only 104,468; and while the output in 1937 was larger, the number of miners was only about three-quarters of what it had been eight years earlier.[25] The immigration system has been operated with flexibility so that the mines and estates do not appear to have suffered from a shortage of labour when the export quotas have been increased. At the same time the control of immigration has regulated the supply and ensured a stability of labour conditions which would have been impossible under the old system of unrestricted migration.

Javanese Labour

Javanese have been employed to a limited extent, the total number in 1937 being 15,603, most of whom were labourers on estates, especially in Pahang, and received about the same rate of pay as Tamils. The small number seems surprising in view of the industry of the Javanese and the proximity to Malaya; and as long ago as 1890 employers considered the possibility of recruiting labour from there. Little came of the suggestion owing to the high cost of recruitment inseparable from contract labour and the success which attended the immigration of free labour from India. The Government of Malaya disliked this anomalous remnant of the contract system, but the Government of the Netherlands East Indies insisted on its retention and only agreed to its abolition in 1932 after protracted negotiations. Under the indenture the Javanese labourer was bound to serve his employer for 900 or, more usually, 600 days, and breach of the contract could be punished by fine or imprisonment. The welfare of the Javanese was safeguarded not by the Labour Code (save for the provisions on health conditions on estates) but by the Netherlands Indian Labourers Protection Enact-

ment of 1909. Javanese began to emigrate to Malaya at their own expense and were employed on a monthly contract either on piece work or on daily wages. In 1931 only about 1,400 of the 11,000 Javanese in Malaya were indentured, the remainder being free labourers, and in 1932 there were only seven contract labourers. Under the arrangements made with the Netherlands East Indies Government in 1932 the indenture system was abolished and Javanese came under the provisions of the Labour Code. The Dutch stipulated that no Fund was to be created similar to the Indian Immigration Fund: the employer might freely recruit labour in the East Indies and precautions were taken to prevent the recovery of excessive amounts under the guise of advances and costs of travel. The labourer was to be repatriated free of cost in three years, and to cover the expense small deductions were to be made from his wages. The Javanese was also to be entitled to leave his employer at any time on giving a month's notice. The new arrangements do not seem to have had any appreciable effect in increasing the number of Javanese employed in Malaya.[26]

Conditions of labour in Malaya are decidedly superior to those in many parts of the tropics: the immigrants are far better off than in their own countries, and their eagerness to emigrate is the best evidence that they are well aware of the situation. In almost all its essentials the system which has produced these results has been evolved by the Malay Government and employers without outside pressure. At the same time it is only fair to point out that Malaya been favoured beyond many tropical dependencies in its natural resources. The large revenue which their development has brought made it possible to finance the heavy cost of the system of labour with its elaborate medical and other social services. A recent League of Nations report paid the tribute that "Malaya like Sumatra is an admirable example of what can be done to raise the level of civilization in the East, when scientific methods can be applied on a sufficiently large scale to a country possessing a rainy climate, a fertile soil and mineral resources, and containing a population well within its capacity to provide not only with a bare subsistence but with the facilities for physical and cultural development".[27]

Labour in Java and Sumatra

The conditions of labour on estates in Malaya may be compared with those in Sumatra but differ in many respects from the situation in Java. Sumatra and Malaya are similar in their suitability for

rubber and other plantation crops, their very large area of unoccupied land, the sparseness of the indigenous population and its disinclination for regular work. The Sumatran planters have therefore been compelled to import the greater part of their labour from Java and the remainder from China. Java on the other hand has a very fertile soil but has become so densely populated that the land available for plantations is limited. There is a population of 41,719,000 in an area little more than half the size of Great Britain, and it is estimated that only about 300,000 hectares of new arable land remain available for future increase. The average size of a holding is less than an acre, and the pressure on the land has forced the Javanese to become as industrious as the Tamils. At an earlier period European planters bought or rented on long lease large areas from the Government; but at the present time they can rent from the Javanese on short lease only as much of the village lands—not more than a third—as are not required for their own cultivation. The villagers supplement their income from their own holdings by work on the land leased to the sugar and tobacco companies. The Government carefully safeguards native land rights; and about two-thirds of the plantations are found in Sumatra and the other Outer Islands, which are very underpopulated.[28]

Labour conditions in Java are markedly dissimilar to those in Malaya owing to the wide difference in their economic circumstances. A second reason is that Government regulations were first introduced to safeguard estate labourers in the Outer Islands, and until very recently official attention has been limited to them. A Labour Inspection Service was not instituted until 1930, and while it exercises some supervision over the conditions of employment on estates and in industries, the number of inspectors is small and their work consists of suggestion rather than enforcement. The general standard of hygiene on estates in Java is not so high as in the Outer Islands although workers resident on estates usually receive free medical and hospital treatment. The standard of living is lower in Java so that wages are much less than in Sumatra or Malaya. During the depression, wages for different classes of estate labour varied between four and eighteen cents a day. The Government has no power to determine minimum wage rates; but at its suggestion wages were somewhat increased in 1937, the average rate for men varying between fifteen and twenty cents. At the same date male estate workers earned thirty to thirty-five cents in Sumatra and fifty to fifty-eight cents in Malaya. The laws regulating industrial labour

are less complete than in Malaya: there is for example no limitation on the hours of work and no compensation for accidents.

The development of estates in Sumatra began about 1870, indentured labour being recruited from Java and China. The Government encouraged the immigration of Javanese in order to lessen the pressure upon the land. In addition to the estate labourers, by 1930 about 200,000 had settled permanently on the east coast of Sumatra as small holders and to some extent they increased their incomes by working on the plantations. The Coolie Ordinance of 1880 laid down the terms of the contract and regulated conditions on the plantations. In 1904 the Labour Inspectorate was created to prevent abuses which had come to light on some of the estates on the east coast of Sumatra and to enforce the Ordinances prescribing conditions of employment. The contract was for three years, at the end of which the coolie could be either repatriated at the employer's expense or else renew his engagement. Since the cost of importing an unmarried labourer was heavy—about £9 in 1930—breach of contract was punishable with fine or imprisonment. This in practice usually meant imprisonment, since the coolie could not pay the fine; and after the expiration of his sentence he was sent back to his plantation to complete the term of his contract. The employer was required to pay wages regularly, make suitable food available and provide housing, water, hospitals and free medical treatment for the labourer and his dependants. The planters' health-services have been excellently organized and have reduced the death rate to a remarkable degree. Estate housing is in the same stage of transition as in Malaya, from lines to single or semi-detached cottages. The working day was nine hours and overtime rates must be at least 50 per cent. higher than ordinary pay. While the rate of wages was not fixed, an Ordinance prescribed that it must be sufficient to provide adequately for the normal necessities of life; and the cost of living was periodically established by the Inspection Service after careful inquiry into prices. Legally the regulations applied only to contract labourers and not to the class of free estate labourers that gradually developed. Although the latter were not entitled to the same benefits they nevertheless enjoyed them in practice. That the coolies were on the whole satisfied with the system was shown by the large number who voluntarily entered into re-engagement contracts.

Acute controversy raged for many years around the penal sanction. The planters contended that it was essential to prevent absconding and complained that Labour Inspectors visited their

estates without warning and interviewed their coolies without the overseers and European assistants being present. On the other hand a strong body of opinion in Holland demanded the abolition of contract labour as being a limitation upon human freedom and also because many abuses occurred despite official supervision. In 1930 the United States forbade the importation of the products of convict, forced, or indentured labour under penal sanctions unless they could not be produced in the country in sufficient quantity to meet domestic requirements. This law would have prohibited the entrance of Sumatran tobacco, and to avoid it the tobacco plantations in 1931 gave up their right under the penal sanction clause of the contracts. At this date only about 25 per cent. of the imported coolies were free labourers. The Netherlands East Indies Government passed Ordinances in 1931 and 1936 for the progressive substitution of labourers under free contract for labourers under the penal sanction. The intention was to bring about the almost complete disappearance of the latter not later than 1946. The system has already disappeared to a large extent: in 1935 only 16,636 labourers or 6.4 per cent. of those employed on the East coast of Sumatra were subject to the penal sanction. As a result the planters seem to have made the same discovery as Malayan employers at an earlier date that the penal sanction was unnecessary if the conditions of employment were sufficiently attractive.[29]

The Sumatran resembles the Malayan labour system of thirty years ago in its partial retention of contract labour. This was abolished in Malaya in 1910 and 1914, although fine or imprisonment for various offences was retained until 1923. Prior to that date the majority of the planters were opposed to penal sanctions since they considered them useless as a deterrent and also superfluous. Sumatran experience of recent years appears to be similar. The general conditions of employment, health and housing are similar in the two dependencies, with the important exceptions that wages are decidedly higher in Malaya, and that there is a Workmen's Compensation Ordinance. One of the causes of Asiatic poverty has been lack of local capital to develop natural resources. In both the British and the Dutch colonies European investment has benefited the native population as well as the investors: without it a major part of the new wealth derived from the mines and plantations would never have been brought into existence. Western development has entailed a large annual export of wealth in the form of dividends, even though a very considerable part of the profits has been reinvested in the properties, in the form

of improved machinery or extensions of cultivation. This annual export is not peculiar to the tropics but is found equally in Canada and South America and in the more backward parts of Europe. Any country which is dependent for its development upon imported capital must expect to pay a fair price until it can accumulate the resources to finance itself. If the prospect of reasonable dividends were withdrawn, the only incentive for investment would be removed. The effect upon the Asiatic population has been that large numbers of labourers have been employed at a wage and in general conditions of health and education which they could never have attained if they had continued to gain a precarious livelihood from the soil by primitive and outworn agricultural methods. The carriage of mine and estate produce has created a large additional volume of employment in the Railway and Public Works Departments, motor and steamer transportation systems and dock companies. The indirect result of European investment has been even more important: the revenue derived from it has made possible the maintenance of costly social services which could never have been financed from the native taxable capacity.

The native standard of living is still exceedingly low if judged by Western twentieth century standards; but economic conditions are so different that comparison is impossible. The higher standards of the Western workman are the result of industrialization, greater efficiency, education, lowered birth rate and vastly improved conditions of health. His present situation is of very recent date: the improvement has been more marked during the past hundred years than in the millenium which preceded it. Apart from Japan, Asia is still overwhelmingly agricultural and industrial development is in its infancy. The poverty of India, China, and Java is the result of the pressure upon the soil of an overabundant population, and the fundamental causes of its troubles are antiquated methods of agriculture, rural indebtedness, illiteracy, disease, and a population increase which depresses rural levels to a point where they afford only the barest subsistence. The very improvement in health conditions which has been made in India, for example, has to a considerable extent nullified the great extension of irrigation works and other governmental measures of agricultural betterment. The natural check of a high death rate has been partially removed, and since the birth rate has not fallen the relief to the pressure on the land has been largely offset by the tremendous fertility of the agricultural population. If East and West are to be compared

the truer comparison would be between Asia of to-day and Europe of the fifteenth or sixteenth centuries.

The economic situation in the densely overcrowded parts of Asia reacts upon that in the underpopulated and undeveloped regions like Malaya. Low as their standards are in Western eyes they seem like an El Dorado to the Tamil or the Chinese; there is a vast surplus of rural labour ready to press into them, and as their attractions have become more widely known the influx has grown. This holds down the wage level, for while higher than in India or China the margin of superiority cannot be stretched beyond a certain point in view of the potential immigration. The standard of living in Malaya should therefore be judged by that of India and China and not by that of Europe and the United States. This means that any very great increase in the Malayan standard must wait upon a similar rise in the reservoirs of overabundant and therefore cheap labour.

CHAPTER VII

PROBLEMS OF MALAY AGRICULTURE

Agriculture in Malaya falls roughly into two divisions, plantation and Malay. The first includes products such as rubber and palm oil grown for export on estates the majority of which are European. The second includes crops which are grown wholly or principally by Asiatic small holders most of whom are Malays. The most important and in the past the least remunerative crop has been padi, the unhusked grain of the rice plant. It is the staple food of 99 per cent. of the population and has probably been cultivated in Malaya from the earliest settlement of the country. Fruit and vegetables are grown on far too small a scale to supply local needs; and the same inadequacy characterizes cattle, pig and poultry raising. Coconut cultivation is widespread and important for export as well as local consumption, and is very largely in the hands of Malay small holders. Pineapple growing is almost entirely for export, and is the only form of plantation agriculture controlled by the Chinese.

Little was done to improve Malay agriculture until after the Great War. In 1896 Sir Frank Swettenham, the first Resident-General of the Federated Malay States, urged that rice growing be stimulated by the construction of irrigation works "to free us from our dependence on foreign countries for the supply of our staple food". The Residents of Perak, Selangor and Pahang advised the same policy, and the irrigation works at Krian in Perak were begun. They were completed in 1906 and gave a controlled supply of water to 50,000 acres, the largest single area under rice in the Federated Malay States. A stream of settlers of Malay stock, many of them originally immigrants from Sumatra, flowed on to the land as it became available and so proved that rice cultivation could be increased when good crops were assured. Some minor irrigation works were also built; but none were constructed upon a large scale for nearly thirty years, though they were needed in various parts of the Peninsula. The rapid development of rubber estates in the Federated Malay States led to the passage of the Malay Reservations Enactment of 1913. This empowered each of the four State Governments

to declare any area to be a Malay Reservation in which the land could not be sold to a non-Malay. The purpose of the Enactment was to ensure that sufficient land was set aside for the existing and future needs of the Malays. They were incapable of protecting their own interests and unless the Government took action there was a danger that in a period of rapid expansion so much land might be alienated to European and Chinese planters that too little might be left for the future needs of the peasant cultivator. Legislation of a similar character has been found necessary in many colonies: in the Netherlands East Indies, for example, native landowners are prohibited from alienating their lands to non-natives. Unfortunately the Enactment did not forbid the mortgaging of land, and a far from negligible part of the Reservations had come under the control of Chinese and Indian moneylenders.* The position of Malay coconut growers was decidedly improved by the work of the Coconut Inspection Staff especially as regards the control of insect pests. Research was also begun upon the selection of higher yielding strains of padi. Investigations on coconuts and padi were continued during the war and a Padi Experiment Station was established at Titi Serong in the Krian District. The Field Officers were far too few effectively to persuade a conservative and easy-going

* In 1931 the Government of the Federated Malay States passed a temporary Enactment which appears to have been ineffective, forbidding any sale by foreclosure of a small holding save with the consent of the Sultan and Council of the State. They had power to fix the percentage which the cultivator must continue to pay. The reason for the Enactment was that the Malay cultivators were very heavily in debt—the Resident of Perak estimated their indebtedness both by mortgage and otherwise in his State at $25,000,000—and the Indian moneylenders were threatening extensive foreclosures since they were unable to meet their payments owing to the heavy fall in the price of produce. In 1933 the Malay Reservations Enactment declared that in future no Malay holding might be transferred, charged, leased, or otherwise disposed of to any non-Malay, and that land might not be taken by the creditor in discharge of debts even if the debtor's other possessions were insufficient to settle them. The Ordinance also forbade certain practices by which moneylenders had frequently evaded the Enactment of 1913 which forbade a non-Malay to hold land on a Reservation, e.g. installing a Malay tool of the moneylender as the nominal owner. So far as could be ascertained the amount of debt secured by charge and registered lien on the land on 31st December, 1930, was $5,972,496, almost all of which was owing to Indian or Chinese moneylenders. Out of the 6,298,366 acres of Reservations in the Federated Malay States the area under charge varied from 4·6% in Negri Sembilan to 2·5% in Pahang. This did not include the unregistered debt, i.e. where the land title was deposited without the creation of a registered lien, which was estimated to be an additional $1,800,000. The Government stated that the Malay was gradually losing control of his Reservations because he was 'economically unsophisticated'. He must be protected against himself and prevented from dissipating his patrimony because of the allurements of an immediate loan which frequently was wanted for extravagant expenditure on a wedding or some other ceremony. (*Proceedings of the Federal Council of the F.M.S.*, 1931, pp. B 16–B 19, B 37. *Op. cit.*, 1933, pp. B 132–B 138, B 159–B 169.)

peasantry to improve their methods, and a poor knowledge of the vernacular very considerably hampered what efforts these officers did make. The examinations which they were required to pass in the Malay language set a much lower standard than was demanded after the war. Furthermore they gave most of their time to the European and Chinese rubber planters. The Research Branch did not include a specialist in padi with the result that investigations were disconnected since they depended upon the personal scientific interests of the members of the staff. There was not the continuity which was essential since satisfactory results required years of experiment. The general result was that some excellent research was carried out in a vacuum and did not benefit the Malays from the lack of effective liaison.

Limited appropriations and insufficient staff, particularly after 1914, were partly responsible for the neglect of Malay agriculture. The post-war policy of increased taxation and ever-expanding social services was in its infancy in Great Britain as well as in the dependencies; and the Gladstonian tradition was still powerful that as far as possible money should be left to fructify in the pocket of the taxpayer. Judged by contemporary standards the Malayan expenditure upon agriculture compared favourably with that of other parts of the colonial empire. The rubber boom however caused less profitable crops and especially rice to be largely overlooked. Sir Frank Swettenham's policy of fostering rice cultivation was forgotten in the period of ever-expanding prosperity which began in 1905. Some of the Malays substituted rubber for rice and the entrance of hundreds of thousands of estate and mine labourers very greatly accentuated the inadequacy of the local rice production. Practically all these immigrants were non-productive as far as food was concerned. The profits from rubber were far higher than from rice, no one foresaw the depressions which lay years in the future, and Malaya was close to the great rice-growing countries of Burma, Siam and Indo-China where prices were low. A strong body of opinion among civil servants and unofficials considered that the economic position of the Malays could best be improved by encouraging them to plant rubber and to leave the less profitable rice to the Burmese and Siamese. They opposed the policy advocated after the War that rice growing should be encouraged. The annual imports of rice were admittedly a heavy expense; but the price of rubber was so high that this school of thought held it false economy to divert land and labour to growing rice when the same outlay

would produce a return in additional rubber larger than the cost of importing Malaya's requirements in rice.

During the war it began to be realized that dependence upon imported foodstuffs might have serious consequences. The rice crops failed in India and Siam between 1917 and 1921 and the Indian Government prohibited the export of Burmese rice. A serious shortage developed in Malaya and the price doubled. Not only the native population but also estate and mine owners were hard hit: they had to feed their hundreds of thousands of labourers and to pay from their own funds the substantial difference between the high cost price of rice and the much lower figure at which they sold it to their coolies. To ensure the country against an actual famine the Government established control of rice: all employers of labour were compelled to plant foodstuffs and the inadequate local supply was supplemented by imports from French Indo-China. These were resold to the native population at a reduced price; but the government losses on rice purchases were $42,000,000, over a third of the surplus balance which had been so carefully accumulated. The result of this experience was the decision that rice cultivation must be increased and that more attention must be devoted to native agriculture. The same opinion was expressed in 1919 by Dr. Butler, the Director of the Imperial Agricultural Research Institute at Pusa in India, who had been asked to report on the Department of Agriculture. The Government decided to increase the research and field staff for native agriculture and to establish a Rubber Research Institute so that the Department would be free to devote itself to other crops. It also determined to build irrigation works and form co-operative societies. The carrying out of the policy was greatly retarded by the fall in revenue caused by the depression and the protracted discussions which prevented the Rubber Research Institute from getting under way until 1928. It was not until 1927, for example, that the Department of Agriculture was able to establish a Division of Soils for the systematic study and classification of different soils and the determination of their suitability for various crops. During the greater part of the 'twenties, moreover, the Director of Agriculture was a member of the administrative service and not a trained agriculturist. On several occasions the rules governing promotion led to his replacement by a new Director so that the necessary continuity of policy was broken and time was lost while he learnt the needs of his department.[1]

Meanwhile the Research Branch continued the selection work on

varieties of padi which had been begun in 1915 at the Experiment Station at Titi Serong. The object was to determine the varieties of rice which were best suited to the various conditions of soil, rainfall and cultivation in Malaya and to select pedigree lines, the seed of which could be distributed to the cultivators. The immensity of the work involved is faintly indicated by the statement that over 1,300 strains of rice were collected and that after ten years' experiments sixteen pedigree lines were selected in 1925. A second Padi Experiment Station was established at Malacca in 1921, and further investigations were made in test plots to determine which of the strains evolved at the main stations gave the best crops in each particular area. Only when this had been ascertained could the Malays be urged to plant seed from the selected strain. The results showed that the use of improved seed increased the crop by about 30 per cent. and by 1926 30,000 acres of the Krian District were planted with selected seed. In 1919 an estate was acquired for research in coconut cultivation; and in 1921 an Experiment Station of 1537 acres was established at Serdang near Kuala Lumpur for investigations on crops other than rubber, coconuts, and rice. Reform of the Field Branch of the Department of Agriculture was also undertaken. The Secretary for Agriculture insisted that the European Field Officers must concern themselves with the Malays and not limit their attention as formerly to the European and Chinese rubber planters. He also required them to work in collaboration with the District Officers. Previously the attitude of the Agricultural Officer had been that, since he was an expert while the District Officer was merely an administrative officer, there was nothing to be gained from co-operation. This ignored the right of the latter to exercise a general supervision over the technical officers in his district, since their actions affected the lives of the people for whose administration and peaceful behaviour he was responsible. It also overlooked the very important point that he often had a far better knowledge of the vernacular and of the needs and customs of the Malays.* In 1922 publication commenced of an Agricultural Bulletin written in

* While agricultural and other technical officers are in a way under the District Officer's control he cannot dictate the policies which they are to follow. The *modus vivendi* which has been evolved depends upon co-operation. The technical officer is responsible only to his department on all technical questions; but if the District Officer insists that the enforcement of a particular policy would be inadvisable its execution should be postponed pending reference to higher authority. The head of the department would settle the question in consultation with the British Resident of the state with, if necessary, a final appeal to the Governor and High Commissioner. If the policy is finally approved the District Officer must assist in carrying it out whatever his personal opinion of its advisability.

Malay and containing advice to cultivators. The extension of agricultural education among the small holders required an increase in the number of Malay Assistants to the European Field Officers. Their duties included giving advice, distribution of seed and pamphlets, and taking charge of demonstration plots which were established to educate the cultivators by visual evidence of the results of improved methods.* To give an agricultural bias to the training in Malay vernacular schools the Education Department had added a course in elementary agriculture to the curriculum at the Malay Teachers Training College at Tanjong Malim. Soon after 1916 school gardens were established with if possible a separate plot for each boy. They were cultivated under the supervision of the teacher, the Department of Agriculture supplying seeds and other requisites. Before instituting the scheme an officer of the Education Department had been sent to Java and the Philippines to study their systems of agricultural education. An attack on the problem of rural debt was begun in 1921 by the organization of the Co-operative Societies Department, and a government rice mill was built in the Krian to enable the padi grower to obtain a fair price for his crop. Previously all the rice mills had been owned by the Chinese, who by arrangement between themselves eliminated competition in buying the padi. The Malay had had no option save to sell at the price offered by the middleman who bought for delivery to the mills. The building of the government mill broke the Chinese monopoly in the Krian and enabled the local Malays to obtain a higher price.[2]

A trained agriculturist was appointed Director in 1929 and the Department was gradually reorganized and expanded. He decided that the Field Branch must give more attention to the improvement of Malay agricultural methods and that closer collaboration must be established between the Departments of Co-operative Societies, Education, Statistics and Agriculture, and the Rubber Research Institute. All of them were concerned in different ways with the improvement of Malay agriculture.§ The work of improving small

* Some training of an elementary character was established in 1918, and in 1923 it was somewhat expanded. Selected graduates of the Malay College at Kuala Kangsar were appointed probationers in the Department of Agriculture and received two years of instruction at Kuala Lumpur from the European Agricultural Instructor and the officers of the Research Branch. Since 1931 the Malay subordinate staff have been trained at the School of Agriculture at Serdang.

§ The question also concerned the Irrigation and District Officers and in addition the latter had the right to exercise a general supervision over the technical officers. During the Great Depression informal committees grew up to promote co-operation in attacking the common problem. Their names and nominal functions varied and

holders' rubber was divided between the two last in the manner already noted. Since 1930 they and the Department of Co-operative Societies have operated jointly a motor caravan for rural propaganda. Inspection of school gardens was found to be very uneven, excellent in some states and below standard in others. Arrangements were made at the instance of the Department of Education by which it was to be responsible for their financial upkeep while Field Officers were to visit and report upon them monthly to the Inspectors of Schools. Officers were seconded to organize Departments of Agriculture in the Unfederated Malay States. Johore had appointed an Agricultural Inspector in 1914 and Kedah in 1923; but apart from this little had been done. By 1935 Departments had been established in all the states save Perlis, though the staffs in Kelantan and Trengganu were still small. Proposals were also elaborated for making freely available to the Unfederated Malay States the services of specialists attached to the headquarters of the Department at Kuala Lumpur. In 1935 the Director of Agriculture Straits Settlements and Adviser Federated Malay States was also made Adviser to the Unfederated Malay States. While the Departments in the latter were not placed under his executive control he was put in a position to guide and co-ordinate their policies working in co-operation with the British Advisers to the Sultans. Since Malaya is an economic unit with the same agricultural problems in all its political subdivisions, the new position of the Director was a beneficial recognition of economic realities.[3]

The Central Experiment Station at Serdang was enlarged by the addition of a stock farm, tea factory and palm oil mill. A dairy, poultry and vegetable farm was established in the mountains at Fraser's Hill. The annual imports of milk, meat and vegetables were very heavy owing to the inadequate quantity and poor quality of the Malay products; and there was great need for investigation into the possibility of improving the local supply. Two Experiment Stations were established for research in pineapples, which had become a minor but decidedly promising export. By 1938 there were eight Padi Experiment Stations and forty-three test plots, the latter being used not only for testing high-yielding strains but also to

they had no rigid rules as to membership, duties or government control. They were really general purposes committees which talked over and decided any matter of interest to the district which needed to be discussed. Usually they were composed of the District, Agricultural, and Co-operative Societies' Officers, and sometimes included the Education and Irrigation Officers and Malay subordinates. Similar committees for one or two mukims (subdivisions of a district) were made up of the local Malay officials and the executive committees of the village improvement societies.

demonstrate their qualities to cultivators, and supply seed. There were also twenty-eight Agricultural Experiment Stations for research, demonstration and the supply of planting materials for coconuts, pineapples, fruit trees, oil palms and such minor crops as tea, coffee, spices, tobacco, bananas and yams. Nine years earlier there had been only twelve Padi and Agricultural Experiment Stations. The staff of the Department in the Straits Settlements and the Malay States was composed of fifty-two Research and Field Officers, of whom forty-four were Europeans and the remainder Chinese and Malays. There were also 238 Asiatics in such subordinate positions as Agricultural Assistants and Probationers.[4] In Java at this date the Research Branch had a staff of about 150. While research there was further advanced than in Malaya the discrepancy was nothing like as great as these figures would indicate. Java was a much older and more developed colony with almost nine times the population, and its needs were far greater and more diversified. Its wealth and revenue were proportionately larger and Dutch colonial development was concentrated in Java to such a high degree that more intensive investigation was the natural result.

Far greater attention was paid to the improvement of native agriculture than in the 'twenties and the methods of propaganda employed were extended. Coconut growers in the past had often dried the copra in a faulty manner so that mould developed and they received a poor price. The Research Branch invented a form of kiln which very greatly improved the quality of the copra at small cost to the cultivator. The element of expense was very important since no improvement had any chance of adoption if it ignored the fact that the Malay could afford to spend very little on agricultural equipment. The Rubber Research Institute invented an inexpensive smokehouse, the use of which enabled the small holder to produce a much higher quality of smoked sheet rubber. Seeds and planting material were distributed as before from all agricultural stations, and during the depression fungicides and insecticides were sold at cost price. The Department realized that it was useless and unfair to prosecute a rubber or coconut grower for contravention of the Pests and Diseases Ordinances when he had no money to buy the necessary remedies, and it substituted a blend of instruction and persuasion. The methods of propaganda included lectures, the distribution of agricultural journals and leaflets printed in Malay and Chinese, and demonstrations at experiment stations and test plots which were attended by the local Malay village headmen. The results of adopting

improvements were also shown by employing them on the land of selected cultivators, the work being done by the owners and the Department's subordinate staff. The holding of agricultural shows was extended, and they and the village fairs for the sale of produce were established in all parts of the Peninsula and were used for the distribution of leaflets, insecticides and rat-traps. Rats did a great deal of damage to padi but the pest was reduced by traps and poison. The Government also organised rat hunts which proved successful and very popular as combining business with pleasure. A Rat Destruction Officer with a staff of Malay destructors was appointed for the large padi areas of the Krian, Province Wellesley and Malacca. In areas near the sea, land crabs developed a liking for a rice diet; so the Research Branch evolved a special type of trap for their benefit. The interdepartmental rural lecture motor caravan made annual tours through the Federated Malay States and the Colony. Roads were infrequent in Pahang and the apparatus and exhibits were transferred to a house-boat to reach villages which were only accessible by water. It was found that larger audiences were attracted if two nights were spent in each village and the first was devoted to films which followed the principle that "he who'd make his fellow-creatures wise should always gild the philosophic pill". The second evening, camouflage was dropped and lectures with lantern slides and agricultural exhibits dealt with the problems of peasant agriculture. The lecture caravan aroused great interest among the Malays, but to attain lasting results it had to be followed up at once by visits and practical instruction by the Asiatic Agricultural Assistants of the District.[5]

To the Asiatic subordinate staff was assigned a very important part in the programme of agricultural education. It was felt that in the effectiveness of their work lay "the key to successful approach to the peasantry". Their number was considerably increased, and in addition the Rubber Research Institute created a staff of Asiatic Rubber Instructors. The European Field Officers closely supervised their work, which "evinced marked improvement". Their training was much improved after the establishment of the School of Agriculture at Serdang with a two years' course of study; and refresher courses were given to keep their knowledge up to date. The College also gave a special fourteen days' annual course for *penghulus* or Malay village headmen, which was widely attended. All new appointees are required to attend the course, so that eventually all *penghulus* will have a training in improved agricultural methods and will be

able to supplement the work of the Departments of Agriculture and Co-operative Societies.[6] The School also offered a less elaborate one year's course for the sons of prosperous Malay peasants owning fifty to 100 acres, to improve their management of their land. Similar training was given at two other smaller farm schools, one of them at Malacca. Gardening has also been taught in most of the Malay vernacular schools and about 700 gardens established, although the main purpose has not been to impart agricultural knowledge. The real aim has been defensive, to teach the children not to despise manual labour and so try to keep them on the land. A school without a garden became a rarity, like one in Selangor which could grow nothing because the grounds were periodically inundated with salt water.

The general problem in Java is the same as in Malaya: a conservative people who are slow to be convinced of the value of change and who cannot adopt any improvement if its cost is beyond their limited means. The methods of agricultural propaganda are similar but are on a more extensive scale. One experiment which has not been tried in Malaya is that of using the village vernacular school teachers to give simple agricultural training to the neighbouring cultivators. An instructor in the Department of Agriculture gives a two-years' practical course to the local teachers, who attend once or twice a week. When their training is complete they in turn give a similar two years' course in which they take part in the work in order to overcome the contempt of the practical farmer for the bookish theorist. The pupils are between twenty and forty years of age; the object of the Dutch is to train the rising generation of farmers and not to waste time upon the older men who are too old and conservative to change their methods. This experiment was begun a few years ago and has proved so successful that it is spreading and about 1,000 village teachers are giving instruction of this type. Formerly the Dutch had a number of vernacular farm schools similar to the one recently established at Malacca. The purpose was to give cultivators a simple training which would enable them to make better use of their land and not to qualify them for a government post. Most of these farm schools have been closed since it was found that many boys attended in the hope of attaining thereby a government position where they could teach others how to farm, and with no intention of returning to their fathers' holdings. Those who did return and attempted to put into practice what they had been taught were promptly suppressed by the village elders and not

allowed to interfere with traditional methods. The Dutch therefore turned their attention to the somewhat older group, who were already cultivating their own land and so were in a more independent position.

The onset of the Great Depression re-enforced the lesson of its predecessor that the production of foodstuffs must be increased. The area planted with rice varied somewhat from year to year, as did the amount of imported foodstuffs. It would seem however as if most of the additional acreage planted in 1919 and 1920 owing to the abnormally high price was subsequently used for other crops when normal conditions returned. In 1930 the total rice area in Malaya was 707,740 acres and the production 264,202 tons or about 30 per cent. of the total consumption; while net imports were 591,755 tons valued at $64,305,162. In addition, about $30,000,000 of meat, vegetables, edible oils and other foodstuffs were imported, so that the total cost of imported foods was between $90,000,000 and $100,000,000. This became a particularly heavy burden owing to the catastrophic fall in the price of tin and rubber; and the Malay small holders who had substituted rubber for rice were reduced to serious distress. Those who had continued to grow rice were able to support themselves from their produce: being less prosperous in good times they were far less affected by slumps. No more was heard of the old argument that it was more profitable to concentrate upon the production of valuable exports and import the necessary foodstuffs. Instead there was general agreement that it was feasible and highly desirable greatly to reduce imports by the fostering of rice, vegetable and fruit growing, cattle and poultry farming and dairying.[7] The Malays had a traditional preference for food crops; but the stumbling block was the poor returns, especially in padi cultivation.

In 1930 the Government appointed a Committee to make recommendations for the extension of rice growing. The report was presented in 1931 and estimated that there were from 600,000 to 1,000,000 acres of potential rice lands in Malaya or more than the area actually in use. A considerable part of it was planted with rubber and the Committee advised that the Government should not allow any more to be grown on land suitable for rice. By far the most important region was the alluvial plain along the coast. A large part of it was already used for rice, rubber, or coconuts, while the remainder was swampy jungle. "A long familiarity with Malayan jungle in the flat swampy coastal region is necessary before one can visualize with accuracy the same region cleared of its jungle, exposed

to the drying influences of sun and wind, well drained and cultivated with rice. The flat Krian lands were deep impenetrable swamp before clearing, draining and cultivation; . . . yet it is these Krian lands which yield the richest harvest." The same methods of controlled drainage and of irrigation from the adjoining rivers would make a large part of the existing swamps cultivable. The other types of Malayan rice lands were either scattered areas in the valley bottoms or alluvial lands on the banks of the large rivers which were liable to flooding. While considerable tracts were planted with rubber and coconuts as well as rice there still remained much waste land which was suitable for rice cultivation. Flood control and on occasion irrigation works were frequently necessary. The Committee considered that better control of water was the most important means of increasing cultivation.* It recommended that the Hydraulic Branch of the Public Works Department should be expanded and established as a separate Drainage and Irrigation Department.

The Committee reported that the second essential was that the Department of Agriculture should expand its research and field work in padi. The detailed recommendations followed the scheme of departmental reorganization which has already been described. The Committee also advised that the Government should break the price-fixing rings of Chinese millers by building rice mills as they had done in Krian. The result of that action had been that cultivators who were not in debt could obtain the fair market price for their crop throughout the important padi area of Krian, Province Wellesley, and Kedah. Unfortunately the establishment of a competitive market only touched the fringe of the problem. From 40 per cent. to 90 per cent. of the cultivators in the different padi districts were not free to sell their crop at the market price because they were in debt. Their creditors were either Indians who held a mortgage on their holdings or Chinese shopkeepers who had made

* " A long straight metalled road divides the Krian District of Perak from Province Wellesley in the Straits Settlements. The boundary is a purely artificial one, but it is the dividing line between two administrations and their public works. An old Malay peasant was laboriously tilling his land on the Province Wellesley side to prepare it for rice planting; the rain had been scanty, the ground was hard and the labour heavy. On seeing the writer stop near him on the road he said, ' Allah, Tuan, the work is hard nowadays.' On being asked his further meaning he admitted that his fields were as they had ever been; but he added ' on that side over there ', pointing to Perak, ' formerly the folk used to be as we are still. But now the Company (Government) has dug them canals of water and made gates for them. Now they never lack water and their crops, formerly small as ours, yield them in these days more grain. Their luck is good." (A. S. Haynes, *Extension of Rice Cultivation in the Federated Malay States: Need of a Definite Policy. F.M.S. Council Paper No.* 28 *of* 1933, p. 4.)

advances in cash or kind while the crop was growing. The debtors were compelled to sell their rice to their creditors for far less than the prevailing market price. The Committee could see no remedy save the extension of the co-operative movement, although it admitted that success had been less among Malay cultivators than among urban and Indian estate workers. The principal lesson to be drawn from this important report was that there was no one way of making padi growing more profitable and bringing about its extension. The problem must be attacked simultaneously through drainage and irrigation, agricultural betterment and the co-operative movement.[8]

The Department of Drainage and Irrigation was established in 1932 and an extensive programme of works was undertaken. Settlement schemes were carefully worked out and it was found that the newly irrigated lands were rapidly taken up by Malay cultivators. Two new government rice mills were built and some efforts were made to promote co-operative marketing. Three rice specialists were appointed to the Department of Agriculture, a large additional number of experiment and test stations were established, and the Asiatic subordinate staff of the Field Branch was expanded. There was fair success in persuading the Malays to use selected seed and adopt improved methods of farming. A tax of $2.50 per ton was imposed on all rice imported into the Malay States from October, 1933, to 1st May, 1935. It will be recalled that about the same time the Netherlands East Indies restricted imports of rice by a quota in order to substitute Javanese for foreign rice in Sumatra and some other parts of the empire. In 1937 the total area in Malaya planted with padi was 740,040 acres, about two-thirds of which was in the Unfederated Malay States. This was about 25,000 acres less than it had been in 1933, the decrease being apparently due to the improvement in the price of rubber. The planted area was about 32,000 acres more than it had been in 1930. The production was 319,234 tons and the net imports 573,000 tons. Malaya therefore produced 36 per cent. of its staple food as against 30 per cent. in 1930. The larger crop was the result partly of the extension of cultivation, but to a considerable extent it was due to the use of selected seed.[9]

The situation as regards rice is decidedly more encouraging than it was ten years ago, although it is open to question whether Malaya will ever supply all its requirements. Even when the Government gave little encouragement in practice the Malays continued to

grow a large part of their own requirements, and some places like Krian, Kedah, and Kelantan had a surplus for export. Several reasons may be given for the failure of the attempt in the 'twenties to increase the output. The work was harder than rubber or coconut cultivation and the profits less. Another strong deterrent was that the cultivator was frequently uncertain whether he could obtain his water when he needed it and, what is of equal importance, get rid of it when no longer needed. There was no attempt to abandon rice cultivation in districts like Krian where there were adequate drainage and irrigation works. The final reason for the earlier lack of success was the failure to enforce the laws regulating planting. In the Federated and most of the Unfederated Malay States and in Malacca Territory the growing of padi was compulsory on practically the whole of the area which was regularly planted with rice. Padi cultivation being essentially a communal form of agriculture, the laws also provided for compulsory adherence to the dates on which the various operations such as sowing must be performed. During the 'twenties the Ordinances were not enforced and in many rice districts the Malays substituted rubber. During the past decade the law has been enforced and at the same time the cultivation has been made more profitable. The result is that the acreage and production have increased and that there has been no difficulty in obtaining Malay colonists for the newly-irrigated tracts. The majority have been immigrant Malays from Sumatra, many of them settled for an unknown period in Malaya. The moral would seem to be that the extension of rice cultivation is practicable when the production is made profitable. The average holding is about two and a half acres and this will provide enough to support a family of six and leave some surplus available for sale. A holding planted with padi alone, however, gives a bare even though an assured subsistence: to raise the standard of living it must be combined with rubber, coconuts, fruit trees or some other crop. The proposal has therefore been made that part of the irrigated rice areas should be bunded off and planted with a money crop. Incidentally this is the policy which the Dutch have followed with great success. The objection has been raised that irrigation works are expensive and that it would be uneconomic to allow part of the irrigated area to be used for cultivations which do not require elaborate measures of water-control. Diversified cultivation, however, would somewhat raise the small holder's standard of living, besides encouraging him to increase Malaya's food supply. The question of rice only, as against

a combination of crops, should not be decided solely in terms of the cost of irrigation works.

Coconuts also have been predominantly a small holder's crop: of the 609,417 acres planted in 1937 only a third was composed of large estates. A considerable part of the nuts on small holdings are used as food or shipped to India, while the remainder and the whole of the estate crop are exported in the form of copra (the meat of the coconut) or coconut oil. Malaya is the fourth largest exporter in the world, with about 10 per cent. of the copra and 4.5 per cent. of the coconut oil. It is far surpassed by the Philippines, the Netherlands East Indies and the British South Sea Islands. The control of coconut pests and diseases began in 1902 and was one of the few pre-war accomplishments of the Department of Agriculture which effectively benefited the Malay cultivator. Since 1924 a Coconut Experiment Station of about eighty acres has been maintained at Klang for investigation of such problems as improving the yield of nuts. Experiments were also made in the methods of production, since much of the copra prepared by estates and especially by small holders was of inferior quality. It retained too high a percentage of moisture, which caused the formation of mould, owing to poor methods of smoking to dry the copra. The Department evolved an inexpensive and improved type of kiln; and the Field Branch conducted an energetic campaign which led to a marked improvement in the quality both of estate and Malay copra. The Malay cultivator had the long-established custom of selling his nuts to Chinese middlemen before they were ripe for harvesting, with the result that he obtained a poor price and the buyer harvested all the nuts he could obtain whether they were ready for picking or not. The further result was that the unripe nuts gave a poor quality of copra. The Department of Agriculture had a fair amount of success in persuading the cultivator to prepare his own copra and so obtain a better price for his crop.[10]

During the greater part of the 'twenties the market price of copra fluctuated between £20 and £30 per ton; but from 1928 it began to fall until by 1934 it was only about £9 10*s*. The price of coconut oil showed a similar decline and the financial position of the growers was very serious since prices were below costs of production. There were 165 estates with an estimated pre-depression capital value of $54,000,000; while the native small holders were believed to be about 300,000 and the value of their properties about $120,000,000. The Government appointed a Committee of Inquiry in 1934 to

investigate the coconut and palm oil industries and make recommendations. It found that the causes of the "disastrous" fall in prices were the same as those already enumerated in the account of the palm oil plantations. While production had greatly increased, Western consumption had fallen heavily, especially during the early 'thirties, owing to the lessened consumption of margarine in Great Britain and the restriction of imports in the United States, Germany, France, Italy and other European markets. Moreover Malayan copra did not have the highest of reputations for quality on the world's markets. It was surpassed by that from Ceylon and the Netherlands East Indies, though it was superior to that from the South Sea Islands and the Philippines. The Committee considered that it was impossible to control production by international agreement. There were too many sources of supply and, furthermore, to be effective the control must extend to other vegetable oils like that from the soya bean and to whale oil. In the end the most efficient producing countries would survive and one of the principal recommendations was that the quality of Malayan copra should be improved. Further planting should be forbidden on estates, though not on small holdings. The existing export duty of 1½ per cent. *ad valorem* should be temporarily remitted, the government rentals charged on coconut lands reduced, and attempts should be made to substitute coconut oil for the $5,000,000 of edible oils annually imported for Asiatic consumption. The Government gave effect to some of the recommendations including the remission of the export duty from the Federated Malay States and Johore and the reduction of quit-rents to $1 per acre. The price of copra and coconut oil began to improve from the end of 1934 and growers were able to export at a small profit. In 1937 the total value of the net exports of coconut products was $17,463,530, whereas the average value prior to 1930 had been over $20,000,000 for about half the quantity. The Department of Agriculture continued its efforts to raise the quality of the product; and by 1938 much of it was of higher standard than copra from the Netherlands Indies. Of recent years the coconut oil industry has expended rapidly, the exports of oil being about five times the volume of 1930. The gross are much greater than the net exports for in addition to the production in Malaya there is a large importation of copra particularly from the Netherlands East Indies. Part of it is crushed and the oil re-exported while the remainder is graded and blended with Malayan copra before it is reshipped to Western markets.[11]

Pineapple canning is one of the principal minor industries of Malaya and the only one which is entirely in the hands of the Chinese. The first factories were opened about 1888 in Singapore by Europeans; but within two or three years ownership appears to have been transferred to the Chinese. European interests have never attempted to re-enter the industry, since they have been discouraged by the impossibility of competing with the costs at which the Chinese prepare the finished product. The increase of pineapple cultivation was closely linked with the expansion of rubber. Until about ten years ago pineapples were grown as a catch crop between rows of young rubber in order to obtain some return from the land while waiting for the trees to reach maturity. The fruit was particularly suitable for this purpose: it grew on a wide range of Malayan soils and the first crop was harvested about eighteen months after planting. Owing to the heavy and well-distributed rainfall and equatorial conditions generally two crops could be harvested annually. Pineapples were first grown on the island of Singapore, but the principal centres of cultivation shifted to Johore and Selangor with the development there of rubber planting. The bulk of the crop was canned for export while the pineapples grown in other parts of Malaya were sold for local consumption. Before the Great War the export was of moderate proportions fluctuating between about 18,000 and 28,000 tons. The diversion of shipping partially extinguished it in 1916–18; but during the past twenty years the exports have on the whole increased steadily and rapidly to more than double their pre-war maximum. Factories were built in Singapore, Johore, and Selangor and by 1930 the planted area was 54,278 acres and the export 57,960 tons valued at $7,859,048. Malayan pineapples have found their principal market in the United Kingdom, and the Government's Malay Information Agency in London carried on advertising campaigns with the assistance of the Empire Marketing Board. By the end of the 'twenties the United Kingdom bought about 80 per cent. of the annual export and Canada 11 per cent. The reason for this success was that in addition to good quality and flavour the Malayan pineapple was the cheapest canned fruit on the market and was especially popular with the poor. The low price was possible owing to the cheap costs of production resulting from the use of hand labour instead of machinery and the poor price paid to the growers. A third advantage was that most of the canning factories and the adjacent planted areas were close to Singapore so that the cost of freight was reduced to a minimum. Next to Hawaii

although a long way after it Malaya had become the world's largest producer of pineapples. The Hawaian output was about twenty-eight times the Malayan and specialized in the better and more expensive grades, while with a few exceptions the Malayan brands were of lower quality and much lower price.[12]

The 'thirties brought several changes of importance to the in-industry. The decision to alienate no more land for rubber meant that if the canneries were to continue, pineapples must be grown as a sole instead of a catch crop. The change came about rapidly: in 1929 only about 3,000 acres were cultivated as a sole crop, but by 1934 over three-fifths of the total area were under pineapples alone. This involved more careful cultivation than the somewhat haphazard methods employed in the past, and required investigation of many problems such as manuring. Experiments were carried on at Serdang and two Pineapple Experiment Stations were established. The weakest point of the industry was the poor methods of canning and grading. These were beginning to win for it an unfavourable reputation abroad, and the Government realized that unless reforms were introduced it might lose to competitors the market which it had won in Great Britain. A Pineapple Conference was appointed which made its report in 1931. It found that from being a minor by-product of the rubber industry the pineapple had risen to fifth place in the list of exports and had become an asset of great potential value. "The whole industry is underfinanced and is distinctly in the nature of a gamble", since in the past it had been precariously dependent upon a temporary crop. There had been no incentive to invest much money in it and the Chinese factory owners were men of "little or no financial stability, but with a strongly developed speculative bent". The buildings and machinery in the eighteen factories were cheap and primitive, hand labour was used wherever possible, and sanitary conditions left a great deal to be desired, although they were not as bad as they had been. Few factory owners possessed pineapple estates and, instead, bought the fruit from Chinese growers at a low price. Efforts had been made since 1928 to improve the quality of the product and by 1931 the best brands were as good as the Hawaiian. The greater number however fell "decidedly below the highest standard" owing to carelessness in the manufacture. The canners sold their output to European exporters in Singapore who marketed it abroad under their own labels irrespective of the factories from which the tins had come. The produce of inferior factories dragged down the price of the whole pack and

the individual canner had little incentive to improve his product. The result was "that an industry with an assured market which is prepared to pay a higher price for the product is unable, owing to its lack of combination and organization, to obtain that price".[13]

The Pineapple Conference recommended the establishment by the industry of plantations where pineapples were the sole crop, further research by the Department of Agriculture, and an extension of its advertising campaign by the Malay Information Agency. It also advised legislation to insure hygienic conditions in the factories, better methods of manufacture, and establishment of uniform standards of quality. The first recommendation was addressed to the industry itself, and by 1937 two-thirds of the 75,345 acres cultivated were under pineapples alone. Ordinances passed in 1934 required the registration and periodical inspection of all factories to enforce the Malayan standards of hygiene and general sanitation. No unregistered factory could operate, and as a result "many have been rebuilt and nearly all are now up to the standards required by the Health Authorities". In 1935 a Canning Research Officer was appointed to improve the methods of canning by investigation and advice. The manufacturers found his work of such value that a cess is to be imposed on the industry to defray the cost of building a Pineapple Canning Laboratory and a model demonstration factory under his control. Each factory was required to register a special mark which must be stamped on all tins, so that they could be traced back to the original cannery if complaints were made by the consumers abroad. A voluntary grading scheme under government control was adopted in 1938 to improve and standardize the quality of the canned pineapples intended for export. Government inspectors make frequent and regular inspections, and factories which meet the requirements for methods of manufacture and quality of the product are allowed to stamp on their tins the registered Malayan mark. This secures a higher price, and factories which fall below the standard are forbidden to use the mark. In 1938 prices fell below cost of production and the industry was threatened with collapse owing to overproduction and cut-throat competition. The Government was asked to intervene, and an Ordinance was passed in 1939 which limited the building of new factories and established a Central Control Board. The Director of Agriculture was a member and had the power to veto any action, and the Board allotted to each factory its quota of output and regulated sales.[14]

During the past decade attempts have also been made to promote

stock and poultry farming. Measures had previously been confined to efforts to stamp out rinderpest and other diseases by inoculations and quarantine. Buffaloes were raised primarily for their use in padi planting and hauling timber and only incidentally for meat. Cattle farming was fairly important in Kedah, Kelantan, and Trengganu; but the inadequate supply had to be supplemented by a large annual import for slaughtering. The dairy industry so far as it existed was controlled by Indians, and Malaya was largely dependent upon imported milk. This "should be regarded as an undoubted blessing because the milk that is ordinarily supplied by the native vendor is of undependable quality, is usually produced under unhygienic conditions, and is subject to gross adulteration with water of dubious origin". Flour was used to camouflage the suspicious thinness of appearance. There were a limited number of goats and sheep whose outstanding characteristics were extreme hardiness and skill in foraging. Pig-keeping was carried on by Chinese small holders, the local supply being supplemented by imports. Finally no Malay hamlet was complete without its population of lean and athletic fowls who functioned as an efficient corps of scavengers. The animals on the whole were undersized and of inferior quality, due to the very mixed and dubious ancestry which came from promiscuous breeding and the lack of proper care and feeding.

The Department of Agriculture established a stock farm at Serdang and carried on successful experiments in the cross-breeding of imported European pigs with the local Chinese variety. It had considerable success in improving the quality of the animals and in inducing the more progressive Chinese to adopt its methods. Investigations were made to improve the breed of buffaloes and draught and dairy cattle by cross-breeding and better feeding. A dairy farm was set up at Serdang in 1926 and another at the hill-station of Fraser's Hill in 1931 to carry out research on the improvement of milch cattle and to supply good milk to hospitals and the general public. The School of Agriculture at Serdang has a poultry farm at which investigations are carried out. Educational propaganda among the Malays was carried on by the Field Branch to improve the standards of cattle and poultry raising. The Veterinary Department was in charge of measures for the control of outbreaks of animal diseases and for the prevention of disease entering the dependency through the importation of animals. The field officers carried on educational work among small holders. Owing to the small staff there was no organized research, but the Veterinary

Officers were encouraged to carry on investigations so far as their time permitted. The establishment of cattle raising and dairying as a flourishing industry is not merely a question of improved care and breeding: the expenditure necessary would be so heavy that the profits are somewhat dubious. The greater part of Malaya is covered with forest, which is expensive to remove, and there are no natural pastures. When a tract is cleared it rapidly reverts to jungle owing to the luxuriant growth of vegetation, unless it is continuously tended; and the only grass which thrives in open spaces is lalang which most animals dislike. The experience has been that when imported fodder grasses are sown they are gradually replaced by the more vigorous local grasses which have a low feeding value. Scientific tropical stock raising and dairying are still in their infancy; but so far there seems little prospect of their widespread development in Malaya either as a small holders' or as a large scale Western industry. On the other hand there seems to be more likelihood of improving the production of buffaloes, pigs and poultry. Apart from these the dependency is likely to continue to import most of its requirements for meat and milk.[15]

The Drainage and Irrigation Department

Lack of adequate water might seem to be the one danger which the Malay padi-grower need not fear in a country with so heavy and well-distributed a rainfall. The problem is different from that of India in that drainage rather than irrigation is the principal necessity. Of the total rice area 93 per cent. is cultivated by the "wet" system, and this requires that the padi shall grow in water until it begins to flower, when the water supply is reduced until the land is just wet. While the principal necessity is that the water must be drained off when it is no longer required, irrigation is sometimes needed. The rain may not come exactly when it is required and even a brief period of unwonted dry weather will seriously retard the maturing of the padi. This is especially serious in the river valleys since the rivers are subject to periodical floods. Late rains may mean that before the crop is ready for harvesting it is destroyed by floods. Malayan rivers are capable of remarkable feats when swollen by heavy rains: in one exceptional instance the level rose ninety-six feet in twenty-four hours. Rivers in the tin and rubber districts are particularly liable to flood their banks because their beds have been raised by tailings from the mines and soil erosion from the estates. Many of them require dredging and the banks must be protected

by dikes to prevent flooding. The maturing of padi planted on the riverine flats may be hastened by pumping water from the river on to the fields. In large flat areas like Krian a system of main and subsidiary canals with water gates to control the depth on the fields is needed, so that the supply can be regulated and drained off the land when it is no longer required. In some areas storage reservoirs and canals are also required to regulate the supply and ensure delivery at the proper time. Finally, the largest areas which are suitable for extensions of rice cultivation are tracts of swampy jungle near the coast. When cleared and equipped with drainage and sometimes with irrigation works they make excellent padi lands, but the work is far too heavy to be left to Malay cultivators.

Until 1932 the Hydraulic Branch of the Public Works Department was in charge of drainage and irrigation works in the Federated Malay States and the results attained were disappointing. There was an Irrigation Engineer in Kedah and another with a few subordinates for the whole of Malacca Territory and Province Wellesley. The staff was small and appropriations were limited; and while a number of minor works were built, the one irrigated area of large size was Krian, completed in 1906. The policy that the Malays should be encouraged to grow rubber rather than padi was in the ascendant. Also the belief was widespread that they could not be induced to increase their padi acreage, as witness the extent to which they were substituting rubber. The reply—that they would grow more rice if it could be made a more profitable and assured occupation, and that the key to the problem was water control—did not carry conviction. In 1926 unprecedented floods occurred in many parts of Malaya: the rivers rose from seventy to 100 feet, large tracts of country and parts of towns were flooded and the loss of property was very heavy. Angry protests were made by the unofficial members of the Federal Council of the Federated Malay States, and the Chief Secretary admitted that the Government had been "somewhat dilatory". Decrease of revenue during the rubber slump had been one cause of delay; but since the recovery more measures of flood control had been taken on paper than along river courses. The Government announced the intention to increase the staff of the Hydraulic Branch and to dredge and embank rivers in the tin districts. The Government also adopted the policy of refusing a mining lease unless the applicants could produce a plan which in its opinion would control their tailings. Sometimes this proved impossible and the lease was refused. Conditions were improved so far as the rivers

were concerned but the policy towards padi lands was unchanged until 1931. In that year the committee appointed to investigate the extension of rice cultivation recommended that a separate Drainage and Irrigation Department should be established with an enlarged staff and that its duties should include river control. The Department should have executive powers in the Colony and the Federated Malay States and advisory functions in the Unfederated Malay States. The Committee condemned the former arrangement under which a small staff had been divided into three independent sections in accordance with political divisions. In irrigation as in agriculture, public health, and many other branches of government, the problem was Pan-Malayan and political boundaries cut across its essential unity. Geographically, for example, the Sungai Acheh district in Province Wellesley was a continuation of the Krian in Perak, and if the Krian irrigation scheme had been extended to it Malaya would have had "a considerable additional area of padi land". This had not been done because the two territories were under separate governments, with the result that the padi crops in Province Wellesley were far inferior to those in the Krian.[16]

The new department was created in 1932 and its investigations confirmed the previous impression that "all over the country padi lands were steadily going out of cultivation . . . even in Malacca, one of the oldest and best rice growing settlements in the Peninsula. . . . Even in the fine padi plain of Province Wellesley . . . conditions were steadily deteriorating, the cultivators in debt and their *kampongs* often indicating a state verging on poverty". The moneylender and use of poor seed were important causes; but the prime factor was the lack of a controlled water supply. In Province Wellesley and Penang where there were 40,000 acres under padi, much of the cultivation was almost entirely dependent on direct rainfall, and drainage of surplus water was by a number of small independent systems of canals which had been gradually built as settlement proceeded. The Malays had not kept the channels cleaned from silt and they had gradually choked so that the crops were steadily lessening. The first need was to clean and repair the drainage canals and rivers, then to control the supply of water by dams or gates, and lastly to supplement the rainfall by irrigation water. Another lesson plainly evident was that the duty of the Department would not end with the construction of the works: maintenance would be equally essential if the former progressive dilapidation was to be prevented. In the valley of the Malacca River over 6,000 acres of rice land had been

abandoned out of 7,059, either because they had degenerated into swamp or because they were so liable to flooding that the Malays had become discouraged. The reason was that the river had silted heavily owing to soil erosion caused by the clearing of natural vegetation and also because a bar had formed across its mouth where it ran through the town of Malacca. The area was restored to cultivation by dredging the river and building dikes and drainage canals. When the bar across the mouth was examined it "was found to consist of a hardened mass of bricks, concrete, tins and other *debris* which had no doubt been dumped into the river from the houses built up to the water's edge". This had effectually prevented the silt from being carried out to sea and so had helped to fill up the stream bed. Malacca was founded centuries before the days of town planning and the occupants of houses abutting on the river find it more convenient to throw their rubbish into it than to carry it through the house to the rubbish bin at the front. The practice could be stopped by demolishing the backs of the houses and building a lane along the river bank. But this would make some of the houses too short for human habitation! Investigation also showed that in much of the swampy jungle along the Straits of Malacca the soil was overlain with peat. The Department of Agriculture has not yet finally decided whether such tracts would be suitable for padi if cleared and drained, and it would appear that the area of potential rice lands was formerly exaggerated. It is also doubtful whether there is any potential padi area larger than the Krian likely to be developed in the near future in the Federated Malay States. Instead of a broad belt of rice lands along the west coast there will be numerous separate tracts of 1,000 to 25,000 acres. Most of the potential areas are under dense virgin jungle and the evidence of their limited extent re-enforces the arguments of civil servants who twelve years ago were urging that all potential padi lands should be reserved for that crop alone.[17]

The Department began an extension of the Krian canal system which would include the adjoining Sungai Acheh area in Province Wellesley and various tracts in Perak. When completed the padi area would be enlarged from 50,000 to 60,475 acres at an estimated cost of $375,000. The drainage and irrigation of the Sungai Manik, a tract of swampy jungle near Teluk Anson, was begun. When fully developed the scheme will provide 25,000 acres of padi land with the possibility of extending it to include another 20,000. In 1932 the whole territory was under dense jungle save for 500 acres, and

the sole inhabitants were fourteen wild elephants, *seladang* and tigers. "Extensive agricultural development for rubber planting in the beginning of this century caused the Batang Padang River (which flows through the tract) to silt, and by the year 1920 it had risen above the surrounding land in Lower Perak; its waters poured over the country far and wide to the valleys of the Kroh and Chikus rivers. The coarse silt blocked the mouths of its tributaries and with the dispersal of its own waters it could no longer maintain its channel, which became choked up with elephant grass growing prodigiously in the silt; and this fine river with a normal channel 100 feet wide became so overgrown that it was impossible to pass down it even in a small boat. The Railway authorities had to abandon the station at Chikus and raise the line. . . . Over 30,000 acres of jungle became inaccessible owing to the depth of water lying over it." A new channel was dredged and diked with results which were "most spectacular as it reduced water level in the swamp alongside by over four feet and completely freed the railway from flooding". The jungle was gradually felled and drainage and irrigation works built. The Malays were sceptical until they saw the water actually flowing through the new distributaries; but since then colonists have taken up the land as soon as it was ready for occupancy, and many applications have been made for small holdings in the tracts which are still under jungle.[18] In Selangor the Panchang Bedina area of 17,000 acres was converted into padi lands and settled between 1932 and 1936. This had been a swampy jungle between the Bernam and Selangor rivers near the Straits of Malacca. Numerous smaller areas of a few hundred to a few thousand acres were provided with proper water control, particularly riverine tracts which in the past had suffered severely almost every season. A very frequent story was that planting was retarded by the lateness of the rains, and that then before the padi matured the river rose in flood and destroyed the crop. The method adopted was to pump water from the river and distribute it to the scattered fields by a system of canals. The result of an assured water supply at the proper season was a very decided improvement in the crops. Between 1932 and 1937 the Department added 40,209 acres to the existing irrigation schemes in the Colony and the Federated Malay States, giving a total acreage of 142,142. The cost of the padi irrigation works was $4,967,882.[19]

Drainage has also had a beneficial effect upon coconut groves planted by small holders on the very flat land in the coastal belt

below high tide level. Originally these tracts were mangrove swamps which were reclaimed by diking and draining and are now very valuable. In the past they suffered severely from inundations by the sea, which at times completely ruined them besides bringing widespread malaria. Sometimes the belt of mangrove forest between the dike and the sea had been cut down with the result that the sea ate into the land at the rate of a mile every ten years and was "practically impossible to stem". Frequently however the trouble was caused by faults in the construction of the dikes and badly designed water gates to control the drainage. The great enemy of the earth dike is the boring crab, its favourite diet is mud and its particular joy is to travel from one body of water to another. It discovered that it could combine its favourite diet and pastime by tunnelling through the dike from the sea to the drainage canal which the Malays used to dig parallel with the dike and inside it. Unfortunately sooner or later the Straits of Malacca followed the crab's example. The Department is gradually safeguarding the coconut groves by an improved type of dike and drainage works; and it has found that a fairly effective way to kill the crabs is to inject Jeyes fluid into their holes.

The Department also took over the work of repairing the damage done to the rivers by soil wash from the estates and tailings from the mines. In addition to the destruction of crops, Ipoh (the centre of the Kinta tin district) and other towns were chronically flooded. The town of Kuala Kubu had to be abandoned owing to unrestricted mining in the hills around it and other towns were threatened with the same fate. In some instances the original valley floor was buried beneath as much as forty feet of silt so that the river ceased to have any well-defined banks and in times of flood was likely to spread widely over the valley. Flood prevention measures include dredging, building dikes and river training, i.e. the construction of new, well-defined banks to keep the river within its channel. The root of the trouble is the quantity of silt which enters the rivers and the Department therefore draws up plans for river works to prevent this. They are built at the cost of the tin miners whose tailings they control; and the strictness with which the Department enforces its requirements has not increased its popularity with miners.[20]

The Co-operative Societies Department

The heavy burden of debt is one of the most serious obstacles to raising the Malays' standard of living. What makes the problem

much more difficult to solve is that in considerable measure it is the result of their own racial characteristics. Those who know the Filipino will recognize the similarity both in the racial traits and in their economic consequences: indeed in the Philippines the situation appears to be a great deal worse than in Malaya. The cultivators and particularly the padi farmers require credit for certain purposes and in the past they had to obtain it from the Indian or Chinese moneylender since no other source was available. Much of the borrowing however has been for unproductive purposes such as marriage ceremonies. Malays are by no means indifferent to money: they like it to spend on what they want at the moment and are indifferent whether the object is worth the cost. At the same time they are not sufficiently interested in making money to work harder, or, except slowly and reluctantly, to alter their traditional methods of production in order to earn more. They lack foresight and plunge cheerfully into heavy debt quite untroubled by the thought that repayment will be most difficult and perhaps impossible. The day of reckoning is in the future and the motive for incurring the debt is in the present. It would be unfair to say that the Malays borrow with no intention of repayment. They intend to repay, but at their own convenience and not the creditors': their difficulty is that they have no conception of the time element in borrowing. It should also be said that the Malays do not repudiate their debts: very often there is no written contract of indebtedness but they make no attempt to evade their obligations on this ground. The Malays' indebtedness is in large measure the result of their own traits of character combined with the fact that their creditors, the Chinese and the Indians, exhibit strongly those very traits in which they are most lacking. Racial characteristics also go far to explain the slow progress of the co-operative movement: its success depends upon thrift, foresight, industriousness, initiative and a spirit of co-operation, in all of which the Malays are notably deficient. Whether the qualities can be developed is an unsolved problem: co-operative officers have a cautious confidence that the cultivators are slowly responding to tuition.

Malays have to overcome a heavy handicap and have little time in which to do it. To a very large extent their characteristics are the natural result of an enervating climate and an environment where to obtain a bare livelihood is dangerously easy. At the same time the forces of nature are so strong that to raise the standard is more difficult than in a temperate climate. To prevent a plantation from

reverting to forest, for example, requires far more unremitting toil than in Great Britain owing to the luxuriant growth of vegetation. Underpopulation has also been a serious handicap: there has never been the pressure upon the land which has compelled the Chinese to be industrious if he were not to starve to death. The political and social structure of Malay society has also been a great hindrance. Seventy years ago the Malay States were a rather primitive and disintegrating copy of eleventh century feudal Europe. The evolution which took the West nine centuries has been crammed into two generations. It was impossible for the Malays to take this headlong plunge into the twentieth century: even with the most painstaking and thorough training by Government they could not have kept up with the advance. Individual officials did all they could to help them make the transition: but unfortunately the Government was absorbed in the opening up of Malaya until about twenty years ago. It gave the people security of life and property such as they had never before enjoyed, it abolished debt-slavery and oppression by the nobles, and it educated, cured and sanitated the Malays with increasing thoroughness. Government assumed that the Malay would himself alter his own character and habits to fit into his new twentieth century environment. He did profit to a minor but nevertheless considerable extent from the prosperity of his country; but he was incapable of carrying out the psychological revolution expected of him. From defects of character and lack of training he wasted the money he got from his rubber or coconuts and had little to show for the greater wealth which passed through his hands. By the time the Government realized the situation he was heavily in debt to the immigrant races and in serious danger of becoming merely a hewer of wood and drawer of water in his own country. The Government's faults were lack of imagination and the sin of omission. Since the Great War it has been trying to train the Malays to hold their own against more astute and aggressive races. There are many who consider the task hopeless; but the British Government is under the strongest of moral obligations to make the attempt.

No exact information exists as to the amount of rural and urban debt; but it is known to be heavy and in individual instances beyond the possibility of repayment. Altogether apart from the large amount of unnecessary borrowing, seasonal credit is needed chiefly by the padi planter who requires to be financed for about six months of the year between the time of planting and harvest: the credit is

supplied by pawnbrokers and shopkeepers, most of whom are Chinese, the commonest security taken being the growing crop which will be sold to the creditor at an agreed price below the market price. This form of credit has been necessary but expensive and has prevented the small holder from obtaining the proper price for his rice. Rubber and coconut growers should not require short term credits since these are not seasonal crops but produce an income throughout the year. Medium term credit is needed for such purposes as building a house or buying buffaloes, but repayment must be spread over more than one season. Long term credit is required by agriculturists who intend to plant a permanent crop like rubber or coconuts where several years must elapse before the trees come into bearing. Hitherto the main source of supply for medium and long term credit has been the Indian moneylenders or chettiars who manage Malayan branches of wealthy Indian firms. In the past they have performed a real service in financing the opening up of Malaya, although the interest rates are high, varying from 1½ per cent. to 3 per cent. a month depending upon the security. Unpaid interest is added to the principal and interest charged on both, which makes an impossible burden. The chettiars' security is a mortgage on the land; and in the past they have not been anxious to foreclose or even to secure repayment of the principal so long as they received their interest. The Chinese also prefer not to take the debtor's land in settlement of his debts; but many Malays have lost their holdings to Chinese or Indian moneylenders, and become their tenants. They receive a small sum for cultivating the land and handing over the produce. Often they would be far better off if they abandoned their holdings and took up fresh land somewhere else; but Malays as a rule refuse to leave their native villages. Another type of moneylender is the Sikh watchman who is employed by many firms in the towns to guard their premises. His burly and patriarchal figure may be observed enthroned upon a *charpoy* (bedstead) outside the doorway. He may also be observed in less patriarchal guise loaning money to city clerks at 10 per cent. or 20 per cent. *per mensem*, or a few months later outside their offices on pay-days backing a slender and shrinking clerk against the wall and levying toll on his wages.

Marketing and debt are inseparable, for the Chinese moneylender has also been the village shopkeeper and the only buyer of its produce. The Malays have to buy all their requirements at the shopkeeper's price, which is therefore too high, and to sell their padi,

copra or rubber for too little. The compulsion becomes absolute when the Malays are in his debt and are under an agreement to sell their produce for less than the market price. Finally, as the sole source of credit, the Chinese shopkeeper and produce dealer was in a position to dictate his own terms for loans. His triple monopoly put him in a very strong strategic position to get the best of all three worlds. The hold which the *bunnia* has over the Indian peasantry was largely produced by the same advantages; and a rather similar situation has had a large share of responsibility for the failure of self-government in Newfoundland. The position of the Chinese was still further strengthened by the Malays' own defects of character and their friendly attitude: they regarded him as a benefactor and did not resent his overcharging and underpaying since they felt that he had a right to earn a living like anyone else. Co-operative societies found that when the Malay cultivator had money after harvest he would pay first his debt to the Chinese shopkeeper and give the co-operative nothing. So inveterate was his habit of borrowing that in some cases where the Government paid off all his debts to give him a clean slate he promptly borrowed again from the Chinese for unproductive purposes. His restored solvency had improved his position as a prospective debtor and he plunged into debt as deeply as ever.

Governor Sir Arthur Young suggested the creation of co-operative societies in 1907 as a result of his experience with them in Cyprus. A committee of inquiry, however, strongly advised against it in 1911 with the result that another ten years elapsed before any steps were taken. The committee considered that the Malay was incapable of working a co-operative society because he "is in little haste to grow rich, is somewhat distrustful of his neighbours, . . . still suffers from the recollection of past evil rule when . . . saving was merely inviting attack . . . and is perhaps undergoing a rather painful transition from what has been called a self-sufficing domestic economy to a commercial money economy". The committee also believed that the Malays would refuse to join co-operative societies since it was "entirely against the tenets of the true believer of Islam to take interest on money lent out". Eleven years elapsed between the report and the formation of the Department of Co-operative Societies; and in the meantime the committee's theological pronouncement spread amongst the Malays and prejudiced many of them against the movement as contrary to their faith. The result was that in its early years the Department "always had to struggle

and fight hard" against religious scruples especially "whenever the movement attempts to spread into new territory". The question of whether co-operative societies were forbidden by the Mohammedan religion was investigated by the Sultans of Perak, Selangor, and Kedah, the leading religious authorities of Malaya and Egypt and the Mufti of Mecca. They unanimously agreed that there was nothing in the practice of the Malayan co-operatives which was contrary to the Mohammedan religion.[21]

After the Great War the proposal was revived and in 1921 the Government sent one of its officers, Mr. A. Cavendish, to India and Burma to study the working of the societies there. On his return he was placed in charge of the new Co-operative Societies Department, and in 1922 six rural credit societies were established with a total membership of 182 and a working capital of $2,065. Three urban thrift and loan societies were formed among clerks employed in government departments and private firms with a membership of 547 and a capital of $14,239. Two co-operative stores were opened, both of which failed after a brief existence. The department's policy from the beginning was that no society might borrow from Government or another society and that each must depend for its capital upon the subscriptions of its members. It would have been easy to form any number of so-called "co-operative societies" under the lure of government loans; but the societies would have lasted only as long as the credit was forthcoming. Each society made loans to its members at about 15 per cent. per annum interest while the moneylenders charged from 20 per cent. to 60 per cent. and sometimes more. A large part of the loans was used to pay off debts to the Chinese and Indian moneylenders owing to the much lower rate of interest charged by the societies. During the next few years the number of societies slowly increased, and in 1927 the work was extended to Kedah and Johore. The Malays who formed the committees of management of the rural credit societies were enthusiastic but inexperienced and needed constant supervision and instruction. Especially at first they were very much inclined to attach more importance to obtaining a large number of members than to whether an applicant was thrifty and would repay his debts. Malays being inveterate borrowers, there was no lack of candidates, since many had the erroneous impression that a village co-operative existed to furnish loans at low interest for the mere asking. The committees often failed to realize that a debtor's borrowing capacity was the amount by which his income exceeded

his expenditure and not the value of his land and other immovables. Another source of trouble was overdue loans; the committees were often reluctant to press fellow villagers to repay their debts. The staff of the Department was too small and most of them were untrained, so that they had to learn the theory and practice of co-operation in what time they could spare from their duties. This considerably retarded progress and led the Director to adopt the policy of supervising and strengthening existing societies rather than adding to their number. While progress was slow there were nevertheless some encouraging signs. The societies formed among padi growers were making a considerable impression on the "padi ratus" system under which Malay debtors were compelled by the terms of their loans to sell their crop to their Chinese creditors at less than the market price. Sometimes the cultivators received as little as a half or even a third of the current figure and were kept in a state of perpetual economic servitude. The 550 or so padi growers who joined co-operative societies were freed from the system and received for their rice as much as $40 an acre more than before. While the main stress in the earlier years was laid on liberating the Malays from the moneylender, the co-operative also assisted the agricultural field officers in persuading the cultivators to improve their agricultural methods.[22]

In 1926 the Department began to establish thrift and loan societies among Indian estate labourers. The object was to assist them to save part of their earnings and also to provide loans at a reasonable rate of interest. Ordinarily there was no reason why they should fall into debt; but unthrifty habits and the traditional excessive expenditure on marriages and other ceremonies often drove them to borrow from the Chinese pawnshops, which charged 48 per cent. to 60 per cent. per annum.[23] The estate manager became President and Treasurer and deducted the monthly subscription from the members' pay, since even with the best of intentions this was the only certain way in which the Tamils could save. The money was invested in the Post Office Savings Bank or in gilt edged securities, and the books were audited by the Department's Auditor. The planters were very strongly in favour of the movement but progress was slow at first since it was difficult to find Indian co-operative officers with the proper disposition and training. Urban thrift and loan societies grew much more rapidly in numbers and paid-up capital than either of the two varieties of rural societies, since clerks were quick to appreciate an organization which granted loans at

1 per cent. per month. It was estimated that roughly 45 per cent. of them were in debt, sometimes for their whole lives, to pawnbrokers, moneylenders or the still more rapacious Sikh watchmen. The most frequent causes were the extravagant expenditure upon weddings and funerals which custom demanded or such unavoidable contingencies as sickness or birth. The bulk of the loans granted to members was to pay off debts to the moneylenders, and the remainder for such reasons as sickness, marriages, funerals or building houses.[24]

In 1928 a report was made on the Malayan co-operative movement by Mr. C. F. Strickland, an Indian co-operative officer.[25] The number of societies on 31st December, 1928, was 200 with a membership of 28,660, and a working capital of $2,691,649. The urban thrift and loan societies were the only type which had developed rapidly and accounted roughly for half the total membership and four-fifths of the capital. They had relieved many clerks from an overwhelming burden of debt and the number of members who contracted loans had decreased to 45 per cent. of the total. Their weakness was that too many of the members were interested in borrowing rather than saving and that the managing committees were too prone to grant loans without making proper inquiries. Mr. Strickland commended the efforts made by the Department to correct this weakness, and he suggested that the societies be used as a means of educating the members against "the high and growing expenditure on marriages and other ceremonies". This was "rather due to fear of public opinion than to any desire for extravagance on the part of the individuals concerned". The position of the Malay rural credit societies was not altogether satisfactory. The padi growers might need seasonal credit but the small holders with a permanent crop like rubber or coconuts should only require a loan once, to clear off their debts to the moneylenders. Thereafter they should not need credit at all providing they were moderately thrifty. The trouble was that "they ordinarily make no attempt to practise thrift, and their attitude in economic adversity is a good-tempered but apathetic acquiescence. If prices are bad they tend to wait until they rise, maintaining in the meantime their previous standard of expenditure. If money comes to a Malay's hands he spends it, regardless of the time when he will need it urgently". The rural credit societies should therefore emphasize the teaching of thrift rather than the granting of loans which in most cases would not have been needed if it had not been for the Malay's great weakness of

"indifference to economic consequences". Mr. Strickland suggested the formation of "better-living societies" to, e.g., restrict extravagant spending. Later they might be expanded to encourage the adoption of better agricultural methods. He was sceptical of the success of the co-operative rubber factories which the Department was attempting to set up.

European officers were too few and their effectiveness had been hampered from the beginning owing to the failure to give them preliminary training in "the highly technical subject which they were handling". Also very little opportunity had been granted them to visit India and Java in order to study the co-operative movement there. The result was that the European officers had neither received nor been able to give their Asiatic subordinates an adequate training; and it was amazing that they had achieved "a measure of success under such a handicap". Mr. Strickland was very dissatisfied with the Malay officers, who were only about fifteen to ninteen years of age, and had had to train themselves with the help of an occasional lecture from the overworked European officers. They were too young to organize and supervise societies and were also "profoundly bored" with their work "since they have never understood its nature". Asiatic officers should receive six months' agricultural training at the experiment station at Serdang. A European Education Officer should be appointed to give them an additional six months' training in methods of co-operation and rural economics and to guide the studies of the European staff. He should also have charge of propaganda and of the collection of detailed economic information on the condition of the small holder. The broad outlines of the situation were known, but there was a "remarkable" dearth of exact knowledge as to, e.g. the amount of mortgage indebtedness in each district or the extent of land transfers to non-Malays. Mr. Cavendish had urged such a survey in vain when he formed the Department, and owing to its absence the co-operative officers were "compelled to work largely in the dark". An Education Officer was appointed to the Department in 1931. Until the staff was enlarged and better trained Mr. Strickland approved the policy which had been adopted of retarding rather than fostering the creation of new societies. A new society always needed a great deal of attention, and if a large number were allowed to spring up the small staff would be so overwhelmed with work as to be unable to give them the necessary oversight.

During the following years the number of Indian estate-labourers'

societies rapidly increased. All the District Planters' Associations in the country urged their creation and the limited staff of the Department was entirely unable to comply with the requests. In spite of the decrease in wages and the closing of estates during the depression the number of members more than doubled between 1929 and 1932 and the paid-up capital trebled, while only twenty-one societies failed and had to be liquidated. Where they were well established there was a tendency for drunkenness and indebtedness to decrease. The gradual lifting of the depression assisted their expansion; and at the end of 1938 there were 338 societies in the Colony and the Federated Malay States with 61,120 members and a paid-up capital of $1,901,735. While they were primarily thrift societies small loans were granted to members after they had subscribed $24 in monthly payments of about $1. The estate-labourers' societies differed in one very important respect from the Malay co-operatives. To a very large extent they were managed and controlled not by the members but by the European estate manager who received and disbursed the money. The urban thrift and loan societies also made striking progress despite the reductions in staff made during the depression both by Government and private firms. Individuals were unable to repay their loans, but even during the worst years the amount of overdue loans was never serious and was very considerably reduced as the depression began to lift.* Debt to the moneylenders was appreciably diminished and, as knowledge of the advantages of the societies spread, many new ones were formed, especially among Indian clerks. In 1938 there were seventy-six societies with a membership of 30,626 and a paid-up capital of of $6,393,100, or more than double the amount of their funds in 1929.[26]

The Malay rural credit societies declined both in membership and capital. Prior to the depression the Department had decided to wind up any society which became hopelessly insolvent from granting excessive loans to members, and not to attempt to bolster

* In 1934 a Straits Settlements Ordinance required all moneylenders to keep books and give debtors a written memorandum of each loan stating the amount of the principal and the rate of interest. Compound interest was forbidden and the maximum rate must not exceed 3% per month. The Courts were empowered to investigate all cases of harsh or excessive interest and decide how much should be paid, and if the rate exceeded 48% per annum they were required to presume it to be unreasonable. In the debate it was estimated that 75% of the government clerks were in debt. A clerk's parents often borrowed on his expectations as soon as he received an appointment, and he spent the rest of his life renewing promissory notes, making payments and borrowing further amounts. (*Proceedings of the Legislative Council of the S.S.* 1932, pp. C 146–C 150. *Op. cit.* 1934, B 48, C 747–C 757.)

it up by loans. Its belief was that quality was more important than quantity and that a small number of true believers who really practised co-operation was better than a host of members who looked on the societies as a unique opportunity to secure loans on doubtful credit. During the depression many members were unable to repay their loans owing to the fall in the price of their agricultural produce; and societies were liquidated which became insolvent from inability to collect their debts. The alternative would have been to take the debtors' land or other property. The Department rejected this solution since it felt that a society formed to extricate the members from debt which ended by taking everything they had would be a contradiction in terms. The policy adopted had the advantage that if a society were wound up no one suffered except the members who were unable to collect the amounts lent to fellow-villagers: neither the Government nor any co-operative society had to write off loans as bad debts. The policy also meant that the process of rescuing the Malays from their burden of indebtedness would be exceedingly slow. The course of events is illustrated by the statistics for the rural credit societies. In 1929 there were ninety-three societies in the Colony and the Federated Malay States with 2,999 members and a paid-up share capital of $103,451. In 1938 there were seventy-six societies with 2,384 members and a paid-up capital of $83,626. The societies which survived the depression emerged with a better understanding of the real meaning of co-operation. Still others which escaped liquidation practically suspended operations until about 1936 and then began to resume their activities as the price of produce improved. In 1936 the number of members and the amount of capital began slowly to increase for the first time since 1930.[27]

Failure also ended the first efforts of the Department in co-operative rubber manufacturing and marketing. In 1927 and 1928 an officer seconded from the Agricultural Department assisted by two European planters investigated the methods of cultivation, production and sale. They reported that almost the only redeeming feature was that the small holdings had suffered less from soil erosion than the big estates because the trees had been planted too closely together and so had protected the ground. There was serious danger that in a few years the decreasing yield of latex due to the "excessively high" destruction of the bark caused by overtapping might "threaten the economic stability of the peasantry". The rubber when manufactured by the grower was usually of low grade because

of faulty methods. It was sold to the Chinese village shopkeeper *cum* moneylender who invariably paid less than the fair price. Much of the raw rubber was sent to Chinese factories for rolling and smoking so that the Malay received a poor price for his product. The report suggested that a few co-operative rubber factories should be built, though it was somewhat sceptical of success.[28] It proved very difficult to persuade the Malays to change their methods, but eventually subscriptions were collected and three small rubber factories built in 1930. The price obtained by the members was higher than that received by individual sale; but by 1933 all three factories had failed. One reason was that owing to the very low price of rubber many members ceased to tap their trees. Moreover the co-operative could not distribute payments to its members until it had sold the rubber. The Malays wanted to be paid at once and preferred to sell to the Chinese shopkeeper for a lower price. Another cause of failure was the strongly marked individualism and lack of co-operation which distinguish the Malay character. Each grower wanted to have charge of his own rubber and disliked communal manufacture. The Department profited by its failure and in its new scheme of operations each Malay manufactured his own rubber and then sold it through the co-operative. In 1938 three small societies successfully made trial sales.

In 1932 a new type of organization made its appearance and spread fairly rapidly, the general purposes society. The real object was to teach the Malays to work together, since team work, one essential element in co-operatives, was conspicuously lacking in their disposition. Any general purpose was therefore adequate, e.g. communal rat-killing in padi fields, improving the appearance of mosques or burial grounds, building schools, or improving the kampong's sanitation or water supply. A few organized the co-operative marketing of produce despite opposition from the shopkeepers: and thrift was encouraged by the collection of small weekly deposits. Lectures and demonstrations were given by medical, agricultural, veterinary and co-operative officers. The societies required careful and tactful handling at first; and as fast as one general purpose was fulfilled another was suggested. By 1938 there were forty-six Malay societies with a membership of 6,798 and a capital of $22,924. "Better-living societies" were founded, the purpose of which was to develop public opinion against extravagant expenditure at ceremonies. A new form of credit society appeared in 1936 when four seasonal credit societies were established in padi districts.

Unlike the earlier rural credit societies they did not make loans to free the cultivator from his debts to the moneylender but merely to tide him over the period between sowing and harvest. The members paid an annual contribution of $5 at harvest time, and, out of this fund, loans were subsequently made to needy members which must be repaid at the following harvest. The movement has made encouraging progress; and in 1938 there were twenty-two societies with 386 members and $3,340 capital.

When rural co-operative societies were first established in Malaya the outstanding need of the Malay cultivator appeared to be to free him from his burden of debt, and until the late 'twenties this was the aspect which was particularly stressed. Gradually the Department came to the conclusion that better methods of production and sale were also necessary. The general purposes and better-living societies are an attempt through the agency of the most elementary form of co-operative society to create the spirit of team work. The lack of it and of certain other traits of character very largely explain the slow progress of the co-operative movement. In its success lies the Malay's best hope of achieving economic independence in his own country; but all that can be said at present is that the signs are encouraging. The methods of cultivation are slowly improving: co-operative marketing has been successfully established for some products; some societies have learned to manage their own affairs with only occasional help and advice from the department; and the general purposes societies have in many ways developed a limited amount of co-operation. Membership is growing and the circle of those interested is much wider than the actual members. Small holders in increasing numbers are seeking advice and leadership in new economic methods where a few years ago they would have accepted things as they were.

The co-operative movement in Malaya has some similarities with that in the Netherlands East Indies but even more contrasts. In characteristics the Malays and Javanese have much in common: there is, for example, the same lack of a business sense and the same strong conservatism as regards methods of production. There is however a far greater willingness to work hard in Java owing to the pressure of population. The Indian and Arab moneylender and the Chinese shopkeeper-cum-moneylender are also present, with rates of interest which are sometimes as high as 360 per cent. The village co-operative societies in Java numbered 320 registered and 100 unregistered in 1937; and, like the Malayan societies, they encouraged

thrift and lent only to members. They formed however only a very minor part of the government attack on rural debt. The real assault was by the rice banks and the money banks. In 1937 there were 5,579 of the former and 6,752 of the latter in the Netherlands East Indies. The rice banks are based upon the facts that barter and not money is the medium of exchange with a large part of the population, and that the padi farmer needs help for about half the year if he is not to be dependent upon the village shopkeeper. The banks are erected at the cost of the villagers, but where their means are inadequate the Government advances money without interest for the purchase of rice and the construction of a warehouse. The villagers can borrow rice from the bank and must repay it at the following harvest with interest either in rice or money. The rice not loaned is sold each year and the surplus profits placed in a reserve fund.

The money banks are established in the villages and are operated by the headman and a committee of leading villagers under the supervision of inspectors of the popular credit banks, which are also called divisional or regency banks. They in turn are controlled by the central popular credit bank; and the whole organization and management are predominantly official. The funds of the central bank are derived partly from a loan made by Government in 1907 when it was created. It also holds the reserves deposited by the money and rice banks, the deposits made by individuals and the funds of the village treasuries. The proceeds of certain local taxes have been allocated to a village treasury for, e.g. the construction of minor village roads and bridges. While the expenditure is controlled by the village headman and elders, the money must be deposited in the central popular credit bank. The capital of the village money bank is granted to it from the funds in the village treasury or by a loan from the central bank, which must be repaid promptly in instalments from its profits. It does not come from the subscriptions of members. The headman and other members of the managing committee receive a small percentage of the profits, and make loans to anyone whose credit they consider to be good. Borrowers are required to repay the debt in equal weekly instalments with an extra week's instalment as interest. Although the Javanese are normally slow to pay their debts it is said that a threat of legal action is usually enough to ensure payment. Between 1933 and 1935 the payment of 57,477 of the 94,411 loans made by village banks in Java and Madura was in arrears, but in the end the bulk of the money

was recovered.[29] The banks realized that loans contracted when the price of agricultural produce was high could not be repaid on time owing to the heavy fall in values. In many cases 30 per cent. was remitted if the bank was convinced that the cultivator was doing his best to meet his obligations. The banks have lessened but by no means abolished dependence on the moneylender: very many borrowers prefer to go to him because he does not ask the searching questions necessarily put by a government bank as to their financial position and the purpose for which the loan is sought. Borrowers are not deterred by his high rate of interest owing to their racial inability to envisage the future. Pawnshops are an important part of the credit system for petty loans and appear to be very beneficial to the Javanese as well as providing a considerable revenue for Government. They have been a government monopoly since 1900 as it was found impossible to prevent private pawnbrokers from charging excessive interest.

The Dutch attack on indebtedness has relied principally on the rice and money banks which are virtually official institutions depending for their initial capital upon government loans. No parallel exists in Malaya, and the co-operative credit societies which have been the prevailing type of organization there are of only minor importance in Java. The right to conduct pawnshops in Malaya is still sold by auction to the Chinese as it was formerly in Java; and the rates of interest compare unfavourably with those in the Javanese government pawnshops. It is impossible to dogmatize about which system is the more beneficial to the cultivator when both of them have been in existence so short a time. The Dutch has been much more successful in providing an alternative to the moneylender so far as loans for valid purposes are concerned. Javanese however continue to borrow from him for completely unproductive purposes and show themselves quite indifferent to the extortionate rates of interest. If Dutch rule were removed the Javanese would pretty certainly fall back into their old position of subservience to him. The British method has had as its real aim the creation of those traits of character which would to a very large extent enable the Malays to do without him. If the attempt succeeds, and there are some hopeful signs here and there, then a far more fundamental solution of the problem of debt would have been achieved. Apart from the uncertainty of success the British method is exceedingly slow and for a long time to come the majority of the Malays will remain heavily in debt. There is also a second reason why the Governments

of Malaya have not established banks similar to those in Java: they believe that many of the debtors would fail to pay even under firm though moderate pressure. Eventually the Governments would have to choose between writing-off considerable amounts as irrecoverable or selling the debtors' land. As regards pawnshops the Dutch policy seems far superior. Both Malays and Javanese use them very extensively for petty loans, and failure to redeem a pledge of clothing or jewellery does not inflict such irreparable injury as the loss of the landholding. Dutch experience tallies with Indian, that laws attempting to regulate usury are ineffective. The choice lies between the Malayan system of private pawnbrokers charging exorbitant interest and the Dutch method of a government monopoly with much lower rates. About fifteen years ago the Malayan Government rejected a proposal to establish pawnshops charging 8 per cent. or 12 per cent. annual interest in place of the Chinese rate of 48 per cent., apparently on the ground that pawnbroking was not a respectable calling. The dignity of a government office would not be enhanced by the sign of the three golden balls! It has never been suggested however that Dutch prestige is injured because it takes the commonsense view that since the native is going to pawn his belongings he had better do so at a reasonable rate of interest.

Forestry

Geographically Malaya consists of parallel mountain ranges which as they approach the sea lessen in height to hills that eventually merge into the coastal plain which encircles the peninsula. Originally the whole country was covered with forest and four-fifths of it is still so covered. Three-fifths are uninhabited save by a few thousand wandering aborigines; and half of the inhabited area or one-fifth of the total is still largely under jungle, while the remaining fifth is occupied by the towns, mines and plantations. The aborigines live partly by hunting and also practise shifting cultivation. A tract of virgin jungle is burnt and planted with rice until the yield falls off, when the cleared area is allowed to revert to jungle of a sort and the same process is repeated elsewhere. In some tropical countries this wasteful practice has caused wholesale destruction of the forest but in Malaya only a trifling percentage has been destroyed. The real damage has been done in the past sixty years in Perak, Negri Sembilan, and Selangor. The tin miners required large quantities of timber for fuel, and the planters burnt practically all the jungle on their estates in order to clear the land

for rubber. Chinese logging companies were responsible for a minor share of the waste since the forest officers were too few to control them. The result is that while 40,453 square miles of the total of 51,070 square miles in the Peninsula is still under forest, the bulk of it is in the East coast states and a large part has at present no commercial value because of its inaccessibility. In the developed West coast states the area has been rapidly diminishing and in some districts not enough jungle is left to provide for the requirements of the Malays. Malaya however was more fortunate than most countries for the Forestry Department was able to act in time to preserve sufficient forest reserves in Perak and Negri Sembilan, so that only in Selangor is the reserved area too small for the needs of the population. The Department has had the usual experience that both Governments and public have tended to regard as its chief justification its annual revenue from selling timber and promoting the development of the logging industry. Its more important benefits—the preservation and renewal of trees for future use or the prevention of floods and silting of rivers caused by destruction of the forests—are far less obvious than an annual surplus. "The protective argument may carry weight in countries where the ill effects of forest denudation have been experienced: elsewhere there is no argument for forestry as cogent as a forest department that pays dividends."[30]

In 1879 Major McNair, the Colonial Engineer and Surveyor-General of the Straits Settlements advised the creation of a small Forestry Department to check the serious inroads which were being made upon the jungles. As a result a few officers were appointed and in 1883 a small Forestry Department was set up under the control of the Director of the Botanic Gardens at Singapore. Forest conservation in the Federated Malay States was in the hands of the Land Officers until the late 'nineties, when untrained European Forest Officers were appointed in Perak and Selangor. In 1900 a Conservator of Forests who was brought from India to investigate the situation advised the creation of a Forestry Department for the Colony and the Federated Malay States. The Government accepted his recommendation in 1901 and appointed as Chief Forest Officer a member of the Indian Forestry Service from Burma. The department which he created followed closely the Indian model. In 1918 Mr. Cubitt, then head of the department, made strong representations that the staff was far too small adequately to carry out its work, and also advised the establishment of a research branch and of a School of Forestry to train Asiatic and junior European members of the

staff. A Forest Research Officer was appointed in 1918 and in 1925 the Colonial Office sanctioned a considerable increase in the staff of the department. The number of European officers was gradually enlarged from fifteen to forty-four in 1929, and subsequently reduced to thirty-eight, several posts being abolished as an economy during the depression. In addition there were about a dozen minor executive positions filled by Europeans and English-speaking Asiatics locally recruited, and a subordinate forest staff of over 600 most of whom were Malays. Officers were seconded for the creation of State Forestry Departments in Johore (1920), Kedah (1923), Kelantan and Brunei (1933) and Trengganu (1935). The Director of Forestry for the Straits Settlements is Adviser to the Malay States. Since he is also Chief Forest Officer in each of the Federated States he is able to co-ordinate the four departmental policies with that laid down by the Director and Adviser. While he has no executive authority in the Unfederated Malay States his position as Adviser, together with the circumstance that their Forest Officers have been trained in the Malayan Service, enables him to lay down a forest policy which is uniform in essentials for the whole of Malaya.[31]

Before the year 1914 the Forestry Department was too small to accomplish very much save to initiate the policy of establishing forest reserves in the Federated Malay States. These were areas which were to remain permanently under forest and produce sustained yields of timber which would make Malaya self-supporting. In 1915 the reserves were only 1,832 square miles or 6.6 per cent. of the whole area, far too little for the future needs of the country. After 1918 the reserves were enlarged in spite of periodical protests from the planters and miners and by 1938 27.6 per cent. of the Federated Malay States had become a forest reserve. The same process was carried on in the Unfederated Malay States with the exception of Trengganu, where reservation has not yet begun. By 1938 the total area of reserved forests was 9,826 square miles for the whole of Malaya excluding Brunei, or 19.2 per cent. of the Peninsula. A large part of the reserves are commercially valueless at present since they are situated in inaccessible mountainous parts of the interior. The tracts at an altitude of less than 2,000 feet will eventually be usable as communications improve and the need for the timber arises. Besides constituting a future source of supply the reserves conserve rainfall and prevent erosion and flooding by protecting the mountain sides. They also provide the Malays with timber, jungle gums, etc., under various restrictions necessary to protect the trees. Unreserved forests were also owned by Govern-

ment, but were destined for future alienation for agriculture and mining. The policy until recently was that valuable timber upon them should be cut in anticipation of this contingency since experience had shown that when the land was alienated for planting there was an "appalling waste of timber". In 1926 it was estimated that not less than 75,000,000 tons had been burnt in clearing the land. Logging was therefore allowed much more freely than in the reserves under the supervision of the Forestry Department. The overproduction of rubber and other agricultural produce has ended the period of rapid extension of cultivation. The Department has therefore adopted the policy that logging should be restricted as far as possible to areas where there is a definite prospect that the land will be required for settlement in the near future. The wisdom of creating reserves has already shown itself in very tangible fashion during the past ten or twelve years. The supply of timber from unreserved forests required for buildings and fuel has been becoming exhausted in the developed West coast states and the reserves have been drawn upon more and more. In 1933 Perak and Negri Sembilan for the first time drew upon their reserves for more than half their requirements, while in Selangor the same situation had been reached ten years earlier.[32]

A course of training was established in 1921, and in 1927 a School of Forestry was established at Kepong near Kuala Lumpur. A nine months' vernacular course was given to train Asiatics, principally Malays, for subordinate posts, the preference being given to men already employed as Forest Rangers. The annual number of students has slowly increased from one to two dozen drawn from the Colony, the Malay States and British Borneo. European probationers to the Malayan Forest Service were attached to the Research Institute at Kepong for six months and to a forest district for three for training in local forestry conditions, law and the Malay language. Previous to this they had taken their degree in Forestry from a British University and after selection for the service had had one year of post-graduate work at the Imperial Forestry Institute at Oxford. A Research Institute was established at Kepong with laboratories and an experimental plantation of about 300 acres. In 1929 timber research laboratories were built at Sentul for such work as testing the strength and suitability of various Malayan woods for commercial purposes. The Federated Malay States Railways, for example, bought its sleepers from the Forestry Department but insisted on certain primary hard woods which were not subject to

attacks by termites. After long experiment the laboratories discovered that certain secondary hard woods could be made equally resistant by creosoting them. The latter were much more common than the former, and it was a distinct conservation of forest resources as well as an additional source of profit to the Chinese timber companies when the Railway Department was finally persuaded that the secondary hardwoods were equally suitable for its purposes.[33]

An experiment intended to revolutionize the methods of timber extraction in Palong forest was a failure. The industry was entirely in the hands of the Chinese, and the distinguishing characteristics were a maximum of hand labour and a minimum of machinery. It seemed to some officers of the Department that the work could be made more efficient and more lucrative if the American methods which were being employed in the Philippines were introduced into Malaya. American machinery was bought and Canadian loggers imported to teach the Chinese how to use it. Three years were required to train an American logger and the Chinese needed an even longer time to learn how to use the strange equipment. Canadians at high salaries had to be imported to teach them and as they frequently fell ill the work had periodically to be suspended until a successor arrived. American methods involved the felling of all the trees in the area logged over, and the consequences were soil erosion and also total destruction of that tract of forest for a considerable period. The Malayan forest policy was selective felling i.e. to remove part only of the stand and leave enough to replace those taken by natural seeding; but this was impracticable with American methods. Another objection was that many of the species of Malayan trees were not marketable for e.g. building or railway purposes; and the number per acre which were commercially valuable was much smaller than in the Philippines. The remainder were saleable only as fuel, but since supply greatly exceeded demand this was impracticable owing to the cost of transport unless the area logged over was close to the market. The result of the experiment was the discovery that the most economical type of exploitation in primaeval jungle was selective felling of the saleable species. Chinese methods, though crude, were effective for this purpose and were cheaper than the use of expensive American machinery. The economic situation of the logging industry in the two countries was exactly reversed: in the United States wages were high and machinery was used to reduce the employment of labour as far as possible. In Malaya hand labour was comparatively cheap and in

most instances was more economical than machinery. The Forestry Department therefore abandoned the attempt to revolutionize methods of production and set itself to introduce certain minor improvements into the Chinese practice.

The creation of an export market in the United Kingdom was also undertaken by the Department to make the timber industry more profitable. In the past it had not been very lucrative and the Chinese had not been over eager to expand their operations. The internal market was limited, costs of transport were heavy, and the Chinese sawmills at Singapore found it cheaper to import 70 per cent. of their logs from Sumatra. The overseas market was negligible despite the value of some of the hardwoods, owing to the primitive methods employed in the Chinese sawmills. About 2 per cent. of the sawn output consisted of hardwoods such as substitutes for mahogany which were suitable for making furniture and the frames of railway carriages. The Department in 1932 was successful in selling trial consignments in the United Kingdom, but found that Chinese sawmills would have to alter their methods radically if they wished to build up a trade in this exacting market. Their machinery was antiquated, their labour poorly trained, and they did not trouble themselves greatly about such matters as seasoning and grading. The Forest Engineer gradually educated them to turn out a product which has established an assured position in the United Kingdom market. The export will continue to be small since the amount of suitable timber is limited; but inferior grades are sold with fair success in Hong Kong, Mauritius and South Africa. The Forestry Department received no direct financial return from its assistance to the timber trade. It benefits indirectly however since the larger the market the more readily it can sell unwanted trees to Chinese logging contractors and so reduce the cost of forest improvement.

The felling is carried out without expense to Government in forests which are close enough to a market so that costs of transport do not eat up the profit. The Chinese are allowed to cut down part only of the valuable timber; and the work is closely supervised to make sure that they do not fell trees which the Department wishes to preserve. Enough seed bearers are left to increase their number by seeding since the Department rarely plants seedlings and relies upon natural regeneration. Unwanted and unsaleable trees are then removed by the Department by girdling and poisoning so that more space is provided for the growth of the valuable species. In forests

where sale of the timber is impossible the Department carries out at its own cost regeneration improvement fellings of the unwanted trees. To cut them down is expensive and research has shown that they can be destroyed much more cheaply by girdling and poisoning. A shallow girdle is cut around the trunk a little deeper than the bark and the tree is poisoned by pouring a solution of sodium arsenite around the cut. For once the white ants are a blessing, since their attacks cause the tree to fall much sooner than it would in, e.g. Great Britain or North America. In 1935 a wild elephant broke into a hut in a Selangor forest and feasted on several drums of sodium arsenite. He was found dead a few hundred yards away and the post mortem showed that he died of over-indulgence in arsenic.[34]

CHAPTER VIII

THE MEDICAL AND HEALTH SERVICE OF MALAYA

Introduction

The Malay Peninsula to-day is one of the healthiest parts of the tropics; but this has been brought about only by lavish expenditure and unremitting effort. It is an outstanding example of the transformation which can be effected when there is ample revenue and willingness to spend it generously. Naturally the Peninsula is one of the most unhealthy parts of the tropics, and sixty years ago the mortality among both Asiatics and Europeans was very heavy. Malaya is as richly endowed with diseases as with mineral and agricultural wealth. The principal causes of death are malaria and "fevers unspecified", tuberculosis, pneumonia, and the dirt diseases such as dysentery, enteric fever, typhus and ankylostomiasis. The heavy immigration and the entrepôt trade of Singapore greatly complicate the problem of health, for in addition to the indigenous diseases there is always the risk that plague or cholera may be introduced. The extreme rarity of their occurrence is due to the effectiveness of the measures employed to exclude them.

The medical policy of Malaya during the nineteenth century was similar to that of most tropical colonies. Emphasis was laid upon curative medicine, and public health measures to prevent the occurrence of disease received only minor attention. About a century ago the death rate in Penang from malaria was heavy, and ignorance as to cause and cure prevented any effective steps from being taken. The treatment for "Pinang fever" was somewhat startling: quinine had fallen into temporary disfavour among the medical profession and the patient was given 800 to 900 grains of calomel supplemented by castor oil, mercurial ointment and relays of leeches for bleeding. If the victim survived into the stage of convalescence his strength was restored by a daily diet of bottles of port, burgundy, champagne, beer and hock, supplemented by jelly and mulligatawny soup![1] At Singapore a cholera epidemic in 1851 led to the decision to build waterworks in place of the town wells. Sanitary regulations were passed about 1869–70, and in 1887 a Municipal Health Department was established. Although outbreaks of disease

were sometimes traced to infected ships, port health work was not begun until 1873, as the result of an epidemic of cholera which had been introduced from Bangkok by sea. A quarantine station was built at St. John's Island; but for over twenty years the staff was utterly insufficient. A Port Health Officer was not appointed until 1901; and in addition to boarding from twenty to forty ships a day, inspecting immigrants and supervising the quarantine station, he was responsible for the control of infectious diseases throughout Singapore Island. In 1902 the total staff of the Port Health Division was only nine. Thereafter progress was rapid and by the end of the war of 1914–18 the personnel had been greatly enlarged and provided with adequate equipment. The nucleus of a public health information bureau for the Far East had also been established. Reports of outbreaks of infectious diseases in Eastern ports were regularly received and charted so that quarantine restrictions could be promptly imposed. The best evidence of the effectiveness of the Port Health Division was the steady decline in the number of outbreaks of smallpox, cholera and plague in spite of their frequent occurrence in neighbouring countries.[2] Another very serious evil which gradually developed in Singapore during the second half of the nineteenth century was overcrowding. Immigrants from China brought their unhygienic living conditions with them, and since there was no adequate sewage system the sanitary condition became very serious. Immense sums of money had to be spent to undo the damage caused by the *laissez-faire* policy of the nineteenth century.

The Malay States were fortunate in that they came under British control at a much later date than other Asiatic dependencies. Their economic development and rapid increase of population roughly coincided with the growing realization of the necessity of public health measures. About the same time came the series of discoveries of the cause and prevention of tropical diseases which revolutionized or, rather, created, the science of tropical medicine and public health. The Malay States were able to take advantage of this situation without having first to spend large sums in remedying the effects of earlier indifference. Tin and, later, rubber provided revenue on a scale which many older colonies lacked; and the administration was generous and far-sighted in its expenditure. In 1900 it established the Institute for Medical Research at Kuala Lumpur, one of the first to be created in the British tropics. The Government of the Federated Malay States was also the first in the British Empire and perhaps in the world to use successfully Sir Ronald Ross's discovery

in 1898 of the cause and prevention of malaria. Dr. (later Sir Malcolm) Watson, the District Surgeon of Klang, asked the Government in 1901 for money to drain the town in order to test Ross's theory. The money was voted at once and within a couple of years a very malarial town was almost freed from the disease. Similar work was then carried out at Port Swettenham, which had been founded as a harbour for the Federated Malay States. The death rate from malaria had been so heavy that abandonment of the site had been ordered two and a half months after its opening. The swamps were drained and the incidence of malaria was so greatly reduced that Port Swettenham has become an increasingly important centre for the trade of the Malay States. The success of these first experiments led to the campaign against malaria which has been carried on ever since and has been the outstanding accomplishment of the Government medical service in Malaya. Malarial preventive measures were begun in other towns and in 1905 the work was extended to rural areas. The rapid development of the rubber plantations was now taking place, and for the first few years the mortality was very heavy among the European managers and the Asiatic estate labourers. At first anti-malarial measures were placed under the control of the District Medical Officers, who were also in charge of the hospitals. In 1910 a separate Health Branch of the Medical Department was established to control anti-malarial and other health work on estates, mines and kampongs, although many years elapsed before the staff was sufficiently large to give adequate time to this last aspect of the work. Health Officers were gradually appointed in the towns and had the usual public health duties, such as anti-malarial measures, inspection of water supplies, enforcement of sanitary regulations, supervision of the public health aspects of building operations, licensing of premises and the testing of foodstuffs offered for sale. After 1918 certain other functions were added, such as medical inspection of schools and maternity and infant welfare. The creation of the Malaria Advisory Board in 1911 was an important step in advance. Previously some of the efforts to eradicate malaria had resulted merely in heavy expenditure and an increased mortality, as at Kuala Lumpur, owing to the use of unsuitable methods or lack of thoroughness. The root of the trouble had been that the works had been controlled by various State and Federal authorities, each of which had acted independently. The Malaria Advisory Board was appointed to collect and disseminate information, select the most appropriate schemes which could

be carried out in the Federated Malay States and advise the Government as to the method of operations. The Board was also to issue detailed instructions as to the construction and maintenance of anti-malarial works, and in general to control and co-ordinate the efforts of local bodies.

The earliest forms of mosquito control were the draining of the swamps and the destruction of the jungle on the coastal plains. The carrier here was *anopheles umbrosus* which bred in stagnant water under heavy shade, but disappeared when open earth drains were built with a current of water and were kept free from weeds. Vegetation only a few inches high provided all the shade that was necessary for breeding. A few years later, rubber estates were opened in the hills near the coast and the same measures adopted. The jungle was felled and all vegetation removed from the banks of the numerous streams which intersected the country. The incidence of malaria mounted rapidly, and the more zealously the planters destroyed vegetation the heavier the mortality became. In 1908 the death rate on twenty-one estates in the Federated Malay States, of which eighteen were in the hills, was over 200 per 1,000. Sir Malcolm Watson investigated and found that the very precautions adopted were the cause of the trouble. The carrier was a mosquito hitherto unsuspected, *anopheles maculatus*. It bred in unshaded, fast running streams, so that the measures which eliminated *anopheles umbrosus* were ideal for *anopheles maculatus*. Sir Malcolm discovered in 1911 that it could be completely eliminated by installing an elaborate system of subsoil drainage in all the ravines so that they were completely dry except during rainstorms, when the water ran off rapidly in a few hours. The same methods were used successfully in Kuala Lumpur, where unsuitable methods of prevention had been steadily increasing the incidence of malaria.* In 1914 Sir Malcolm discovered that spraying a mixture of kerosene and crude oil completely destroyed the mosquitoes in hill streams and thus provided an alternative to subsoil drainage. The next step was a careful study of the particular varieties of mosquito which carried malaria in the different parts of Malaya, and only these dangerous species were eliminated. The discovery was made that padi areas in the plains

* The effect of anti-malarial measures at Kuala Lumpur is shown by a comparison of the death rates for 1907 with those for 1920 when the work had virtually been completed. In 1907 the true total death rate per 1,000 was 37·9 and the malarial death rate per 1,000 was 9·7. In 1920 the rates were 30 and 4·2. During this period malarial infection had practically been abolished from an area of approximately 6,200 acres at a cost of $365,473. (*F.M.S. Annual Report of the Medical Department for* 1919, pp. 15–16. *Op. cit.* 1920, pp. 14–15.)

like Krian were practically free from malaria, though under water for a considerable part of the year, while rice fields in narrow valleys were usually malarial. The death rate was reduced from 62.9 per 1,000 in 1910 to 18.57 in 1920. In 1921 Sir Malcolm Watson estimated that anti-malarial measures in Malaya has already saved 100,000 lives and an enormous but incalculable amount of money.[3]

During the 1914–18 War the medical department, like the other departments in the Federated Malay States, was greatly handicapped by inability to expand or even to replace those who died, retired or left on military service. Men long overdue for leave refrained from asking for it since their absence would still further have disrupted medical work. While the authorized number of European Medical Officers in the Federated Malay States in 1919 was forty-one only twenty were actually available for duty. The Asiatic subordinate staff of Assistant Surgeons, dressers (men trained as nurses, hospital assistants or to take charge of dispensaries) and nurses was less reduced, 393 serving out of an authorized establishment of 412. The European matrons and nurses had fallen from twenty-six to sixteen. The establishment of Health Officers sanctioned for the whole of the Federated Malay States was only seven, but the number actually available in 1919 was four. One feels no surprise that in 1920 the Senior Health Officer reported that as yet no town had had a full time Health Officer. In that year there were in the Federated Malay States fifty-one government hospitals and sixty dispensaries, in addition to 151 estate hospitals. There were also eighteen ambulances doing travelling dispensary work in rural areas. The Institute of Medical Research was carrying on invaluable research on malaria and other Malayan diseases and had a European staff of seven. Anti-malarial measures had reduced the death rate from that disease from 17.47 per 1,000 in 1911 to 15.24 in 1920. The distribution of quinine to the kampongs had been organized through the media of the motor dispensaries, the village *penghulus*, the police stations and the post offices. This reduced the sick rate but did not prevent infection. In the same year Sir George Maxwell established Mosquito Destruction Boards under the chairmanship of the local Health or Medical Officer responsible for anti-malarial work in the towns and villages. They were well provided with staff and funds and did successful work in identifying the local varieties of malarial mosquitoes, finding their breeding places and eradicating them.

A campaign against ankylostomiasis or hookworm was being planned. Although the actual death rate was only .44 per 1,000,

investigation showed that a very high proportion of the population was infected, and the anæmia and "run down condition" produced by the disease were a predisposing cause of death from other infections. Measures were also being adopted against the overcrowding which was one cause of the widespread tuberculosis. In areas controlled by Sanitary Boards (the Malayan equivalent of town councils) efforts were being made to improve the standard of dwellings and to limit the "appalling" overcrowding to which the Chinese were so prone. The prevalence of venereal disease was also being attacked and some dispensaries had been opened for treatment. Infantile mortality was heavy, the death rate for children under one year of age in 1920 being 189.03 per 1,000. Conditions were improving as anti-malarial work was extended: in 1917 for example the rate had been 218.45, and during the decade 1911–20 the average had been 195.62. Among the causes were the ignorance of the mothers as to proper methods of feeding, the neglect of sick children, and insanitary living conditions. In 1921 an Infant Welfare Advisory Board was established and a Lady Medical Officer gave talks and practical demonstrations on hygiene in the kampongs and the schools; but infant welfare work was still in its early stages.[4]

The effect of the 1914–18 War upon the Straits Settlements was similar to that on the Federated Malay States. The staff was reduced in numbers and while curative medicine was fairly adequate the preventive side left a good deal to be desired. Prior to 1914 the Colony had been engaged in an expensive atonement for its sins of omission during the nineteenth century; but during the years of the War, expenditure had been reduced in order to conserve resources. Conditions were better than they had been, but one indication of how much remained to be done is given by the mortality rate per 1,000 of children under twelve months. Prior to 1914 it had never fallen below 300 in Singapore; in 1917 it was 266.92, and in 1919 it was still 212.42.[5] One important reason for the decline was the permanent anti-malarial work, particularly subsoil drainage which had been begun in Singapore in 1911. Before that date only temporary measures such as oiling or clearing of drainage ditches had been carried out. By 1918 the death rate had fallen appreciably, although only part of the town had been dealt with. In 1921 the work was extended to the rural districts of Singapore Island, an area of about 186 square miles. The result to-day is that the mosquito is almost the only form of insect life which is practically never seen in Singapore and that the death rate from all causes has fallen from

50.91 per 1,000 in 1911 to 24.23 in 1936. Towards the end of the War there was a great speaking of minds in the Legislative Council, government and unofficial members vying with one another in triumphantly parading all the sanitary skeletons in the colonial cupboard. Mr. F. S. James, the Colonial Secretary, had formerly served in Nigeria, and he vigorously compared the medical and sanitary conditions of his present and former stations, to the great detriment of Malaya. "The want of sanitation and of proper sanitary measures here, and proper hospital accommodation, is most apparent." Anti-malarial measures in Singapore were inadequate, and there was grave potential danger that yellow fever might be introduced owing to the prevalence of the *stegomyia* mosquito. Hitherto this species, the carrier of the disease, had not been infected; but in view of the worldwide commerce of Singapore there was always the risk that a ship might bring the infection. A vigorous campaign to eradicate malarial and other mosquitoes must be undertaken by a properly organized Sanitary Department, and health propaganda must also be carried on in an effort to secure the co-operation of the Asiatic population. The income of the King Edward VII Medical College at Singapore must be increased since its existing annual revenue of $45,946 was insufficient to cover the cost of giving the students a proper medical education. On 11th November, 1918, Mr. James announced that as soon as the war was over there were "two subjects that this Government should go in for at once", viz. education and preventive and curative medicine. Mr. Darbishire, one of unofficial members of the Council, cordially agreed: the Singapore hospital was too small and was not fully equipped on modern lines; and malaria could not be eradicated by "tinkering with filling-in swamps here and there. . . . A scheme must be boldly conceived and carried out without regard to what expense it may incur". Another unofficial complained of the "very backward" housing conditions, a remark which was emphatically free from overstatement. At another meeting of the Council the Director of Medical and Sanitary Services urged the establishment of venereal diseases clinics.[6]

Post-war Expansion

The Medical Departments of the Straits Settlements and the Federated Malay States were reorganized, the Medical and Health branches being more clearly separated than previously. A large increase in European staff was sanctioned, but owing to the post-

war shortage of qualified doctors it proved "extraordinarily difficult" to recruit, particularly for public-health work. For some years it was necessary to supplement the permanent staff of the Health Branch by borrowing Medical Officers and temporarily engaging local European practitioners. The rubber slump brought a strong demand for reduction of taxation and much vague and general criticism of governmental extravagance. The Governor insisted that expenditure must be increased on medicine, education, public works and police, in all of which the Colony was in a "backward and undeveloped condition". The number of subordinate posts held by Asiatics was also increased. They were employed as Assistant Medical Officers, dressers in the hospitals and dispensaries, nurses and trained midwives and Sanitary Inspectors. In 1925 the service in the Federated Malay States was composed of 124 Europeans and 914 Asiatics. The curative branches (hospitals and dispensaries, central mental hospital, venereal diseases and radiological branches) had fifty European Medical Officers and specialists and fifty European nurses and matrons. The Health Branch was still considerably below its authorized European establishment of nineteen and its work suffered accordingly. The actual number serving was seven Health Officers and two Chief Sanitary Inspectors supplemented by five Medical Officers lent by the Curative Branch. The Asiatic Sanitary Inspectors were sent in relays to attend the six months' course of instruction established at Singapore in 1921. The lectures and practical work were in accordance with the syllabus prescribed by the Royal Sanitary Institute in London. The Institute for Medical Research had a staff of nine Europeans, and the Veterinary Branch was composed of six European Veterinary Surgeons. The number of Europeans in the Medical Department of the Straits Settlements was 108, the curative branches having thirty Medical Officers and forty-eight nurses and attendants. The research branches had a staff of eight, viz. two pathologists, a bacteriologist and five analysts. The King Edward VII Medical College had nine professors who had charge of some of the hospital wards in addition to their lecturing. The Health Branch was composed of seven Health Officers, three Sanitary Inspectors and three Europeans at the Quarantine Stations. Five of the Medical Officers also carried out public-health work. In addition to the Government service the municipalities of Singapore and Penang had their separate Health Departments with a staff of half-a-dozen Health Officers. A European Medical Officer was stationed at the Indian Emigration Depôt at

Negapatam. Twelve Medical Officers and seven European nurses from the Straits Settlements establishment were seconded for service in the Unfederated Malay States. Their medical services were much less advanced than in the Federated Malay States owing to the small amount of revenue available, those in Johore and Kedah approximating most closely to the standard of the wealthier States. Curative was much more developed than preventive medicine; but in some areas anti-malarial measures were in progress. The rubber estates, both in the Malay States and the Colony, maintained a number of European and Asiatic doctors who are not included in the above statistics.[7]

The Medical Departments received a generous share of the increased revenue which resulted from the return of prosperity to the rubber industry, expansion being particularly marked in the Health Branch. In 1930 there were about 389 Europeans in the medical services of the Colony, the Federated and the Unfederated Malay States, with, in addition, seven European Health Officers who were employed by the municipalities of Singapore and Penang. The locally qualified staff in the Straits Settlements and the Federated Malay States numbered 158, most of them being Asiatic and Eurasian graduates of the King Edward VII College of Medicine. With a few exceptions they were Assistant Medical or Health Officers. The Medical Department of the Straits Settlements had 148 Europeans, of whom the Medical Officers and specialists numbered forty-one, the Health Officers nine, the faculty of King Edward VII College eleven, the matrons and nurses seventy-four, and those in miscellaneous posts such as Chief Sanitary Inspectors about thirteen. There were seventy-three locally qualified medical men in government service, four more employed by the municipalities and about 500 Asiatic nurses and dressers. In the Federated Malay States there were about 203 Europeans, eighty-five locally qualified doctors and 885 Asiatic nurses and dressers. Of the Europeans sixty-one were Medical Officers or specialists, thirty were Health Officers, eleven were attached to the Institute for Medical Research, ninety-five were matrons and nurses and six held miscellaneous posts. The fourfold increase in the number of Health Officers was particularly marked, the European and Asiatic personnel being in the ratio of one to 27,000 of the total population. The services in the Unfederated States were on a much less elaborate scale. The expansion however had been comparatively rapid, the European staff of twenty-one Medical and Health Officers and seventeen nurses being twice

as large as it had been five years earlier. The increase was mainly due to the formation of separate health branches, Johore having four Health Officers, Kedah two and Kelantan and Trengganu one each. Maternity and infant welfare work had also been begun in Johore and Kedah, lady Medical Officers being appointed for the purpose. In addition each State had its own service of locally appointed Asiatic Medical Officers, nurses, dressers and sanitary inspectors. Unlike the Europeans they were not transferable for service outside the State.[8]

The Great Depression compelled Malaya to economize, though the governments successfully resisted the strong popular demand for drastic decreases in expenditure. Nevertheless a considerable reduction became inevitable, particularly in the Federated Malay States, as the depression deepened and revenue declined. Expenses were reduced in the Federated Malay States without loss of efficiency by about $1,500,000, through the abolition of unnecessary positions created during the prosperous period of the 'twenties. Similar economies in the Straits Settlements amounted to only about $300,000 since expansion there had been on a much more cautious and considered scale. At the same time the introduction of the policy of decentralization brought about changes in organization. Hitherto the Department in the Federated Malay States had been controlled by the Principal Medical Officer at Kuala Lumpur; but it was now decided to transfer the service in each of the four States to the local government. It was essential however to maintain a high degree of uniformity in the four separate administrations, since the medical problems of Malaya were the same throughout the Peninsula. Some central co-ordinating agency was necessary; and it was also decided to combine the departments in the Colony and the Federated Malay States into a single service. These somewhat contradictory aims were carried out by abolishing the post of Principal Medical Officer and by placing the medical and health branches in each of the four States under the control of a new creation, the State Medical and Health Officer, who was responsible to the Government of the State. The higher posts in the separate medical and public health services of the Colony and the four Federated Malay States were combined into a single Malayan Medical Service. The personnel were transferable and continued as formerly to be seconded for service in the Unfederated Malay States. The new head of the service was the Director Medical Service Straits Settlements and Adviser Medical Services Malay States. He had executive

authority in the Colony, but advisory powers only in the Federated Malay States. He also controlled the Institute for Medical Research, the Central Mental Hospital, the Leper Settlements and the home for the decrepit. These four institutions remained federal and were not transferred to State control. He also took over from the former Principal Civil Medical Officer Straits Settlements the supervision of the services in the Unfederated Malay States which remained under the control of their several governments.[9] The new arrangements have considerably increased the importance of the Resident since the State Medical and Health Officer and the Adviser must consult him and obtain his approval of their proposals. In the old days the Principal Medical Officer frequently ignored him and arranged matters with the Chief Secretary, the head of the federal administration. If a deadlock should occur under the new régime the question would be referred to the High Commissioner for final decision. The Adviser has been able to maintain substantial uniformity in the medical policies of the four States. In theory the State Medical Officers have a good deal of independent power, but in practice they and the Adviser have worked together harmoniously, since all of them have grown up together in the Service. As in so many other phases of Malayan administration the legal position is much less important than the personalities involved.

Expansion of the staff recommenced as prosperity began to return, and by 1937 the strength of the medical and health establishment for the whole of Malaya was 362 Europeans and 2,056 Asiatics. The members of the Malayan Medical Service numbered 186, or virtually as many as before the depression. They included 143 Medical or Health Officers and specialists, twelve in the King Edward VII College of Medicine, fourteen in the Institute for Medical Research, and seventeen Europeans holding miscellaneous appointments. There were 176 European matrons and nurses, slightly fewer than in 1930. The Asiatic subordinate staff was composed of 176 locally-qualified Assistant Medical and Health Officers, 585 nurses, 1,076 dressers and assistants and 219 Sanitary Inspectors. The medical and public health staff of the Municipalities of Singapore and Penang was about the same as it had been prior to the depression.[10]

The building of new and much larger hospitals was undertaken during the 'twenties, particularly in the Straits Settlements. General hospitals with modern equipment were built at Singapore, Penang and Malacca, the last named being the largest in Eastern Asia. Eye

and dentistry departments and out-patient eye clinics formed part of the new hospitals and were added to some of the old ones. Two separate government maternity hospitals were built, and there were also maternity blocks attached to the general hospitals: the proportion of mothers who take advantage of them has been steadily increasing. There was no separate hospital for tubercular cases, wards being reserved in the general hospitals. The majority of the patients were immigrant labourers who refused to take treatment until they were no longer able to earn their living. By that time many of them were in an advanced and hopeless stage of the disease. A ward was also opened for the cure of opium addicts, orders for admission being issued to applicants by the Protector of Chinese. The number under treatment was most gratifying until it was discovered that most of them were not opium smokers, but Chinese coolies anxious to receive free board and lodging at the hospital while the cure was in progress. Orders for admission signed by the Protector of Chinese had a clear financial value and were sold by the recipients. They were abolished and replaced by a medical examination, whereupon the number of applicants for admission sharply declined. Few genuine addicts were willing to risk losing their liking for the drug and eventually the ward was closed. The Government also maintained a number of small district hospitals as well as dispensaries for the treatment of minor ailments. Of recent years the policy has been to provide one large general hospital in each Settlement and Malay State, to which patients can be brought by motor ambulance, and as far as possible to convert the small district hospitals into dispensaries. This development has been made possible by the rapid post-war expansion of motor transport. Prior to the 1914–18 War almost the only means of conveyance was by rail or bullock cart, so that in addition to the general hospitals a number of small district hospitals had to be built at convenient places and distances. The new policy has been put into effect in the Straits Settlements, but not as yet in the Federated Malay States, since the depression has prevented the replacement of the old general hospitals by new buildings. The total number of beds in the government hospitals in the Federated Malay States in 1937 was 5,527, and the average daily number of patients 4,391. The number of government hospitals in the Unfederated Malay States has considerably increased since 1918; but as a rule they are smaller than in the more developed parts of the country. Various hospitals of a special character are maintained by Government, viz., one police, four

prison, two mental, three leper and three quarantine hospitals, one at each of the stations where immigrants land. The number of lepers in settlements at the end of 1937 was 3,807, about four-fifths of whom were Chinese and the majority of the remainder Indians. Most of them were maintained at two settlements, the third containing a diminishing number—139 in 1937—of chronic incurable lepers who were also opium smokers. So far as possible they are encouraged to lead normal lives. For example they finance and manage several shops, have their own band and cinema, take great interest in football, badminton, fishing and picnics, and have their own troop of Boy Scouts. Propaganda and treatment in recent years have tended to diminish the sense of horror associated with leprosy in the minds of both patients and the outside public.

In addition to the government hospitals others have been built by missionary societies or Chinese charitable organizations. There are also the estate hospitals, which in 1937 numbered forty in the Straits Settlements, 134 in the Federated and fifty-eight in the Unfederated Malay States. The larger estates had their own separate hospitals, but eighty-three out of the total of 232 were group hospitals supported by smaller properties for their common use. The majority employed visiting medical practitioners, but twenty-seven estates had resident doctors. There are signs that members of group hospital associations are likely to ask for legislation compelling their neighbours, particularly the larger Asiatic estates, to join the associations and contribute to their cost. The elaborate arrangements for medical and health work maintained by the Malacca Agricultural Medical Board have already been described. A similar, but even more extensive scheme, has been operated by the estates in Kedah since 1930 through the Kedah Health Board. This is composed of four members appointed by the Kedah Government, five by planting associations and one by the British Medical Association. It maintains hospitals and visiting practitioners and carries out anti-malarial measures. The expense is defrayed by a cess levied on employers, and the Board has statutory power to compel all estates of over fifty acres to pay their fair share of the cost. In consequence an equal standard of visiting and hospital services has been effected for all estates exceeding fifty acres in area—a result in advance of what has been achieved elsewhere in the Peninsula.[11]

The King Edward VII College of Medicine at Singapore shared in the post-war expansion of medical services. It had been founded in 1905 to train local practitioners and candidates for the position

of Government Assistant Surgeon. Originally most of the staff were medical officers and local doctors who gave part of their time to the College. The annual income was small, but the standards were high; and in 1916 the degree was recognized by the British General Medical Council. This entitles graduates to practise anywhere in the British Empire. After the war new buildings and laboratories were built and seven additional chairs created, two of them through the generosity of the Rockefeller Foundation, which made a grant of $350,000. The medical training lasts six years, that in dentistry five, and a course in pharmacy has recently been established. In 1939 the College had 158 students and a staff of fifteen Europeans, nine locally qualified graduates and twenty-two part-time lecturers who were members of the Malayan Medical Service. A recent addition to the curriculum has been the training of Air Raid Wardens and the establishment of a decontamination centre. The training of doctors continues to be the primary purpose, but research is also carried out upon Malayan problems. One of the problems studied during the past ten years has been nutrition. Samples of the foods which are bought ready prepared from restaurants and hawkers by the Asiatic population have been analysed, and practically complete information obtained on their composition and relative value. One of the results has been to confirm the previous belief that the staple diet of polished rice and dried fish is devoid of vitamins and minerals and "might well be considered a poison rather than a diet". Polished rice causes beri-beri, a deficiency disease which is one of the principal reasons for the heavy infantile mortality. Unfortunately the majority of the population strongly prefer this type of rice and the Government has had little success in its efforts to persuade them to substitute husked rice, which from the dietetic aspect is vastly preferable. The second main deficiency in diet is lack of protein, the reason being the expense of most foods which provide it, such as milk and eggs. The effects of climate are also being investigated and the research seems to indicate that this as well as deficiencies in diet is partly responsible for the lower stamina of the Asiatic as compared with the European.

The Institute for Medical Research at Kuala Lumpur has a European staff of fourteen and is one of the best-known centres for the investigation of tropical diseases. The Malayan governments have recognized its value and have provided adequate funds for staff and equipment. For many years its principal work has been applied research, i.e., the investigation of specifically Malayan problems.

One particular subject of investigation over a long period of years has been a group of Malayan fevers. Before 1914 they "defied diagnosis", "differed in onset, in signs and symptoms, in mortality, and patently had each its own causal factor. Obviously there could be no universal cure". The work is still in progress, but several have been disentangled, such as Japanese river fever and tropical typhus. While investigations have almost always been directed to local medical problems the results have benefited other parts of the tropics and have given the Institute an international reputation. Close liaison has been maintained between the research officers and the other branches of the Malayan Medical Service, as well as with estate medical officers. Another duty of the Institute has been to prepare the stocks of vaccines required in Malaya for rabies, cholera and other diseases. The staff has also carried out the more complex analyses and examinations of specimens required by the hospitals in the Federated Malay States, the Health and Veterinary Officers and the Police. In the Straits Settlements similar work has been done by the Government Pathologists and Analysts and the Professor of Bacteriology at the Medical College.[12]

The outstanding accomplishment of the past twenty years has been the extension of anti-malarial measures.[13] While this was a continuation of the work begun early in the century it was carried on with considerably increased funds an enlarged staff, and the results have been correspondingly impressive. The incidence of the disease has declined and many areas which formerly were highly malarial are now virtually free from it. At the same time statistical evidence proving this is hard to find, for while the records of deaths from malaria in hospitals are accurate, those from the kampongs where the majority of deaths occur are not. The petty officials who fill in the death certificates are not experts in diagnosis and their frequent entry of "fever" covers a multitude of varieties. In 1937, for example, the number of deaths in the Federated Malay States from malaria definitely diagnosed was 2.93 per cent. of the total and that from fevers of undefined origin about 33.33 per cent.[14]

The Malaria Advisory Board has filled the rôle of a general staff in planning the campaign ever since its formation in 1911. It supervised the work of the various local authorities, each of which was in charge of the campaign in its own district, by inspecting their areas and criticising the proposals which they submitted. As now constituted it includes the Director, a Malaria Research Officer and an Entomologist from the Institute of Medical Research, the General

Manager of the Railway, the four State Medical and Health Officers, an engineer from the Public Works Department and five medical men. The Board has worked in close collaboration with the Institute for Medical Research, which investigated such typical problems as new methods of control and treatment and the guilt or innocence of the different varieties of mosquito. In 1937, for example, another species, *anopheles novumbrosus*, a jungle-swamp breeder, was added to the long list of carriers of malaria. Once conviction had been secured a careful study was made of the habits of the new criminal in order to determine the proper methods for dealing with her. It will be recalled that in the early days a holocaust was caused on the rubber estates because it was not known that measures which exterminated *anopheles umbrosus* provided ideal breeding conditions for *anopheles maculatus*. Anti-malarial work is organized by Mosquito Destruction Boards, which are composed of the District Health Officer as chairman, the District Officer, the District Engineer, local doctors and influential individuals. The Health Officer Railways is a member of each Board through whose area the railway runs, since railway cuttings have often proved to be breeding places. The membership ensures the co-operation of the various government departments and unofficial interests; and the presence of the Health Officer makes it certain that the schemes drawn up will be based upon accurate knowledge of the habits and life-history of the species which they are intended to eradicate. Each Board has an Asiatic staff whose work is supervised by the Health Officer. It carries out such minor works as digging drainage ditches and oiling, while major works such as subsoil drainage are executed by the Public Works Department under the control of the District Engineer. The procedure followed is that the Health Officer draws up proposals which are discussed by the Board, and if approved are sent to the Engineer for an estimate of the cost. The plan is then laid before the Malaria Advisory Board for criticism and is finally submitted to the Resident of the State. If he approves, the cost is entered in the State's estimates of annual expenditure. Anti-malarial work on estates is carried out by the owner at his own expense in collaboration with the local Health Officer. This forms part of the work of the Health Branch in enforcing the Labour Code which has already been described. Experience has shown that it is impracticable to collect the cost of measures carried out on small holdings of less than twenty-five acres from each individual owner, and an assessment is therefore levied upon all cultivators in the area benefited. Measures

carried out upon unoccupied reserves of State lands are at the expense of Government, and on railway reserves at the cost of the Railway Department. In Singapore and Penang anti-malarial measures are carried out by the Municipal Health Departments. Towns and villages present a special problem, since some species of mosquito can breed in small quantities of water which collect in, e.g. empty tins or bottles or broken coconut shells. Sanitary Inspectors are empowered to order the owner to take whatever action is necessary to destroy breeding places. Refuse must be removed, tanks and cisterns covered, grass and undergrowth cut down and holes in trees filled with concrete. Non-compliance can be punished with fine or imprisonment or the work can be done by the health authorities at the expense of the owner.

The methods adopted depend upon the habits of the local species of mosquitoes which are vectors of malaria, and may be either temporary or permanent. The most important temporary measure is the oiling of streams, ponds, drains, etc., every six to ten days. In the most populous districts and on estates, breeding places are oiled for half a mile from the outskirts of the area. Other measures include the application of paris green in places where oiling is not advisable, the flushing of hill streams and ravines at fixed intervals by automatic sluices built at their heads, the clearing and clean weeding of drains, and the stocking of ponds and reservoirs with larval-eating fish. Of the permanent measures, drainage is one of the most important, in some areas by surface drains, in others by subsoil drains of masonry or bamboo pipes, and along the coasts by dikes and tidal gates. This last method is employed against *anopheles sundaicus* which breeds in the brackish water of the mangrove swamps. Another method is by the filling in of pits and pools. In Malaya the preliminary stages of cultivation are favourable to the increase of malaria since the felling of forest, the breaking up of virgin soil and the interference with natural drainage lead to the formation of breeding places. When the land has been planted and drained, however, the breeding places are diminished. Cultivation when completed and kept up has proved to be one of the strongest deterrents of malaria. On the curative side the methods employed are treatment of patients in the hospitals and the free distribution of quinine. In some years as many as 2,000,000 tablets have been distributed: they can be obtained at the hospitals and dispensaries, the schools, the police stations, and from the village *penghulus*. The third method of attack is propaganda by means of posters and pamphlets

in the vernaculars, films, lectures by Health Inspectors and the teachers, and exhibits at agricultural shows. The same tactics are used to teach the methods of prevention and cure of the other prevalent diseases, such as hookworm and tuberculosis. The cost of anti-malarial measures, and particularly of permanent drainage, is very heavy. During the depression both the Government and the planters were forced to economize: few permanent works were built and the interval between oilings was somewhat extended. No serious effects followed, since anti-malarial measures were not allowed to fall below the margin of safety, and with the gradual lifting of the depression the old standards were resumed. The majority of managers appreciated the economic value of mosquito control and readily co-operated with the Health Branch. As soon as the price of rubber began to rise they showed themselves willing to spend increased amounts on preventive work. By 1935 the Government was able to report that "in the principal towns and on large estates protection is as complete as human effort can make it, in evidence of which statement may be cited the fact that the prophylactic use of quinine is practically unknown among Europeans in this Colony".[15] The same statement might have been made about the Federated and some of the more developed parts of the Unfederated Malay States. The very small amount of malaria which occurred during the building of the naval base at Singapore was due to the thoroughness of the precautions. The district was extremely malarial, and at a very early stage in the operations the Admiralty sent out a medical naval officer who had had special experience of anti-malarial work, to take charge of preventive arrangements. The cost of carrying out his recommendations was heavy, but the result was the high standard of health among the thousands of men employed. The areas where much remains to be done are the small estates, particularly those owned by Asiatics and the Malay kampongs. In part it is a question of expense, for even in a wealthy dependency there are limits to the amount available when the demands are so many. In the allocation of funds the preference must be given to the towns where the largest number will benefit. In part also it is a matter of educating the mass of the Asiatic population to realize the necessity of carrying out the instructions of the Health Officers without constant supervision. A vast amount of time and energy could thereby be set free for other purposes. The inhabitants do not actively oppose health measures as they have done on occasion in India. Their co-operation can eventu-

ally be gained by a judicious mixture of education, persuasion and stimulation; but the Health Branch has to contend against the dead weight of a naturally indifferent and insanitary population.

The decrease in the number of cases of yaws has been another feature of the post-war period. This painful and disfiguring disease, which has many of the characteristics of syphilis, is especially prevalent amongst Malays, but can be cured by a few injections. A systematic campaign was started by Sir George Maxwell, the Chief Secretary, in 1921, and has continued since that date. The confidence of the Malays in the treatment was gradually won, although for many years it was difficult to persuade them that some further injections were needed to make the cure permanent after the outward signs of the disease had disappeared. They now come forward voluntarily for treatment at the hospitals and dispensaries, or the travelling motor and motor-boat dispensaries which visit the more remote villages, and the number of cases is declining. The campaign against ankylostomiasis or hookworm has been another important development. The zone of the disease lies between parallels 36 North and 30 South, and contains more than half of the world's population. Among the regions where it was widespread were the Southern states of the United States, where a vigorous campaign was begun in 1910. There are varying degrees of infection and investigations in Malaya showed that about 8.3 per cent. of the population were carriers, although they were so lightly infected that they were unaware that they harboured the worms. It has been estimated that 500 must be present in the small intestine before their host becomes conscious of their presence. The actual number of deaths caused by ankylostomiasis is small, but the patient suffers from physical and mental fatigue and in bad cases from anæmia owing to the loss of blood. He is thus always below par, and in addition to the heavy economic loss which this entails his debility makes him more likely to succumb to other diseases. Cure is comparatively simple, but is merely a temporary relief; reinfection is almost inevitable in countries where the majority go barefoot and almost any unoccupied spot of land is regarded as a suitable latrine. The eggs develop in the soil and as soon as the larvae come in contact with the human skin they become borers, eventually reaching the intestine where they take up their residence. "Soil sanitation" must be undertaken on a wide scale if the cure is to be permanent, and this must be combined with an educational campaign to persuade the population that, e.g. the use of properly constructed

latrines is more than a curious aberration of their Western rulers. In Ceylon some years ago the villages built latrines to comply with a government Ordinance and then shunned them like the plague as a breach of immemorial custom. Contaminated food, e.g. the practice of Indian dairymen in Malaya of adulterating milk with water, may also be a source of infection.

Rural health work had been begun at Singapore in June, 1914; but the Health Officer who was appointed left for the war the following April and the work lapsed until about 1920. The Island was then divided into five sanitary areas and a Rural Health Officer was appointed to carry on sanitary and anti-malarial work. Mosquito destruction was considered to be the more pressing need, and by 1926 only a beginning had been made in sanitary and in infant-welfare work. In that year the Medical Department of the Straits Settlements and the International Health Board of the Rockefeller Foundation began a three-years' campaign for the cure of ankylostomiasis and the development of rural health organization and propaganda. The expense was shared by the two bodies and thousands were cured of the disease, 463,522 treatments being given. The results in Malacca Territory showed that about 90 per cent. of the Malays were infected, 50 per cent. of the Chinese, 76 per cent. of the Indians and 39 per cent. of the Eurasians. Of the Malay school children 11.5 per cent. were infected sufficiently severely to be anæmic. Many of the infections were slight, but 31 per cent. of the total population were harbouring enough of the worms to be definitely in ill-health, and only 20.8 per cent. were free from the disease. The figures for the other Settlements were roughly similar. Propaganda took the form of lectures, demonstrations, illustrated pamphlets, posters and advertisements in the vernaculars, talks to school children, films ("Unhooking the Hookworm" was a great popular success), and meetings with civil servants, *penghulus*, British and Asiatic estate managers and business men. Investigation of sanitary conditions showed that in the rural areas they were as bad as had been anticipated. Soil infestation by the larvae was widespread and in some places the drinking water was polluted. Only about 30 per cent. of the houses in the kampongs had private latrines, and only a minority of these could be described as sanitary. A large number of rural schools and other government buildings were no better provided. In the few villages where Government had installed a hygienic system a high percentage of the inhabitants declined to use it. Conditions on estates were controlled by strict

provisions in the Labour Code, but these had not always been adhered to, especially on properties owned by the *chettiars*. The situation on estates was far from perfect, but it was considerably better than in the villages. The Municipalities of Singapore and Penang had a satisfactory system of sewage disposal, but there was much room for improvement in the sanitary condition of the poorer districts. The whole campaign showed that unless sanitary conditions could be greatly improved, mass treatments were like "bailing with a sieve". In a couple of years the majority would have become reinfected, although some time would elapse before the disease could regain its former hold. The chief permanent value was perhaps the educational effect: a certain number would remember the lectures and demonstrations, and a wholesome shock had been administered to the various governmental bodies. The Straits Settlements were already spending 10 per cent. of the revenue on medical and health work; but all agreed that the treatments and propaganda must be continued and in particular that more attention must be paid to rural sanitation. A comparison of the situation with that in other parts of the tropics shows that the Straits Settlements were typical. In all of them the insanitary habits of the population had produced about the same percentage of infection. The perennial problem of immense need and insufficient revenue had compelled all of them to concentrate first on urban sanitation on the principle of the greatest good of the greatest number. So, in all of them, rural sanitation had lagged behind, as indeed it still does, although it is now possible to give it increasing attention, since the more pressing needs of the towns have been met.

One immediate result of the hookworm campaign was the building of sanitary latrines in rural schools and other government buildings and a stricter enforcement of the Labour Code on estates. The Government also decided to extend the Health Service by dividing the rural area into District Health Units. Each would have as staff, an Asiatic Health Officer, dresser and nurse, who would continue the hookworm treatments and propaganda as well as undertaking infant and maternal welfare work. Special efforts would be made to persuade the villagers to wear shoes and build sanitary latrines. The Health Branch designed a model that was inexpensive and yet durable, the latter quality being important since, if the erection decayed, the owners would not trouble to rebuild. Compulsion in the kampongs was not practicable and was in any case repugnant to the spirit of British colonial administration. It

was agreed that the educational campaign would be long and arduous since the population had absolutely no sanitary conscience and the majority were ignorant, illiterate and superstitious. The four travelling motor dispensaries would also help to carry on the health campaign.[16] In the following years the annual reports of the Medical Department in the Straits Settlements have each chronicled the demolition of from 1,000 to 2,000 insanitary village latrines. Many still survive, but they are gradually being replaced by bore-hole latrines in the more remote villages and the "pail" system in those which are more accessible. In a limited number of instances septic tanks have been built. An increasing number of incinerators have been installed for the burning of village refuse, and in many kampongs every householder is required to have a sanitary dustbin the contents of which are collected daily. Shoes continue to be a rarity; but the dangers arising from soil pollution are perceptibly less. Sanitary inspectors pay regular visits and combine hygienic propaganda with more drastic action when regulations are persistently disregarded. During the past decade the supply of drinking water for the villages has been taken in hand, although many still depend on wells of doubtful purity or springs along the foothills. A large number have been provided with deep wells which are reasonably satisfactory, and those close to Singapore and Penang are supplied with piped water by the Municipalities. Singapore and Penang have for years had a partial system of water-borne sewage, the areas of which are being steadily extended. The work is expensive and for this reason it is being undertaken gradually.* Some of the residential sections where main sewers have not been laid have septic tanks; and the "pail" system is still common in the older parts of the town. The provision of proper dustbins is compulsory, and the refuse as well as the night soil is collected regularly. Houses are inspected periodically by Sanitary Inspectors, who combine enforcement of the health regulations with advice and propaganda. Both Singapore and Penang have an ample supply of pure piped water.

Ankylostomiasis is also prevalent in the Federated Malay States, and a special element of contagion exists in the Indian estate labourers, a high percentage of whom are infected, despite the treatment given to immigrants at the Quarantine Stations. As in the Straits Settlements, mass treatment is given on estates and at schools; and

* In 1937 Singapore had about 37,600 houses of which 6,500 were provided with a water-borne sewage system, while the remainder had the pail system.

patients may also apply at government hospitals, dispensaries, infant welfare clinics, or the travelling motor dispensaries. Advance has been made in the control of soil pollution and most villages have an incinerator for burning rubbish. Competitions for village sanitation, and the award of certificates to householders where conditions are good, are arousing a spirit of emulation. Sanitary conditions on estates are regulated by the Labour Code and are usually satisfactory. Some estates which have a piped water supply have been able to build septic tanks and the remainder have bore-hole latrines. Drinking water is frequently obtained from protected wells, although a few villages have piped or chlorinated river water. It is difficult to induce householders to make satisfactory wells and to refrain from polluting them when they do. Most wells lack covers and pumps, which are essential for safety. There is much to commend in the policy followed by the former American administration in the Philippines, which dug a considerable number of village wells and provided them with covers and pumps. Even these safeguards can be circumvented: an outbreak of cholera a few years ago was caused by priming a pump from a wayside pool. Many of the larger estates now have a purified pipe-line supply; the rest have wells protected from pollution by linings and parapets. Sanitary conditions in the mines are in general inferior to those on estates; but the larger properties usually comply with the recommendations of the Health Branch. None of the towns in the Federated Malay States have main sewage installations. The use of septic tanks serving one or a group of buildings is spreading, but the majority of houses have the "pail" system. The arrangements for the disposal of rubbish are the same as in the Straits Settlements. The protection of the water supply from pollution has been improved during the past fifteen years by filtration and chlorination, and the larger towns now have a piped supply with a high standard of purity.[17]

Tuberculosis is one of the principal causes of death in Malaya and is especially prevalent among the urban Chinese. Curative measures have had only a moderate effect, since the majority refuse to go to hospital until the disease is far advanced, and insist on leaving prematurely as soon as there are any signs of improvement, with the result that there is a speedy relapse. So the chief value of hospital treatment is that a source of contagion is temporarily segregated; though more patients are presenting themselves at a comparatively early stage. The death rate has declined slightly owing to

preventive measures. Amongst the principal causes of infection are overcrowded and insanitary dwellings without adequate ventilation, and the habit of promiscuous spitting. Propaganda is systematically carried on by films, posters and lectures, and regulations have been made more stringent to improve housing conditions. So far as the Malays living in the country districts are concerned, no control is exercised over building plans, since their traditional type of dwelling is reasonably satisfactory. They usually choose a site where air, light and water are abundantly to hand and the mode of construction ensures adequate ventilation. This largely explains their general good health and freedom from pulmonary tuberculosis. The problem in the kampongs is the control of insanitary or malarial surroundings. Chinese rural labourers usually live in temporary huts while engaged in vegetable gardening, pig rearing, timber-cutting, or the cultivation of small holdings of, e.g. rubber or coconuts. The sanitary surroundings leave much to be desired, and this and the ever-present problem of the mosquito require control so far as the remoteness of their situation allows. On the other hand the open-air life and the extremely rough construction of their dwellings, which makes it impossible to exclude ventilation, enable them to maintain a high level of health. The housing of estate and government labourers is regulated by the Labour Code and must conform to the Health Branch's standards of construction, ventilation and sanitation. On mines, the labour is generally housed in temporary quarters which provide the maximum amount of coolness and ventilation so that the health of the miners has on the whole been good. The problem of housing is thus essentially urban, and affects the Chinese who form the majority of the town population far more than the Malays and Indians. Control in Sanitary Board areas is exercised through the Building By-laws; and towns and large villages which are not Sanitary Board areas proper are generally made subject to a modified form of the same regulations. The specifications for new buildings set a satisfactory hygienic standard to which builders must conform; and structures which have been condemned as insanitary are demolished. This does not cover the problem of the older buildings erected when less rigid requirements were in force. Owing however to the recent date of the development of the Federated Malay States the situation is much less serious than in the older cities of Singapore and Penang. Wage-earners of the poorer classes live, usually, in wood and attap-roofed (palm-leaf thatched) dwellings. The majority of the traders and

artisans live in shop-houses owned by Chinese or Indians, the business being done on the ground floor and the upper storeys being divided into cubicles for the different families, as in Hong Kong. Much of the tuberculosis is contracted in this type of dwelling; and house-to-house inspections are made regularly by Sanitary Inspectors who do everything possible to maintain healthy and hygienic conditions and to prevent overcrowding.[18]

The older part of Singapore was well laid out by a committee appointed in 1822 by Sir Stamford Raffles. A plan of 1854 shows that each block consisted of a number of large bungalows standing in extensive grounds. The worst of the overcrowding seems to have occurred between the 'sixties and the 'eighties: the merchants moved further away from the harbour and common lodging-houses and rows of Chinese shop-houses several storeys high were built back-to-back in the grounds of the bungalows. Often the latter still stand completely surrounded by later buildings. Town planning was virtually a lost art from the fall of the Roman Empire to the twentieth century and no proper control was exercised. Frequently there was no lane between the rows of houses, so that later on it was impossible to instal a water-borne sewage system. Owing to the unstable character of the soil the pipes were easily broken and it was dangerous to health to lay them in the street in front and bring the connecting pipes underneath the house to the "water-flushed sanitary appliance" at the back. Equally little attention was paid to the provision of light and ventilation, proper sanitary arrangements, or adequate cooking facilities. The Chinese occupants raised no objections: they were accustomed to conditions in China which were at least as bad, and in addition many of them were transients. The population grew rapidly, the number of cubicles and the overcrowding increased, and by the twentieth century Singapore was the possessor of first-class slums.* Private enterprise failed to provide enough new houses and the congestion grew worse, as the inhabitants increased from 220,300 in 1901 to an estim-

*" In Singapore in nine cases out of ten and certainly in the congested areas, a cubicle is a house. It is all that a man, his wife and his family occupy . . . it houses all their belongings including their food. Children are born in them. . . . People die in them while the ordinary activities of the family go on around them. . . . By the by-laws a cubicle must have a minimum superficial area of 130 square feet (some years ago 100) and an opening to the external air. In practice very many are much smaller in area and many have no window or direct lighting of any kind, and though they could be demolished they are rebuilt in the same place or elsewhere within twenty-four hours—because it is literally the case that whole families would be on the streets otherwise. . . . Unless and until we can see a great improvement there is little hope of any substantial reduction of the incidence of pneumonia and tuberculosis." (*Malayan Year Book* 1938, p. 67.)

ated total of over 600,000 in 1937. In 1938 Singapore had less than half the number of buildings necessary to house the population and the town occupied about half the area it should have covered. In one sub-division of thirty acres a density of 703 per acre was recorded in 1936. In 1917 the Governor appointed a Commission to consider the problem, and in 1918 it recommended that an Improvement Trust be created to deal with slum clearance and town planning. The Trust was not set up until 1928, since, while there was a strong demand for it, there was also widespread difference of opinion on the details of the plan. A Bill which satisfied all parties was eventually passed after ten years of criticism and debate, a leisurely process which was not without precedent in Malaya. The Trust was composed of five officials including, as chairman, the President of the Singapore Municipal Commissioners, the manager of the Town Planning Department and four unofficial members, of whom two were appointed by the Governor and two by the Municipal Commissioners. The Board was to prepare plans for the future development of the whole of Singapore Island so that there would be no fear of future slums arising. It was also to effect housing reforms in the existing municipal areas; and for this purpose it could acquire land, order the demolition of insanitary buildings, or require the owner to make structural alterations. The owner had the right of appeal to the Governor in Council, whose decision was final. If the Board's valuation of property which it proposed to acquire was disputed, the case was referred to a special tribunal composed of a District Judge and two others chosen by him from a panel of five civil servants and unofficials. Meanwhile in 1919 the Government had lent $2,250,000 to the Municipality of Singapore and $850,000 to Penang for housing improvement and the installation of sewers, drains, reservoirs and electric lighting. A beginning was made in slum clearance and rehousing, and in 1925 the Government appropriated an additional $10,000,000 for the proposed Improvement Trust. It was also empowered to levy an annual rate of 2 per cent. on the rental value of property, to which the Government would add an equal contribution. The Trust would also receive the rents from the properties which it was to acquire. The total expenditure on slum clearance from 1919 to 1937 was roughly $8,650,000. The contrast with Hong Kong, where the need is equally great, emphasizes once more the immense advantage possessed by a wealthy colony. The Municipality, the Improvement Trust and the Harbour Board of Singapore between them have a larger annual revenue than

Hong Kong, and in addition they have been assisted by loans from the Government of the Straits Settlements.[19]

The Trust first attacked the problem by buying several large blocks of insanitary dwellings and building model tenements and blocks of flats, along with some hundreds of cheap houses suitable for the lower-paid class of artisan. These are let at low rents, which often do not provide an economic return on the investment, and have proved extremely popular. The cost of this method proved so heavy that the Trust realized it could never solve Singapore's slum problem, on account of its enormous expense. The prime requisites were to secure a fair amount of light and ventilation, proper sewerage and drainage and the removal of rubbish. These could be provided by driving a back lane fifteen feet wide through the solid blocks of houses, about eighty-five feet from their frontage. The method has been adopted and usually half the width of the lane is taken from each owner without compensation. The Trust reconstructs at its own expense the rear portion of the buildings, installing a kitchen, bathroom and water closet, and leaving open to the sky a yard equal to half the built-on area of the lot. The Municipality then lays the sewer in the back lane, making the connections with each building; and the refuse is removed from each house by the Conservancy Department by way of the lane. The block is thus made sanitary at a fraction of the cost of buying the land, pulling down the houses and rebuilding. The construction of back lanes in the sections of Singapore near the harbour was expected to be completed by about the end of 1939. Unfortunately there are many blocks through which it is impossible to drive lanes owing to the narrowness of the lots and their awkward shape. The Trust then declares the buildings insanitary, the owner having the right of appeal to the Governor in Council. If the latter sustains the Trust's action the buildings must be demolished; but the owner has the option of doing this himself or of asking the Trust to carry out the work and pay him compensation for the land but not for the houses. If the amount cannot be agreed upon it is determined by the tribunal already mentioned; and while land-values are somewhat inflated, the Trust does not have to overpay excessively: wherein it is more fortunate than most government agencies which acquire land for the public benefit. The methods just described are used to deal with properties held freehold or on 999-year leases. In a short time however a large number of leases made for only ninety-nine years will expire, and the Government has decided that the houses in

some of the blocks must be rebuilt to conform with the municipal by-laws, while others will be converted into open spaces. Many insanitary dwellings will thus automatically disappear. As regards the future there does not appear to be any danger of the construction of slums, for the building by-laws are of a very high standard and are carefully enforced. The problem is not so serious in Penang and Malacca, where the Municipal Commissioners have carried out similar work, though on a smaller scale.

Venereal disease is a serious problem in Malaya owing primarily to the disparity of the sexes amongst immigrants. At the census of 1921 the ratio for the Chinese was forty-seven females to 100 males. The Government has encouraged immigrants to bring their wives with them, but the males continue to predominate, though the sex ratio has been improving. In 1937 it was sixty-six females to 100 males for Chinese and approximately fifty to 100 for Indians. The conditions under which the Chinese coolies lived, "for the most part herded in cubicle lodging houses", aggravated the situation. The Governments of the Colony and the Federated Malay States established clinics, created a Social Hygiene Branch of the Medical Department and carried on an energetic educational campaign. In 1937 the number of new cases applying for treatment at government venereal-disease clinics alone was 145 per 10,000 of the population in the Straits Settlements and ninety-four per 10,000 in the Federated Malay States, while in England 9.8 was the corresponding figure.[20]

Smallpox occasionally occurs on a limited scale, more frequently in the Straits Settlements than in the Federated Malay States: vaccination is too widespread for the disease to be serious. Cholera and plague are also of minor importance: they have been unknown in the Federated Malay States since 1927 when there were 114 cases of cholera and thirty-three of plague. The cholera was believed to have been imported by carriers from India, while the plague seems to have been caused by infected fleas in a shipment of imported rice. The Straits Settlements occasionally have one or two cases of plague or cholera a year, but the last outbreak of any size was in 1928 when there were eleven cases of cholera and four of plague. When one considers the annual immigration of labourers from India and China where the diseases are endemic this virtual immunity is remarkable. The reason is the efficiency of the Port Health Administration at Singapore, Penang and Port Swettenham. Immigrants are carefully examined, and it is only occasionally that,

e.g. a carrier is not detected. They are also given treatment for hookworm and are vaccinated. The development of aviation has made it necessary to examine the aircraft and passengers. Although the risk of the introduction of infectious disease by air is small, an incident which occurred in 1937 showed that it could happen. A European who had been in Bangkok for a few days during the cholera epidemic came by plane to Penang and there boarded a boat for Singapore. While at sea he developed symptoms of cholera and died a few hours after the vessel left port.

In 1925 the Eastern Bureau of the League of Nations Health Organization was established at Singapore for the rapid collection and dissemination of epidemiological intelligence throughout the Far East.

Infant welfare, maternity work and medical work in the schools have been developed on a considerable scale since the Great War. Infantile mortality was heavy—until 1914 the rate in Singapore was never less than 300 per 1,000 births—and deaths in childbirth were far too frequent. Some thousands of deaths a year were due to infantile convulsions, the most common causes of which were malaria, tetanus resulting from insanitary conditions, or errors of diet. The mothers were ignorant of the proper methods of feeding and caring for children, and the Malays especially were afraid of Western medicine and unwilling to enter maternity hospitals. The Asiatic midwives were ignorant and used dangerous traditional methods. In 1910 a municipal nurse was appointed to advise the mothers and a system of training and licensing midwives was begun. Nothing more was done in the Colony until 1923 when an Ordinance was passed requiring the compulsory registration of all competent midwives within the municipal limits of Singapore, Penang and Malacca. It also enacted that in future no midwife would be registered until she had received one year's training at a hospital and passed her examinations. This ensured that as the older school who practised by traditional methods died out, the midwives in the towns would be properly trained; but it accomplished little for the rural areas. In 1922 the Federated Malay States established a course of training for midwives at the hospitals. The Infant Welfare Centres and other agencies of propaganda were used to overcome the conservatism of the mothers and gradually the situation has improved. In 1937 the maternal mortality rate varied from seven to ten per 1,000, the comparable figure for England being 3.13. It is lowest for the Chinese, higher for the Malays and highest of all for the

Indians, owing to their persistence in traditional customs. The rate is lowest in the towns and highest in the country districts, since a large number of the midwives in the villages continue to practise injurious and primitive methods. Every effort has been made to induce Malay midwives from the kampongs to take the course of training offered in all the principal hospitals. In 1937 there were 1,161 trained and 321 untrained midwives in the Straits Settlements, the majority of the latter being in the rural districts of Province Wellesley and Malacca. Trained midwives are attached to all the government hospitals in the towns, to many of the district hospitals and to the clinics and infant welfare centres.[21]

Infant Welfare Centres were established in three of the principal towns of the Federated Malay States in 1922, and the number was gradually increased to fourteen in 1937. About the same time similar work was begun in the Straits Settlements, the Government operating in the rural districts and the Municipalities in the urban areas. In 1937 there were twenty-four Centres and nine sub-centres, together with three municipal clinics in Singapore, two in Penang and one in Malacca. A voluntary organization, the Singapore Child Welfare Society, also assisted. The usual staff was a Lady Medical Officer at the principal Centres, one or more European sisters trained in health work, Asiatic nurses and health visitors, a dispenser and a dresser. Each Centre had a motor 'bus with a fixed itinerary of visits to the outlying villages, which brought in the poorer patients who could not afford to pay for transport. The Centre provided ante-natal and post-natal care of the child, the principal function being to teach the mothers how to look after their children properly. That there was need for it was shown by the report of a health visitor who found a rachitic baby and a little sucking pig amicably sharing the same feeding bottle. District visiting has become an increasingly prominent part of the work. The Centres also did vaccinations and sometimes dental work, treated minor ailments and supervised the midwives practising in the towns. Baby shows and infant welfare exhibitions were held and exhibits were arranged for the agricultural fairs. Lectures and films were provided by a perambulating motor lecture van. At first the health visitors met with a good deal of hostility and suspicion, but this gradually disappeared as the mothers came to understand that the object was to help and not to harass. Their attitude towards Infant Welfares Centre underwent a similar change within a few years. "They were originally full of fears and prejudices and

attended only after much persuasion and in a very hesitating manner; they vouchsafed no signs of approval or otherwise at the instructions given them and appeared completely mystified and far from happy. To-day . . . these same people are now thoroughly at home and have lost their fears, their attendance weekly is regular and they bring not only their own babies but persuade their neighbours to do the same."[22]

Medical inspection and treatment of the school children in the Federated Malay States were begun by the Medical Department in 1921, although for some years not a great deal could be done owing to the shortage of staff. The deficiency was gradually remedied, Lady Medical Officers being appointed for the girls' schools. In 1929 a beginning was made in dental work by appointing a dentist for the schools in Kuala Lumpur, two others being added later. He reported that 75 per cent. of the children had bad teeth because they did not use tooth brushes. Elementary hygiene was added to the school curriculum and the Medical Inspectors also gave lectures. In the Straits Settlements medical treatment of school children was begun in 1921, and in Singapore a private dentist was employed to care for their teeth. At the present time, arrangements vary in the different Settlements, the work being sometimes done by a Dental Officer and at others by private dentists employed by Government or at the general hospitals. Singapore has also an eye clinic for children with defective vision. Maternity, infant welfare and school medical work are much less advanced in the Unfederated Malay States, with the exception of Johore. In addition to the maternity wards in the general hospitals a beginning has been made in the training of midwives, there being eighty-eight in 1937 who had obtained their certificates. There are four infant welfare clinics, and the school medical treatment in Johore is in one respect better than in the rest of the country. It is the only part of Malaya where dental work is done to all the children's teeth; and a unique feature of school life is the daily tooth-brush parade. Kedah is paying increased attention to midwifery and has school medical inspections. Kelantan has recently established an Infant Welfare Centre at the capital, Kota Bharu. Trengganu has begun the training of midwives and has a women's and children's clinic at Kuala Trengganu, the principal town.

The medical history of British Malaya records one of the greatest triumphs of the very young science of tropical medicine. Forty years ago the Peninsula was one of the most unhealthy regions in

the world—so unhealthy that the annual death rate on the early rubber plantations was as high as a fifth of the labour force. To-day many of these same estates have large hospitals which are nearly empty. Not only has malaria been overcome, but dysentery and ankylostomiasis have almost disappeared because of a piped supply of filtered water delivered to the coolie lines and with water-flushed latrines. In much of the settled part of the country all that the average person has to do is to observe a few elementary precautions and leave the rest to the Medical Department. This in no way implies that everything is perfect, as Medical and Health Officers are the first to point out: they have a formidable programme of improvements, especially in preventive medicine. Nevertheless there are strong reasons for considering the medical service as one of the results of British rule of whose benefit to the Asiatic population there can be no doubt. The fall in the infantile mortality rate is one of the best indications of what has been accomplished. In the Federated Malay States in 1917 the death rate for infants under twelve months was 218.45 per 1,000 births. The following decade saw the extension of anti-malarial work and the beginning of rural sanitation, infant welfare and the training of midwives. During the same period the general trend of the infantile death rate was downward although the progress was not steady. The lowest point was reached in 1922 with a rate of 171, and in 1927 it rose suddenly to 203.11. The reason for this abnormal rise was probably the lowered vitality of the population resulting from the unprecedented and destructive floods of 1926–7. These were followed by an outbreak of malaria, and the destruction of vegetable gardens and padi crops caused an increase of beri-beri. During the following decade the trend was fairly steadily downwards, and in 1937 the infantile mortality rate was 147 per 1,000. In the Straits Settlements the rate has usually been higher than in the Federated Malay States: in 1917 it was 266.92, and in 1927 214.14 owing to the unusual amount of malaria, while the lowest figure for this decade was 179.23 in 1921. Thereafter the general movement was downwards until in 1937 it was 155.80 per 1,000, the lowest figure yet attained in the Straits Settlements. In the Unfederated Malay States the rate varied from 113 per 1,000 in Kelantan to 175 to Trengganu. Racial differences seem to be of little importance in determining infantile mortality, although the rate for the Chinese is lower than for the Malays and Indians. Different races in the same place have fairly similar rates, and the variations seem to be due primarily to housing and

nutrition.[23] Many phases of the question are obscure and investigations are continuing. One of the greatest needs is the extension of maternity and infant welfare work especially among the settled rural population. Others are renewed attempts to check the growing preference for polished as opposed to roughly milled rice, and the continued improvement of village sanitation. In the long run the British record in Malaya will be judged by the effect it has had upon the lives and character of the people of Malaya and not by the wealth of the mines and plantations. The development of the past sixty years has changed the Malay from a poor man in a poor country to a poor man in a rich country. It would be a complicated and profitless exercise to apportion the blame between his faults of character, the omissions of British rule, and the aggressive efficiency of the Chinese. The fact remains that he has profited less than anyone else from the development of his own country. The work of the Medical Department is one result of British rule which has been pure gain to him, and its extension should have a prominent place in any programme for improving his position.

Comparisons are difficult to make between the medical situations in Malaya, the Netherlands East Indies, and the Philippines. All three are similar in their prevalent diseases and the insanitary habits of the populations, and all are wealthy dependencies which have laid great stress on the improvement of health. They differ in that Malaya is much smaller both in area and population, and that the bulk of the people are concentrated in the West coast states and the Colony. Medical and health services can be maintained on a costly scale which would be impossible in the Dutch and American dependencies, where the inhabitants are more scattered. Furthermore, it is twenty years since the Americans controlled the Philippine medical service, so that exact comparisons between their work and that of the British and Dutch are hazardous. The vast majority of American officials were replaced by Filipinos after 1915, and although the Governor General retained powers of supervision and control until the proclamation of the Philippine Commonwealth in 1935, in practice his ability to carry out these functions was limited. The Dutch services are seen at their best in the densely populated island of Java and in the developed part of Sumatra. On the curative side hospitals are provided both by Government and missionary societies. Transport is well developed and, as in the Straits Settlements, the policy is to have a limited number of large hospitals at central points rather than a greater number of small district hospitals.

The large estates have an excellent system of hospitals, sanitation and anti-malarial work, though the general standard of hygiene is probably higher in the Outer Provinces than in Java. The legal requirements are exacting and are enforced by the Dutch Medical Officers as far as is feasible. Constant supervision is impossible over such large areas, and it is often found that the regulations are only partially obeyed on estates with Asiatic or Eurasian managers. In the principal towns of Java the water supply is pure and reliable and the sewage system is similar to that of comparable towns in Malaya. A housing programme has been undertaken as part of the attack on plague. Excellent work in rural hygiene has been done in some parts of Java, the campaign against ankylostomiasis and other dirt diseases being similar to that in Malaya. In a large part of rural Java sanitation remains decidedly primitive, the latrines, for example, often being built over a pond, the water from which is also used for washing and drinking.

The condition of the Philippines at the date of the American annexation was scandalous, particularly in the field of public health. Excellent work was done in curative and preventive medicine and research, epidemics became the exception and not the rule, and a very efficient health service was established. Manila and the large towns received the bulk of the attention and not much change was made in the *barrios* or country districts, beyond eliminating epidemics and providing some of them with pure water. Funds were inadequate and most of the available money was spent in the urban areas which had the greatest concentration of population. The deaths from cholera declined from 100,000 in 1900 to 820 in 1915, and of smallpox from 40,000 to 276. These results were attained by compulsory vaccination for smallpox and inoculation for typhoid, cholera and dysentery, combined with a rigorous quarantine system at the ports. The provision of pure water was also taken in hand, and between 1899 and 1934 289 municipal and provincial water systems were built. They supplied some 1,008,918 people, most of whom lived in Manila, Cebu, Iloilo and other large towns, although in some provinces, such as Ilocos Norte, piped water was provided for the rural population. The principal measure adopted between 1904 and 1935 to provide pure water for the villages was by drilling 2,390 artesian wells. They supplied some 3,000,000 persons and are a notable feature of American work in the Philippines.[24] They are passed every few miles, for example along the 150 miles or so of road between Manila and Baguio. Altogether about 4,000,000 people

were provided with pure water; but since the total population was estimated in 1934 to be between 13,000,000 and 13,700,000 the bulk of the task remains to be accomplished. Many villages still depend for their water upon streams or shallow wells which may be contaminated. A water-borne sewage system or septic tanks were built for about three parts of Manila and some of the other towns. Sanitation in the poorer quarter of Manila and in the *barrios* is still very primitive. Some bore-hole latrines have been constructed, but insanitary ones abound. In 1937 it was estimated that about 70 per cent. of the population suffered from ankylostomiasis. An intensive campaign of health propaganda was undertaken, but, as in Malaya and Java, progress was slow since it conflicted with the habits of the population. A promising beginning was made in infant welfare and maternity work, but much more needed to be done. The infantile mortality rate was 150.34 in 1934 in Manila, the most sanitary town in the Islands. The building of hospitals in the country districts was begun about fifteen years ago by Governor-General Leonard Wood. In 1935 the Insular Government had eighty hospitals with 4,402 beds.[25] This seems strangely few when one remembers that at about the same date the hospitals of the Federated Malay States had 6,443 beds with an estimated population of 1,770,486 and similar medical problems. Tuberculosis is a serious evil: a leading medical authority roughly estimated the number of cases at 400,000. As in Malaya, the disease is principally urban and is the result of overcrowding: there is serious need of a slum clearance programme, particularly in the poorer quarter of Manila. The question has been discussed since about 1926, but little has been done owing to lack of funds. Medical and health regulations on estates are very different from those of Malaya and Java. Some areas are very malarial, but estate owners are not required to carry out anti-mosquito or sanitary measures. American and European employers usually do so; but Filipino estates are often remiss. To some extent this situation is remedied owing to the widespread cultivation of sugar and the building of a refinery on many plantations. Owners of large industries such as refineries and tobacco factories are bound by strict sanitary requirements and are compelled to provide a hospital and a resident doctor, unless there is a government hospital within three kilometres. Malaya and the Philippines have been about equally successful in eliminating epidemics. The latter seems to have done rather more in providing a pure water supply for the rural population; but on the other hand rural sanita-

tion appears to be further advanced in Malaya. As regards medical and health regulations on estates, Malaya is decidedly in the lead. Both have a similar problem of housing and the control of tuberculosis. It is difficult however to appraise the American record accurately because it is twenty-five years since they had complete control. Unfortunately it seems clear that in the interim the medical services have deteriorated.[26]

CHAPTER IX

EDUCATION IN MALAYA

Education before 1914

The educational history of British Malaya began soon after the foundation of Singapore. Sir Stamford Raffles established and endowed an Institute "to educate the sons of the higher orders and others" and to instruct the East India Company's servants in the vernacular. These purposes were not fulfilled, and the Institute survives to-day as a government school giving higher elementary and secondary education. The endowments were diverted to elementary classes for Malays, but they showed a strong prejudice against any form of education other than that given in their own Moslem schools where they were taught the Koran in Arabic. A few government English schools were established and grants-in-aid were made to missionary schools. The East India Company did little for education in the Straits Settlements: the very small annual revenue was much less than the expenditure and the Company was more interested in trying to reduce the deficit which it had to meet than in increasing it. The Straits Settlements were transferred to the control of the Colonial Office in 1867, and in 1872 an Inspector of Schools was appointed for Singapore. At this date there were nineteen English schools with 2,641 pupils and twenty-eight vernacular schools with 818 pupils. The most obvious weakness was the backwardness of Malay vernacular education and the Government adopted the policy of assuming the principal responsibility for it. It also maintained some English schools, but the majority were controlled and partially financed by missionary societies to which the Government paid grants-in-aid. The Malays were still apathetic and distrustful of secular education, but their prejudice was gradually dispelled by such expedients as using the schools for the distribution of quinine and other medicines. A college for training Malay vernacular school teachers was maintained at Singapore from 1878 to 1895, and in 1901 a similar institution was opened at Malacca. In 1913 another Malay vernacular teachers' training college was opened in Perak. In 1888 was adopted the policy that Malays

who passed the final examination in the vernacular schools would be admitted free to any government English school in the Straits Settlements. Later the same right was granted in the Federated Malay States, and in a modified form it still remains one of the few special concessions made to the Malays as the people of the country. At the turn of the century Mr. R. J. Wilkinson of the Education Department began publishing the Malay classics for school use and interested the teachers in their own literature. This was a very promising innovation for at that date text-books in British Malaya, as in other colonies, were chiefly remarkable for their unsuitability. Unfortunately Mr. Wilkinson was soon transferred to another department, and about fifteen years elapsed before a successor had sufficient imagination and insight to take up his work. Meanwhile, education had begun in the Malay States: the office of Inspector of Schools was created in Perak in 1890, and a few years later in Selangor and Negri Sembilan. An Inspector was not appointed in Pahang until 1913. In 1897 the post of Federal Inspector of Schools was established in the new federation. Centralization was carried farther in 1906 when the Federal Inspector was abolished and the supervision of education both in the Colony and the Federated Malay States was vested in the new post of Director of Education. A unified educational service was created and substantial uniformity achieved in methods and aims. In later years the Unfederated Malay States established departments under the control of the separate State governments; but their systems conformed substantially to the normal Malayan pattern, since their Superintendents of Education were seconded from the Straits Settlements.

Pre-war education in Malaya left a great deal to be desired both in the government and the aided schools. It was regarded as of minor importance, and in 1914 the net expenditure after deducting fees was $493,447 in the Straits Settlements and $443,209 in the Federated Malay States. This was 4.8 per cent. of the total expenditure for the Colony and 1.1 per cent. for the State. Attention was paid chiefly to English and not to Malay vernacular education; and in this the Government followed the strong preference of the European and Asiatic population. Then and for many years afterwards an English literary education was really a vocational training, owing to the very large demand for clerks in government and business offices. The Chinese and Malays sought an English education for strictly utilitarian purposes: a clerkship meant higher wages and much more social prestige than any form of manual

labour. The curriculum stressed the importance of learning English, and the way in which the subjects (history, geography, literature, grammar, composition and arithmetic) were taught had very little relation to anything Malayan.* Arithmetical problems, for example, dealt with pounds, shillings and pence in a country where the sole currency was dollars and cents, or with the well-known feats of Messrs. A, B, and C in filling bath tubs when the article and indeed piped water hardly existed in Malaya. There was no manual training or school gardening, and the text-books were usually unsuitable English books, since very few good Malayan texts existed. Some pre-war schools used books which had been discarded in England about twenty years earlier. The European masters were usually of poor calibre and the good ones often left as soon as their contracts had expired. They knew no vernacular languages and so could not understand or explain the difficulties of Malays and Chinese who were learning English. The reason was, that since salaries were low, good men were unwilling to go to Malaya, and this led to the vicious circle that salaries were not raised because the masters were receiving all they were worth. The locally trained teachers were no better: their pay and prospects were inferior to those of a clerk, and consequently the schools were the last refuge of the semi-educated unemployed. They were engaged as pupil teachers, and in theory were supposed to be trained and supervised by the managers of the schools. In practice this seldom occurred and the Government established an English teachers' training college in 1904; but no candidates for admission came forward. Although there were seven standards in the pre-war English schools, about 85 per cent. of the boys left on completing Standard IV, since in those days this was sufficient to secure the coveted clerkship.[1]

Reforms after 1918

Minor improvements were made, but conditions remained substantially unaltered until the end of the Great War. Meanwhile the Sultans were pressing for more education for Malays, to equip them to hold their own against the Indians and Chinese. The aided missionary schools complained that their grants were too small; and the Education Conference in 1918 urged that the training of

* "I fear that at present there are many pupils who leave school able to write learned notes on archaisms in one of Shakespeare's plays, yet never read any English afterwards other than cheap novels. . . . Too often an intensive study of the great classics is made before the child can appreciate them, and the result is a definite distaste for all classics." (*F.M.S. Annual Report of the Education Department* 1921, p. 5.)

teachers be improved. The Government and the public began to realize that the system needed drastic overhauling and that far too little had been spent upon it. The question was discussed periodically in the Legislative Council from 1916 onwards, but action was postponed because, for one thing, it was impossible to recruit European masters until the war was over. After the war, salaries for European masters were greatly increased, the same rates of pay, promotion and pension being adopted as in the technical services. Masters and mistresses were required to have an Honours B.A. from an approved British university and became eligible for pension after they had served on probation for three years. To increase the prospects for advancement, all educational positions were reserved for members of the Department, with the exception of those of the Director and the two Assistant Directors in charge of Chinese vernacular schools, all three of whom were members of the administrative service; the last two seconded from the Chinese Protectorate. Subsequently those selected as teachers were required to attend for one year a special course at the Institute of Education in the University of London. At the same time they studied Malay at the London School of Oriental Studies and passed the civil service higher examination in the language after their arrival in Malaya. The post-war European master was a vast improvement on most of his predecessors, in educational attainments and fitness for his work. Supervision was improved by appointing a Chief Inspector of English Schools in 1919. Similar positions were created for the other branches of education, by the appointment of an Assistant Director for Malay vernacular education and a Lady Supervisor of Malay Girls' Schools in 1916, an Assistant Director for Chinese vernacular schools in 1924, and an Inspector of Tamil schools in 1930. The Director of Education was thus freed from a great deal of detailed work and had more time to consider the general needs and development of his department.

The salaries of Asiatic teachers were raised considerably to make the profession more attractive and their training was improved. After the failure from want of candidates of the attempt to establish a college for training English teachers, normal classes had been established in 1905. They gave a three-years' course for teachers selected from applicants who had obtained a Cambridge Local Schools Certificate with passes in written and oral English. The pupil teachers spent their mornings at an English school studying and watching the teaching and in the afternoons attended classes

under European instructors in English language and literature, the theory and practice of teaching, art, hygiene, and physical training. Classes were gradually established at various towns in the Straits Settlements and Federated Malay States and proved successful. It was decided to continue them and, in addition, promising teachers were given scholarships enabling them to study for at least two years at the University of Hong Kong. This arrangement was in force from 1919 until Raffles College was opened at Singapore in 1928, after which date English teachers were sent there on scholarships for their training.[2]

The system of grants-in-aid was revised and the total amount nearly quadrupled in accordance with the recommendations of two Committees of Inquiry appointed by the Government in 1919 and 1921. They condemned the method previously followed, under which the amount paid to each school was determined primarily by the average number of pupils in attendance, combined with the standard of efficiency attained by the school. Its weakness was that many private schools depended for their support very largely on the grant, together with the pupils' fees. They were underfinanced and so, e.g. had to offer lower salaries than the government schools, with the result that they attracted a poorer type of master. A low-grade school was restricted to a small grant and so was financially unable to improve its staff and equipment, which would have qualified it to receive a larger amount. What made the situation particularly serious was that in 1921 78 per cent. of the pupils learning English were in aided schools, the Government having concentrated upon Malay vernacular education. The Committee of 1919 advised that grants be increased to an amount which would enable aided schools to offer the same rates of salary as government schools. The grant-in-aid schools should submit annual estimates of their expenditure for the following year, and should receive the difference between their revenue and their approved expenditure. All their accounts should be audited by the Department of Education, which would, of course, continue to prescribe the curriculum, standards of instruction and equipment necessary to qualify for grants. The Governments of the Straits Settlements and the Federated Malay States accepted the recommendations, and agreed to pay government rates of salary for lay teachers, full pay while on leave and cost of ocean passage. A few years later the Governments contributed towards the cost of provident funds to provide pensions. The lay teacher in an aided school

was thenceforth placed on exactly the same financial footing as one in a government school. Teachers who were also missionaries continued to be paid on a lower scale, since this was the long-established practice of their societies. The Governments also defrayed the cost of rates and taxes and of minor repairs and equipment. In 1921 the Governments agreed to pay half the cost of new buildings and of structural repairs to old ones. The result of the reforms was that the amount of the grants to English aided schools in the Federated Malay States rose from $115,338 in 1917 to $431,632 in 1921, and in the Straits Settlements there was a similar increase.[3]

The Government also decided considerably to enlarge the number of government English schools and the staff of European and Asiatic masters. The demand for English education was growing rapidly, and it was considered undesirable to leave it so completely in the hands of aided schools. To finance the increased cost the rate of 1 per cent. on the annual rental value of urban property which had been levied since 1909 was increased to 2 per cent. in 1919, the rural rate remaining at 1 per cent. It was collected by the Municipalities and Sanitary Boards and paid over to the Board of Education as a supplement to the annual expenditure of the Malayan governments. Originally an even more ambitious policy was contemplated, for in 1918 the Governor held an informal meeting of the unofficial members of the Legislative Council of the Straits Settlements and later announced that it was the aim of Government to afford facilities for the free education of all children in English up to the fourth standard. To carry out this plan proved impossible, since the increase in enrolment kept pace with the growth in the number of schools. In 1923 the Board of Education, which was composed of four official and four unofficial members, recommended that universal English education should be regarded as the ultimate rather than the immediate aim. The latter should be to provide ample accommodation so that every suitable applicant who could pay the fees or obtain a free place could be given an English education.[4]

In 1919 there were seventeen government and sixty-three aided English schools in the Straits Settlements and the Federated Malay States, with an enrolment of 25,302, of whom only 6,031 were girls. Over half the pupils were Chinese and most of the remainder Indians, only a small fraction being Malays. The extent to which the Government had concentrated upon Malay vernacular education was indicated by the figure of 583 government and three aided girls'

schools, with 32,973 pupils, of whom 2,683 were girls. There were 3,683 Tamil children attending 107 schools, almost all of which were maintained by estate owners with the help of government grants. Chinese vernacular education was carried on in private schools which were neither supervised nor aided, with the exception of three small missionary schools. There are no statistics of enrolment for the Straits Settlements, and the schools in the Federated Malay States had 30,922 pupils. The census for 1921 gave the number of children between the ages of five and fifteen in the Straits Settlements and Federated Malay States as 344,575, of whom 169,834 were boys and 174,741 girls. The total number enrolled in school is unknown, since there are no figures for the Chinese vernacular schools in the Straits Settlements. With this very important qualification it may be said that there were 92,880 children in school, of whom the vast majority were boys, or something over 27 per cent. of the total population of school age. The very small number of girls was due to the indifference of the population to female education; this showed itself in the statistics of school attendance in most parts of Asia.[5]

Great difficulty was found in recruiting European masters for some years after 1918; and the decline in revenue which followed the rubber slump temporarily retarded the carrying out of the Government's programme. From the middle 'twenties, however, rapid progress was made in increasing the staff and building additional schools; and the improvement in the curriculum was equally marked, particularly in Malay vernacular education. In the decade 1920–30 the amount spent on teachers' salaries in the Straits Settlements increased more than two and a half times, and in the Federated Malay States by 83 per cent. The number of government English schools grew from eighteen in 1921 to forty-one in 1931; and the number of pupils attending aided English schools fell from 78 per cent. to 61 per cent. of the total.[6] In 1930 there were forty-five government and fifty-four aided English schools in the Straits Settlements and the Federated Malay States, with an average enrolment of 43,878, of whom 11,230 were girls. Compared with 1919 the total enrolment had increased by 74 per cent. and the number of girls in school by 87 per cent. The government Malay vernacular schools numbered 743, with 61,311 pupils, of whom 13,024 were girls. School gardens were cultivated at 375 of the schools in the Federated Malay States and at many of the rural (but not the urban) Malay schools in the Colony. The enrolment was almost twice as

high as it had been in 1919 and was partly the result of the considerable number of rural schools which had been built. Another cause was the growing interest of the Malays in female education: the number of girls attending had increased by 381 per cent., and in 1930 they were over a fifth instead of an eleventh of the pupils. The same change in attitude was taking place among the Chinese, but was least in evidence among the Tamils. None of the Asiatic races as yet saw any great benefit in giving girls an English education, and their percentage of enrolment in the English schools was much the same as in 1919. Chinese vernacular schools in the Colony and the Federated Malay States number 716, with 46,367 pupils, of whom 11,333 were girls. Of these, 115 received grants-in-aid, and in addition there were two government Chinese schools at Kuala Lumpur with 337 pupils. Tamil schools were mostly on estates, though a minority were urban and a few were government. The Straits Settlements statistics are incomplete and omit the sex of the children as well as the number in unaided schools. Subject to this qualification, the average enrolment was about 14,097 for the Colony and the Federated Malay States. An unstated number attended private schools, many of which advertised themselves as teaching English. With a few exceptions the teachers were poorly paid and worse trained. The total number of children receiving a vernacular or an English education in the Colony and the Federated Malay States in 1930 was 189,121. According to the census of 1931 there were 531,364 children between the ages of five and fourteen in the Straits Settlements and the Federated Malay States, so that 35.5 per cent. of the children were attending school. The census estimated that 80 per cent. of the Malay boys and 20 per cent. of the girls of school age were attaining literacy. The education statistics for 1930 differ from those of 1919 in one significant respect. The earlier had nothing to record on technical, higher or adult education. The Reports for 1930 enumerated 225 students, most of them Malays, at the five trade-schools and 128 at Raffles College. They also enumerated the government evening classes which were held in the large towns and were attended by adults or older boys who had gone to work and wished to improve their position.[7]

Malaya was visited in 1928 by Mr. Ormsby Gore, the Secretary of State for the Colonies. He considered that the great effort which was being made to give all Malay boys a vernacular education was "a very fine achievement" in its curriculum, text books and methods of teaching. "The ability of the Malays to hold their own (against

the immigrant races) depends very largely on their education . . . and our duty as the protecting Power is clearly to do all we can for the indigenous people of the peninsula." He felt however "that the Education Department will find itself compelled sooner or later to play a rather more prominent part than it does in Chinese education". As things were, 75 per cent. of Malay boys of school age received a vernacular education, 45 per cent. of the Chinese and 42 per cent. of the Indians. Mr. Ormsby Gore was less satisfied with English education: he considered that too much attention had been paid to literary studies and that "the development of technical and, above all, agricultural education is long overdue". His comment on the text books was that he "did not find quite so many glaring examples of unsuitability as I have seen elsewhere". The reply of the Department was that it was very difficult to find English text-books which were appropriate for local use, but that ten years earlier they had been much worse.[8]

Malay Vernacular Education

The improvement of Malay vernacular education was begun during the Great War, the first step being to send Mr. Winstedt of the Education Department to study vernacular and industrial education in Java and the Philippines. His report stressed the necessity of giving Malay vernacular teachers a proper training and it recommended closing the two existing colleges in Perak and Malacca as soon as a new central training college to accommodate 300 had been built. This was done in 1922 when the Sultan Idris College at Tanjong Malim in Perak was completed. Meanwhile the curriculum of the two existing colleges was enlarged to include basketry and elementary agriculture. The cultivation of school gardens was begun about 1917, not so much to improve agricultural methods as in the hope that it would "at least teach the young Malay that manual labour is not degrading". He was inclined to regard a literary education leading to a clerical post as the sole reason for going to school; and since the vast majority would have to be farmers or fishermen like their fathers, school gardens were introduced as a protective device to keep them on the land. For the same reason the schools introduced manual training, physical drill and the Boy Scout movement. At first there was trouble with the teachers, since the old-fashioned masters despised manual labour; but gradually they were replaced by the graduates of the Sultan Idris College, who were keenly interested in agriculture and handicrafts.

Another of the many consequences of the Winstedt Report was the preparation of new text books for all the subjects taught in the Malay vernacular schools. These were a mixture of translations and original work and emphasized the environment of the Malay, leading him on from the known to the unknown. This excellent reform was sometimes in danger of being overdone, as when there was long debate whether the polar bear could possibly be admitted to the geography book since he was unknown in Malaya. There had been a danger that teachers and pupils alike would regard school work merely as a necessary preliminary to passing examinations; but the new books which dealt with problems of Malay life began to make them realize that arithmetic, geography and history were of real and not merely academic value.

The increasing demand of the Malays for an English education raised a serious question. Many parents were opposed to their son's wasting his time in obtaining a proper knowledge of his own language, so keen were they that he should press on without delay to the coveted goal of a clerkship. English was of necessity the medium of instruction in the English schools owing to the heterogeneous mixture of tongues in Malaya, viz., Malay, Tamil, Malayalam and five dialects of Chinese. No one of these could be adopted as the norm; and also a knowledge of English was of far greater financial value. Investigation had shown, however, that a prior grounding in his native tongue was of incalculable advantage to a child in later acquiring a foreign language.* Moreover the majority of Malays would have to remain on the land, since there were not enough clerical positions for the growing army of aspirants. It was therefore most undesirable to encourage their pressing on towards an English literary education when the result could only be the disappointment of all their hopes. The effects of a literary education in making students averse to manual labour are clearly to be seen in the West; but they are much more obvious in Asia where the prestige

* " The defect in power of accurate expression of which conclusive evidence has been brought to our notice, is not due so much to a deficiency in English as to a deficiency in general mental training. There is much evidence in support of the view that the boys who are taught through the medium of the vernacular until the highest stages of the high school are reached show markedly greater intelligence than those whose earlier education has been more largely conducted through the medium of English. The child begins its mastery of the mother tongue from infancy; it is the medium in which technical mastery is first achieved; it is the medium in which individuality can first show itself and be nursed to strength. We regard a severe training in the use of the mother tongue not as a dangerous rival to training in English, but as the necessary preliminary to such training." (*F.M.S. Annual Report of the Education Department* 1919, p. 11.)

of a sedentary occupation is far higher.* Furthermore a highly industrialized state like Great Britain or the United States requires an infinitely larger number of black-coated workers than the Western dependencies in Asia which are predominantly agricultural. The Department therefore refused to make it too easy for every Malay to proceed to an English school irrespective of his capacity, and instead proposed that, for many, education should be confined to the vernacular schools. "There will always be a large number of Malay children with no aptitude for languages or literary pursuits, whose mental and moral development will depend mainly on the discipline of the village school with the opportunity it provides for studying the 'three R's', benefiting by physical and manual training, and acquiring such rudiments of simple agriculture as will fit them for the free life of that countryside where the happiness and economic interests of their race have lain for centuries."§ The Department also intended to establish trade and agricultural schools as funds became available, and thus provide an alternative to English literary education.

The two objects of the Malay vernacular schools were therefore to give a general and practical education to boys who in later life would be farmers or labourers, and also to lay a sound vernacular foundation on which an English education could be built for those who were qualified to go further. There were no fees, and attendance was compulsory for all Malay boys between seven and fourteen who lived within one and a half miles of a government vernacular school in the Straits Settlements and within two miles in the Federated Malay States. The normal course was four or sometimes five years, the subjects being reading, writing (in both Arabic and the much simpler and more useful romanized script), composition, arithmetic, geography, Malay history, hygiene, drawing, music in some schools, basketry, sometimes carpentry or other handwork,

* A recruit for the Detective Force was formerly required to have a knowledge of English, but in 1931 it was made optional and ability to read and write his own language became compulsory. The reason was that " over 90% of the candidates could neither read nor write any language but English, apart from which, the result of having attained to the V or VI Standard of an English school seemed to be that the candidates deemed it beneath their dignity to perform ordinary barrack fatigues at the Depot, and later when detailed to a Contingent found it quite impossible to consort with anyone who had not an English education like themselves " (*F.M.S. Report on the State of Crime and the Administration of the Police Force for the Year* 1931).

§ In a few schools in Singapore and Penang, English has been added to the curriculum during the last few years for boys who have shown promise in their Malay studies. This is not a departure from the principle that vernacular education should not unsettle the pupils for an agricultural life. Town-dwelling Malays are already divorced from the soil, and English is necessary if they are to do well in urban employment.

gardening, and in practically all schools physical training. The handicraft taught depended upon what was practised in the neighbouring kampongs, and ranged from weaving to soap-making. No deliberate attempt was made to give a vocational training, but the intention was to combine a solid grounding in the three R's with the fostering of an interest in agricultural and village pursuits. The majority of schools acquired playing fields, and sports and the Boy Scout movement were introduced. The Malays proved to be exceedingly keen on these and on physical training. The Malay girls' schools were reorganized in similar fashion; and their curriculum came to include domestic science, needlework and clay modelling. Inspection and control were in charge of the Assistant Director of Malay Vernacular Education, who was appointed in 1916, and the Lady Supervisor of Malay Girls' Schools. Under them came Malay Assistant Inspectors who supervised the Malay-speaking visiting teachers who were in control of districts. Under them again were the group teachers who had charge of the largest school in their area and supervised the smaller ones. By 1930 single-teacher schools were "practically non-existent".[9]

The new style of Malay vernacular teacher was very different to the old. Raising salaries attracted to the profession the most intelligent Malays. Promising pupils were appointed as pupil teachers until the age of sixteen, when those who passed an entrance examination were admitted to the Sultan Idris Training College at Tanjong Malim. The College trained men teachers for the whole of Malaya, the average number of entrants being about 130 a year. The staff was composed of a Principal and two other Europeans, nineteen Malay masters, two teachers of the Koran, a Basketry instructor, a Music master and a European Agricultural instructor. The course lasted three years and took up the subjects of the vernacular curriculum, the Koran and the theory and practice of teaching. The work in agriculture included one hour's farming a day. Attached to the College was the Malay Translation Bureau with a staff of seven translators and two Malay writers. Its work extended beyond the preparation of text books and included the translation of pamphlets for the Medical, Co-operative and other Departments, Boy Scout manuals, and English books which were likely to interest Malays. The language had not a great deal of modern literature, and the aim was gradually to create it. Wisely the translators did not confine themselves to instruction: amongst their translations were such books as *Sherlock Holmes* and *Treasure Island*, and

these have become very popular.[10] To date, the Bureau has printed something over fifty Malay text books and thirty-seven volumes of fiction, travel, music, drama, etc., in the Malay Home Library Series. One has the feeling that the idea is excellent, but that the production of an adequate supply of books in Malay is likely to be a protracted affair, and should be accelerated. The difficulty appears to be that the staff is too small to do this and at the same time translate pamphlets received from the government departments. The training of Malay women teachers for the girls' vernacular schools was finally taken in hand in 1935 by opening a small college at Malacca. The graduates are too few to meet the demand, and, in addition, training classes for young teachers are held at various centres.

Malays usually began their vernacular education about the age of six, and those who wished to go on to an English school were admitted free if they had passed standard IV of the vernacular school before the age of eleven. The Government also provided a number of scholarships which carried with them exemption from fees and free board and lodging for seven years. At the time of entering the English school the Malays knew no English, and were several years older than the Chinese and Indians who began their education at the ages of six or seven. The Malays were given an intensive training in English in a special class wherever possible, which enabled them to overtake the other pupils. The effect of the reforms in vernacular education was shown by the changed attitude of the masters towards them. "Till recently the Principals of English schools dreaded the advent of the average overgrown Malay student, whose intellect had been dulled by years of unintelligent instruction under a village dominie. To-day he welcomes the bright, alert little boy who, given the intensive training in English, can jump to Standard" IV or V in three or four years. Malay graduates of the English schools who had done especially well could obtain a probationership at Kuala Kangsar Malay College, which gave free board and lodging and an annual allowance of $300. Successful graduates could enter the government administrative service with an expectation of promotion into the Malayan Civil Service.[11]

Chinese Vernacular Education

Chinese vernacular education was neither aided nor supervised by Government until after the Great War, and the schools were maintained by missionaries or by the Chinese themselves. Before 1911 the teacher usually had the additional qualifications of being a

doctor, fortune teller and public letter writer; and the children were taught the Chinese classics and a little mathematics. After 1911 many new schools were opened and a modern course of studies gradually superseded the traditional curriculum. A few free schools were financed by charitable persons; but most of these were kept up by Chinese District Societies (for the benefit mainly of children from that particular part of China) or missionaries, or were opened by individuals as a source of livelihood. The majority were managed by a committee, the members of which gave monthly contributions and also solicited subscriptions. With a few exceptions fees of about $2 a month were charged, and after 1923 the Governments of the Colony and the Federated Malay States gave grants-in-aid to approved schools. The medium of instruction after 1920 was Kuo Yu, the modified form of Mandarin which has been adopted as the national language of China. Text books written in Kuo Yu in China were widely adopted, the subjects taught including Kuo Yu, arithmetic, history, geography, general knowledge, nature study and, often, English. There were night schools for English and commercial subjects. Many of the smaller schools gave only the Lower Primary course of four years, others added the Upper Primary course of two years, and a very few gave secondary education. The full primary course lasted six years, but most schools gave merely the first three.

The Registration of Schools Ordinance of 1920 established a certain measure of control, and later amendments amplified the Government's powers. It enacted that all schools with ten or more pupils must be registered and must give the names of the teachers and the members of the committee of management. The Ordinance in its present form empowers the Director of Education to refuse registration if the school premises are insanitary or dangerous, e.g. in case of fire. He may also refuse to register it if there is good reason to believe that it will be used as the meeting place of an unlawful society or for political propaganda detrimental to the interests of the Colony or the Malay States. He may refuse to permit an individual to act as a teacher or as a member of the committee of management and may veto the use of text books which contain seditious and anti-British matter. Registration may be cancelled and the school closed for any of the above reasons; but in all cases there is a right of appeal to the Governor-in-Council, whose decision is final. Periodical inspections are made by health and educational authorities, and supervision is controlled by two Assistant Directors of Education seconded from the Chinese Protectorate, one (since

1924) for the Straits Settlements and the other (since 1931) for the Federated Malay States. The Ordinance was passed because the Kuomintang was beginning the anti-foreign agitation, which during the 'twenties created serious difficulties for the Governments of Malaya, Hong Kong and the Netherlands East Indies. The Government gave assurances that it had no intention of interfering with genuine education, but that it would not permit "teachings manifestly prejudicial to the welfare of the Colony or the British Empire". Part of the Chinese strongly objected to any interference with Kuomintang teachings in the schools. They formed a General Association for Education to organize opposition and intimidate those who were willing to obey the Ordinance. Two representatives were sent to London to protest to the Secretary of State, and letters written *en route* which were intercepted by the police shed a revealing light on the genuineness of the agitation. The deputation planned to start a campaign in the London press on the violent opposition of the Chinese in Malaya and the danger of revolt unless the Ordinance were repealed. "This is meant to impress the authorities and obtain beneficial results". To provide corroborative evidence the General Association for Education was instructed to organize frequent meetings of protest and to see that Reuter's correspondent at Singapore cabled reports to London. "If he refuses to do so then you should try the effect of gold coins." The Secretary of State would then cable the Governor for a report; and the latter must not be able to say that peace reigned in Singapore or the mission to London would fail. The letters went on to draft the "spontaneous" resolutions which were to be passed at the meetings of protest, and wound up by drafting some of the cables which Reuter's correspondent was to send. "The sums of money subscribed for the delegates' expenses can also be published and wired Home by Reuter in some form like the following:—'In spite of the depression of trade such and such a sum of money has been subscribed in Singapore alone to furnish expenses for the delegates to proceed to England to present a petition. This sum includes $2 subscribed by an aged seamstress and $3 from a *sampan* puller.' " The Secretary of State upheld the Ordinance and the General Association for Education was dissolved.[12]

In 1923 the Government adopted the policy of making grants-in-aid to Chinese vernacular schools which complied with regulations prescribing standards of instruction, character of the premises, etc. Many were of too poor a calibre to qualify, and a very large number were unwilling to apply, especially before the Great Depression,

because acceptance of a grant carried with it a stricter measure of control than did the Registration of Schools Ordinance. Under the latter, inspections were less frequent, and there was no attempt to alter the curriculum so long as political propaganda was avoided. There was ample ground for reform in this respect, as well as in the calibre of many of the teachers, and the sanitary condition of the schools often left a good deal to be desired. Some improvement in health was gradually brought about; and in 1924 the Government established at Kuala Lumpur classes for the training of Chinese teachers. They could accommodate only a small fraction of the vernacular teachers in Malaya, and the majority were brought in from China, where they had received their training.

During the 'twenties the Chinese Governments used the schools as one of its instruments of anti-British propaganda. The object was partly to stimulate Chinese patriotism among children born in Malaya as well as those who had emigrated from China, and also to arouse hostility to British rule in Malaya. Extremists went so far as to claim it as the rightful property of the Chinese, since they were much more numerous than the British and more capable than the Malays. The Chinese were exhorted to do their duty in effecting the change of ownership. Many of the teachers were ardent members of the Kuomintang and introduced attacks on the British into courses on civics and geography; and the text books imported from China contained passages attacking British rule. Some schools were founded to spread subversive propaganda, the nominal purpose of education being merely camouflage. In 1928, for example, the Government of the Straits Settlements was compelled to close thirteen adult night schools attended by Hailam (Hainan) Chinese, because of seditious teachings. Certain individuals were forbidden to teach and the more objectionable text books were proscribed. These measures gradually had an effect; and, as in Hong Kong, the growing menace from Japan finally led the Kuomintang to cease attacking Great Britain in order to court her support. In 1932 the two principal publishers of Chinese text books in Shanghai printed a series specially written for Chinese overseas and in Malaya. These books were passed as suitable by the Department of Education and are now in use in the majority of Chinese schools.[13]

Tamil Vernacular Education

Tamil vernacular schools have existed for half a century, the majority being on estates. Others were established by missionary

societies or Tamil religious bodies, or were run for profit by proprietor-teachers, and in the Federated Malay States the Government maintained a few schools for the children of its employees. All were inspected by Government and those which reached a certain standard of efficiency received grants. They were primary schools giving a literary education, although a minority had school gardens. Few pupils completed the full course of six years, which was not surprising, since the estate labourers were to a large extent migratory. One great weakness was the poor calibre of the teachers on most of the estate schools, although of recent years there has been some improvement. Competent and trained teachers had usually to be obtained from Ceylon or India, and few estates were willing to pay a high enough salary to attract them, since, as a rule, the school had only a small number of pupils. The appointment in 1937 of a European Inspector of Tamil Schools with three Tamil Assistant Inspectors should improve the standard of instruction.

English Secondary and Higher Education

The full course of English education in Malaya since the Great War has been eleven years. The average child other than a Malay entered at about six or seven and knew no English. The first two years were spent in Primary I and II in order to study English, which was the language of instruction in the "English schools." Standards I to V, together with the Primary Classes, made up elementary English education. The average pupil completed this stage of his education at about fourteen. Malays entered at the age of ten or eleven, attended the Special Malay Classes I and II where they received an intensive training in English, and were usually ready to enter Standard IV or V three or four years later. Secondary English education comprised Standards VI and VII, the Junior and the School Certificate Classes. Approximately 25 per cent. of the children who entered the Primary Classes passed the School Certificate examination, which was taken at the age of seventeen or eighteen. As a rule, pupils were required to leave school at eighteen, or earlier if they had twice failed to gain promotion to a higher standard. The purpose was to avoid clogging the classes with stupid, over-age boys; but they might be allowed to continue if their failure had not been due to incapacity.[14] Until a few years ago the text-books were usually those used in Great Britain; but books well adapted to local needs have been in process of production. Moderate fees were charged in government and aided schools, but

about 10 per cent. of the pupils received a free education through scholarships or the remission of fees to poor and promising students. In 1926 the number of these in the Straits Settlements was 3,122 out of the 21,741 pupils in the English schools.[15]

The curriculum was of the usual literary type, though manual training was sometimes included and a few secondary schools had science laboratories. Kindergarten and infant classes have been developed during the past decade. Careful attention was paid to physical education, which was in charge of the Superintendent of Physical Education, most schools had playgrounds, and there were a number of Boy Scout troops and Cadet Corps. Medical inspection was begun in Singapore in 1914, but fell into abeyance owing to the shortage of staff caused by the War. It was then resumed and, subsequently, dental and optical work were introduced.[16] In 1891 the Cambridge Junior and School Certificate Examinations were adopted for Malayan secondary schools. They were drawn up to meet conditions in Great Britain, but in 1916 and 1919 special syllabuses laying down the courses of study for the School and Junior Certificate Examinations, respectively, were framed to meet Malayan requirements. These modifications removed many of the unsuitable requirements of the original examinations, e.g. candidates were allowed to offer Tropical Hygiene and to substitute Malay for French or Latin as a compulsory language. In spite of these changes the complaint was made periodically in the Legislative Council that the Cambridge examinations were moulding Malayan English education to an unsuitable model, since they were primarily designed to fit the requirements of university education of a literary type in Great Britain. The critics demanded that the Malayan Education Department should set its own examinations and standards. Mr. Ormsby Gore, the Secretary of State for the Colonies, condemned the Cambridge examinations, as a result of his visit in 1928. The examinations were strongly supported by the teachers in Malaya on the ground that the adoption of the Cambridge examinations and standards had led to a higher level of scholarship. They also considered that the changes in the Cambridge syllabuses had adapted the examinations successfully to local requirements. This has been especially true since the Cambridge Board of Examiners established an Overseas Committee in 1930. The Asiatic population have also been very strongly attached to the Cambridge certificates, and would regard a local substitute as a very inferior economic article.

The opening of Raffles College at Singapore in 1928 provided a

higher education in arts and sciences for Malaya. Previously, students wishing for a university education had had to go to Hong Kong or to Great Britain. The Governments of the Colony and the Federated Malay States had awarded annually four Queen's Scholarships, one of which was reserved for Malays, for students who wished to proceed to an English university. The foundation of the College was first proposed by a committee appointed to draw up plans for a permanent memorial to commemorate the centenary of Singapore in 1919. The Legislative Council of the Straits Settlements agreed to donate the site, to grant $1,000,000 towards the cost of the buildings, and to make an annual grant of $50,000 if $2,000,000 could be raised by public subscription and by gifts from the Malay States. Some of the Malay States also made annual grants towards the cost of maintenance. After the requisite sum was collected a competition was opened for architects' designs, and building was begun in 1924. The staff, most of whom are Europeans, has increased to thirteen, and the number of students has grown from forty-two in 1928 to 211 in 1938. A three-years' course is given, leading to a diploma, the curriculum including English, history, mathematics, chemistry, physics, geography and economics. A fourth-year post-graduate course is offered in Education for those who wish to teach in the English schools.

Evening classes have been held in the principal towns of the Colony and the Federated Malay States for about twenty years, many of the students being clerks in government offices or business firms who took courses in book-keeping and other commercial subjects. With a few exceptions the day schools did not provide education of this type. There were also evening classes in engineering, surveying, building construction, telegraphy and telephony. By 1937 commercial departments giving a complete training had been added to one government and two aided day schools, and in addition there was the Government Commercial Day School established at Penang in 1928. Some other schools gave a partial commercial training, in addition to their normal curriculum. There were also four private commercial schools in Singapore and six in the Federated Malay States.[17]

Technical Education

Technical education has been of recent development in Malaya, apart from the limited amount given in the evening classes, and the Technical School at Kuala Lumpur for training the subordinate

staff of the Railway, Public Works, Survey, and Post and Telegraph Departments as surveyors, draughtsmen, foremen, etc. Originally established in 1906, it had little success in attracting pupils, save in the field of surveying, owing to the superior attractions of clerical work. It was closed in 1914, reopened for its original purpose in 1924, and in 1931 was transferred to the Department of Education. Since that date it has also accepted private students who intended to enter commercial employment. Of the eighty-three full-time students in 1937 sixty-three were training for government service and the remainder for private firms. After 1918 the Departments of Agriculture and Forestry established schools for training their Asiatic subordinates. All three schools, however, existed for a specialized purpose and none of them was intended to give the public at large a technical education. This was not due to indifference, for the Government of the Straits Settlements had appointed commissions to investigate the desirability of establishing a technical school in 1902 and again in 1917. Each of these advised against it on the ground that there was insufficient demand, owing to the general desire to obtain clerkships. In 1918 a similar commission which was set up in the Federated Malay States, advised the establishment of Trade Schools to train skilled mechanics. It is interesting to note that the only member with practical experience of Malayan education dissented from the recommendations of his four colleagues. He was the headmaster of one of the leading schools, and in his opinion "there is at present no desire . . . for technical or industrial education. Higher pay for technical careers will not attract them and they will still prefer to dress like the *Tuan* [European] and keep their hands and clothes clean". To some extent he considered that this state of mind was due to the existing form of education, which had been "altogether too literary, with the sole object of passing examinations. . . . Education in the mind of an average oriental means literary education and nothing else, and our system or want of system has pandered to this characteristic weakness instead of assisting to overcome it". He advised that evening classes would meet any demand which existed. In the face of all these adverse reports it is not surprising that nothing was done beyond the establishment of evening classes and of the various schools, already mentioned, for training departmental subordinates.[18]

Preference for clerical work and the literary form of education were not the only reasons for the lack of desire for technical training. In the past an English literary education had been a vocational

training. There had been a shortage of clerks and a boy with a Cambridge or even a Standard VII Certificate was assured of a clerical post for life, often at a higher salary than a mechanic received. By the end of the 'twenties, however, supply and demand had become approximately equal, and the more far-sighted began to realize that a surplus would be created unless the ever-growing demand for English literary education could be diverted into other channels. This would not be easy, for very few of the boys or their parents realized that conditions were changing. To make the situation worse, private so-called "English schools" which were run solely for profit were beginning to seize the opportunity. Their instruction was usually poor, and many of their pupils were boys who had been rejected by government and aided schools because they were over-age, stupid, or lazy.[19] In 1926 the Government of the Straits Settlements appointed another committee of inquiry and received an interesting but discouraging analysis of the situation. The committee considered the root of the trouble was the amazing prosperity which Malaya had enjoyed through tin and rubber. This created so many openings, that the Straits-born children of immigrant labourers did not have to follow their fathers' calling, as in most parts of the world. "We fear that it is only too true that many of the youth of this country have a genuine distaste for hard and continuous manual labour and that only necessity will compel them to realize that all cannot find employment in small businesses or in clerical service." For the first time they were faced with unemployment; but they did not understand that the halcyon days were over, and as yet "the great majority of the youth of the country have no desire for technical training". A further difficulty was that the number of openings for technically trained men was limited, since the principal need of the country was unskilled manual labour, which was supplied by the Chinese and Indian immigrants. A similar situation existed in Ceylon, Java, and other tropical dependencies where the prevailing industries were agriculture and mining, and manufacturing was only slightly developed. In all of them the demand for, e.g. skilled mechanics was comparatively small, and too great a development of technical education would in time produce a class of unemployed artisans in place of out-of-work clerks. The Dutch East Indies, for example, had only 1,440 pupils in Trade Schools in 1924. Another obstacle in Malaya was that most of the skilled workmen were Chinese, so that Malays or Indians had little chance of obtaining employment. Even Straits-born Chinese

would find it difficult unless they were hereditary members of one of the craft guilds. The committee therefore advised against the establishment of a Trade School and urged that a school of agriculture was "the most important educational need of the moment".[20]

The Government of the Federated Malay States established a Trade School at Kuala Lumpur in 1926, which gave a three-years' training for fitters and motor mechanics. A tailoring section was added in 1935, and also classes in English, since employers demanded a knowledge of it. Malay applicants for admission were given preference and Malay was the medium of instruction. In 1937 102 out of 107 pupils were Malays, and most of them received free education and a subsistence allowance. Out of 227 graduates of the school 221 have found employment, many of them in government posts. A similar Trade School, but without a tailoring section, was opened at Ipoh in 1930. Preference was given to Malays, who numbered fifty-seven of the seventy-five pupils in 1937, and all boys received a subsistence allowance. It was then decided to keep half the vacancies for applicants of other races. A third Trade School giving a three-years' course in carpentry and cabinet-making was opened at Bagan Serai in 1926. All the boys, thirty-four in 1937, were drawn from Malay schools and no fees were charged. The purpose was to give the adjacent padi growers a trade which they could follow during the months of enforced idleness which are inseparable from rice cultivation. A similar Malay school of carpentry was opened in 1930 at Rembau, but closed in 1935 because of the poor attendance. The Government of the Straits Settlements had decided to await the result of the experiments in the Federated Malay States. The degree of success achieved, together with the growing scarcity of clerical employment caused by the depression, led to the establishment of trade schools at Singapore in 1930 and Penang in 1931. All entrants were required to speak reasonably good English and many held the Junior Cambridge Certificate. Applications exceeded vacancies, and in 1937 122 were enrolled at the school in Singapore and seventy-six at Penang, the majority being Chinese. The monthly fee was $3, which was remitted for needy students. Each school gave three-year courses in plumbing, electrical work and general mechanics (which included blacksmith's work, machine-shop practice, and motor mechanics). As in all the Malayan Trade Schools, the standard of skill of the graduates has proved to be extremely high, and they have found employment with European firms, the Municipalities and the Government.[21] As late as 1937,

however, the schools found it impossible to place any of their graduates with Chinese firms, which continued to recruit artisans from amongst the immigrant Chinese. If this condition continues it will materially hamper the development of vocational education in Malaya, since most of the small factories are Chinese. Trade schools for carpentry, tailoring, and English were later established at Malacca and Johore Bharu, Malay being the medium of instruction. The former has been open to boys of all races, but in 1937 thirty-five out of the forty-five pupils were Malays.

An agricultural school was opened in 1931 at Serdang near Kuala Lumpur. There had long been serious need for it, to train the Asiatic subordinates of the Department of Agriculture. They were previously compelled to pick up their knowledge after they had been appointed, although this unsatisfactory situation was somewhat improved after 1924 by the appointment of a European Agricultural Instructor. In 1927 a committee advised the building of an agricultural school and construction began in 1928, the Governments of the Federated Malay States and the Colony both contributing to the cost. The school gave two varieties of instruction, one of three years (later reduced to two as an economy during the depression) conducted in English and the other of one year in Malay. The former gave a sound general training in Malayan agriculture, which prepared the students for positions as subordinates in the Department of Agriculture or as assistant managers on estates. In addition to lectures, the students spent several hours a day in practical work on the large Experiment Station attached to the school. Entrants were required to have the Cambridge School Certificate, Malays being given preference and numbering rather less than half the total. The majority of them held scholarships and had been appointed as probationers in the agricultural services of the Federated or Unfederated Malay States. The private students were usually the sons of well-to-do Chinese. The one-year course gave an elementary training, both practical and theoretical. Entrants must have passed the highest standard of a Malay vernacular, or Standard V of an English, school. The majority of the pupils were Malays, and a few of them might hope to obtain minor posts in the agricultural departments. Most of them, however, were the sons of prosperous Malay cultivators owning fifty to 100 acres, whose object was to improve the management of their fathers' land.* In 1937 there were sixty-

* The subjects in the two-year course were Agronomy, Chemistry and Physics, Botany, Agricultural Zoology, Mycology, Animal Husbandry and Veterinary Science,

eight students in the two-year and twenty-four in the one-year course. Refresher courses were given during the vacations to agricultural subordinate officers. There were two European and three Malay instructors, who, in addition to their work at the college, carried on research in poultry farming. They have become staunch supporters of the native Canton hen, who, they maintain, is a much misunderstood female capable of great improvement! In 1935 a farm school was opened at the agricultural experiment station in Malacca Territory, giving a one-year course similar to that at Serdang. The pupils were Malays, but another farm school opened in 1936 at Penang was intended principally for the sons of Chinese small holders.[22]

Some of the schools have now been in operation long enough to enable tentative conclusions to be hazarded as to the prospects of employment of the graduates. A disappointingly high percentage do not intend to manage their own land, but want positions under Government or on estates. Here the experience tallies with that of the agricultural schools in Java and the Philippines. The agricultural departments are now pretty fully staffed so that the number of openings in them is declining. There is, however, a considerable field of employment as Conductors on Asiatic and European estates. These are really the successors of the expensive pre-depression European Assistant Managers, who are being replaced by Asiatics as a measure of economy. Chinese graduates find employment on Chinese and European estates; but European planters have proved unwilling to appoint Malays, owing to their traditional reputation as lotus-eaters. The experience at Serdang has been that good Malay students can hold their own with the best of the Chinese, although it should be added that most of the Malays are picked men, government probationers, while most of the Chinese are private students whose fathers can afford the fees.

Problems of Malayan Education

A political and racial storm was raised in the early 'thirties by Governor Sir Cecil Clementi's announcement that changes would be made in educational policy. The monthly fees charged in government and aided English schools were to be revised. Since 1926 they had been $2.50 a month for boys and $2.00 for girls up to Standard IV, and $4.00 for boys and $3.00 for girls in Standard V

Estate Sanitation and Hygiene, Surveying, Estate Recording, Agricultural Economics, and English. Pupils in the one-year course were taught Nature and Animal Study, Principles of Agriculture, Field Crops, Geography, Arithmetic, and Office Routine.

and upwards. The new scale would be $3.00 a month for boys and girls up to Standard VI, and from $6.00 to $9.00 in Standard VII and upwards. The reason for lowering the fees in Standards V and VI was that they really belonged in the primary division of English education. The purpose was to prepare pupils who intended to continue with the secondary English education given in the higher standards. It was also intended to provide a complete elementary education for those whose education would cease at that point, or who would then enter a trade school. The new fees would apply only to pupils entering after 1st January, 1934, and existing pupils would continue to pay the former amounts. The Governor stated that his policy was "to supply a sound primary education in the Malay Vernacular and at as cheap a rate as possible in English" in the primary division. Although it was "generally admitted that it is a duty of Government to provide a reasonably good primary education at a nominal cost, it is rarely maintained that Government is similarly bound to provide secondary education at a mere fraction of its cost, as it does in this Colony at present". Ultimately the full cost should perhaps be borne by the parents.* Boys who wished for a clerical career had found it necessary to continue until they passed their Certificate examination; and the raising of fees for these standards was most unpopular with the large and growing number of parents who aspired to give their sons a literary education for this purpose. To some extent the new policy was due to the urgent need for economy: educational expenditure had expanded greatly during the 'twenties, and owing to the depression a strong demand arose that the Government should economize. Sir Cecil Clementi was also troubled by the appearance for the first time of a small surplus of Western-educated unemployed clerks; and he felt that "it is idle to educate youths up to Cambridge School Certificate standard mainly at the public cost, if there is no prospect of employment for them".§ The universal experience was that the literary

* In 1931 the average cost of each male pupil in the Government secondary English schools was $18.49 a month, and in the primary and secondary English schools combined $9.99 (*F.M.S. Annual Report of the Department of Education, 1932*, p 98).

§ In 1933 the Raja Muda of Perak advised the Government to develop technical rather than English literary education. The State Secretariat of Perak had received 1,065 applications for Government posts from English-speaking Malays, and the number was steadily increasing. "I feel rather alarmed because I know, Sir, that most of these 1,000 applicants have no hope whatsoever of getting appointments in the Government service. . . . What is worse is that, as I am perfectly aware, kampong life does no longer appeal to them. I have come across scores of cases in which English-speaking Malays would not go back to their kampong, to live with their parents and help them at their ancestral work." (*Proceedings of the Federal Council of the F.M.S., 1933*, p. B 147.)

educated unemployed refused to undertake manual labour,[1] and economic distress led naturally to political discontent. India with its army of "failed B.A.s" showed the malady in an advanced stage, while Egypt and Ceylon presented the same problem on a smaller scale. By a curious coincidence Colonel Roosevelt, formerly Governor-General of the Philippines, visited Singapore in 1933 and made a speech condemning the fetish of secondary English education for all. He pointed out that the result in the Philippines had been the over-production of literary educated Filipinos and the creation as in India of an intellectual proletariat.* The policy which he advocated for the Philippines was similar to that which Sir Cecil Clementi wished to introduce into Malaya. Its essentials were primary education free and secondary and university education at the expense of the students.[23]

The new scale of fees in English schools might not have aroused so much hostility if it had not been combined with the announcement of a new policy towards vernacular education. Vernacular schools already in receipt of grants might continue to receive them, but no assistance would be given to new applicants. This particularly affected the Chinese schools, the majority of which had been unwilling prior to the depression to apply for grants.§ Sir Cecil Clementi believed that the children of Chinese living permanently in Malaya should be taught to regard the Peninsula and not China as their native country and should develop a Malayan patriotism. To this end there must be a common language, and this could only be Malay, "which in fact is already the *lingua franca* of the country". The Government must therefore "provide free primary education in the Malay language for all children whose parents are domiciled either in the Colony or in the Malay States". The Chinese regarded the refusal of further grants to their vernacular schools as an indirect attempt to compel them to learn Malay. They protested that it might be the *lingua franca* of the country, but that culturally it had little to offer. From the material point of view English was essential

* Many graduates of Philippine secondary schools are forced to take a minor clerkship at 20 pesos (£2) a month, while the manual labourer in Manila receives one peso (2*s.*) a day. Lawyers and B.A.s can aspire to a superior clerkship at 40 to 60 pesos (£4 to £6) a month. This is almost as much as the wages of a good chauffeur who may earn 60 pesos monthly together with his board and room. When rubber restriction was introduced in Ceylon the Government advertised for 200 English-speaking clerks. The employment would last two months, the hours were eighteen a day, the pay was 30 rupees (£2) a month; and there were 2,000 applicants.

§ In 1929, only fifteen out of the 332 Chinese vernacular schools in the Straits Settlements applied for grants. (*Proceedings of the Legislative Council of the S.S., 1930*, p. B 177)

for clerks and increasingly necessary for artisans. Malay was adequate only for small holders who did not aspire to a career in the towns. The Chinese also accused the Government of favouritism towards the Malays: they alone received a free, compulsory vernacular education, those who were proficient were exempted from paying fees in the English schools and some received scholarships in addition. In point of fact the number of Chinese whose fees were remitted on grounds of poverty and ability was about as large as that of the Malays. The Chinese demanded that the Government subsidize their vernacular schools, and that an elementary education in English be provided "free or at a nominal cost". The Malays were angered at the attacks on their language as "foreign and useless", and at statements that the Straits Chinese would not intermarry with them because the children would be "degenerate and worthless hybrids".[24]

The status of the Chinese born in Malaya was a very important factor in the situation. Straits Chinese born in the Colony were British subjects by birth, but in the Malay States they were British-protected persons. While the Straits Settlements were British territory the Malay States were protectorates where sovereign power was vested in the Sultans, even though in practice authority was largely in the hands of British officials. Chinese born in a Malay State were therefore subjects of the Sultan, a position which they refused to accept since they regarded the Malays as inferiors and wished to be British subjects. Sir Cecil Clementi held that the Chinese must accept the situation since they had chosen to emigrate to the Malay States, and that the only way to weld together the various races of the Peninsula was to develop a common Malayan patriotism. Malay was chosen as the common vernacular because it was the national language of the Malay States which made up the bulk of Malaya. The root of the trouble was that at bottom Malays and Chinese despised each other, even though hitherto they had got along together amicably. Conditions had begun insensibly to change: the Chinese had been growing more nationalistic under the influence of the Kuomintang and a few were beginning to demand appointment to the Malayan Administrative Service. They felt contempt for the Malays because they were less efficient and hard working. On the other hand the Malays considered that they were the people of the country and that the Chinese were immigrants who had been able to enter only because of British protection. A few of them were beginning to realize that the immigrant was in a

fair way to become the economic master of the original inhabitant.* The Governor's educational policy helped to aggravate the incipient ill-feeling between the races and bring it into the open. To some extent also it made the Chinese feel that the Government was unduly favourable to the Malays, and this aroused a certain amount of apprehension as to the Chinese position in Malaya and of ill-will towards British rule.

Refusal of grants to the vernacular schools would not have led to their disappearance: the Chinese would still have insisted that their children learn their native language. Apart from arousing discontent the policy would have facilitated Kuomintang propaganda, since experience had shown that a grant enabled the Department of Education to exert much more effective supervision than the Registration of Schools Ordinance alone. Inspection was more frequent, whereas, if a school were merely registered, it was inspected at most twice a year owing to the limited staff of the Department. Moreover, a private school which had received a grant was very loath to jeopardize an assured income. Now that falling revenue due to the depression had made the Chinese schools more anxious to receive help, it would have been wiser to encourage the new tendency. It would also have been in the interests of the children if, as there is reason to believe, the majority of Straits Chinese speak Chinese in their own homes. There are conflicting opinions on the subject, and the language seems to vary among different sections of the community. In Malacca, where some families have been settled for centuries, it is Malay; and the Chinese Christians speak English. In Penang the Chinese speak Chinese at home, and in Singapore Chinese or sometimes Malay (with a tendency for English to replace Malay in the younger generation owing to the growing number of women who have received an English education). In the Federated Malay States the language usually spoken is Chinese. The general rule is that the more recently a family has settled in Malaya the more likely it is to use Chinese. Chinese, like Malay, parents would prefer their children to begin learning English as early as possible. Their real interests would best be served if, like the Malays, they received their primary education in their native tongue and only thereafter

* Occasional speeches of Malay members of the Legislative Council are one indication of the changing attitude. In 1929, for example, a Malay member attacked the refusal to teach English, "the bread-earning language of Malaya," in the Malay vernacular schools as a proof that the real policy of Government was to train the boys "how not to get employment . . . to make room for outsiders". (*Proceedings of the Legislative Council of the S.S., 1929*, pp. B 150–B 151.)

went on to an English school. Many of the Chinese schools were of poor quality because they were underfinanced; and grants would enable them to improve the calibre of the teachers and the instruction.

The Government decided in 1935 that grants would be made to all Chinese vernacular schools which applied for them if the standards of instruction, etc., conformed to the requirements of the Department of Education. The policy has also been abandoned of discouraging the teaching of English, and, instead, Chinese schools are encouraged to teach simple English, which will be of economic value to the pupils. The standard is in general very low, but to encourage improvement a larger grant is paid to schools which teach it with reasonable efficiency and employ for that purpose a teacher holding the Junior Cambridge certificate.[25] In 1937 grants were given to 268 of the better schools out of the 914 in the Straits Settlements and the Federated Malay States. They were attended by 36,473 pupils out of the total number of 77,558 enrolled. Kuomintang influence continues to be strong, but it no longer uses the schools as centres of anti-British propaganda. Nevertheless they serve a nationalistic as well as an educational purpose. One object of the teaching is to foster the Chinese patriotism of the pupils and to cause them to regard China and not Malaya as their native country. It has always been part of the Kuomintang policy to make the Chinese living abroad look upon themselves as natives of China and not of the country where they are living, even though very often they have never seen their country of ultimate origin. In the Federated Malay States 87 per cent. of the children attending Chinese vernacular schools in 1937 were born in Malaya. One is reminded of the policy of the Fascist Government in organizing and fostering Italian patriotism among the Italian settlers in Tunis, some of whom, like the Chinese in Malaya, are of the second or third generation born in the dependency. The British Government is attempting to control this use of the schools, by more frequent inspection and the substitution of Malayan text books for those with a Chinese bias.

Sir Cecil Clementi's education policy could be criticized on several grounds; but he was entirely correct in his warning that a Western literary education was one of the most perfect instruments ever devised to make a boy thoroughly averse to manual labour. At the same time a knowledge of English is becoming necessary in the towns for artisans as well as clerks: a workman who is ignorant of it finds it increasingly difficult to rise very far above the employment

of a coolie. It is unnecessary for a cultivator, and is also undesirable, since even a small knowledge of it makes the village boy unwilling to remain on the land and brings him into the towns. Broadly speaking, the problem of language is geographic; but at the same time it would be unfair to penalize the clever and ambitious country boy by depriving him of the opportunity of obtaining an English education. The embattled parents of the kampongs would also have to be reckoned with. Perhaps the best way of dealing with this phase of the problem is by a continuance of the existing system of remitting fees and in some cases awarding scholarships to clever Malay boys who wish to receive an English education. The same benefit might be extended to Tamils and Chinese who have passed the corresponding standard of their vernacular schools at a comparable age. Free English education for promising students, however, is no solution of the problem of literary education. Raising the fees to restrict the number of pupils rouses strong hostility and is ineffective. It has been found that to pay the higher fees some parents have reduced their children's food, with the usual consequences of under-nourishment. Also the Dutch experience has been that a whole family will invest in the prospects of a clever boy by clubbing together to pay his fees and drawing their dividends from his salary when he has completed his education and obtained his appointment. Another suggested remedy is to stiffen the examinations for promotion from one standard to another. The obstacle here is the existence of the private, unaided English schools which had nearly 14,000 pupils in 1937. With a few exceptions they are run for profit and will take any boys who can pay their fees. They recruit from those who for any reason cannot enter a government or aided school, or who are dismissed because they are stupid or over age. Their product is the half-trained clerk, who is the last to be employed, and the first to be dismissed. The unemployed clerks of the early 'thirties were of this class, together with the failures of the government and aided schools. So far as political discontent existed in Malaya it was very largely confined to this small group who formed the intellectual proletariat. Unfit to be clerks, they refused to take up any other employment and were discontented because they were unable to obtain a position for which they were not qualified. On the other hand the demand for clerks who had obtained their School Certificate and had also had some business training exceeded the supply. So long as the parents fail to realize that to pay for an indifferent English education is a waste of money,

the private schools will continue to swell the number of badly trained clerks. In the interests of the children one is inclined to wonder whether government control of private enterprise might perhaps be extended from the business to the educational world. The seller of adulterated food is prosecuted, but the man who purveys a useless training under the misleading label of English literary education is allowed to make his profit as long as he can inveigle gulls into his school. Still another suggestion is that all children should be taught English, since universality would destroy its financial value, which depends upon its rarity. The experience of the Philippines disproved the practicability of this remedy. The Islands spend 18.45 per cent. of their annual revenue on English education, and, even so, the government and private schools together provided for only 38.43 per cent. of the children of school age in 1935.[26] More than twice the present expenditure would be needed to educate the whole school population; and the result would either be a drastic reduction in medical and other services or an equally startling increase in taxation. The expense in fact should be far higher even than this, for if the children are to speak English correctly and fluently they must be taught by English teachers, whose salaries have to be much more than those of Asiatics. In the Philippines the teachers are very largely Filipinos, and the linguistic abilities of their pupils too often leave a very great deal to be desired. And finally the widespread knowledge of English has not impaired the Filipino thirst for literary education, but seems rather to have accentuated it.

The Dutch have the same problem of a growing Javanese demand for a Dutch literary education. A small intellectual proletariat existed prior to 1929 and grew in size owing to the fall in employment. It was not a serious cause of political unrest, but the Government determined to keep it from increasing by restricting the number permitted to have a Western education. There are two separate systems, the vernacular for the bulk of the Javanese, and the Dutch language schools for the Dutch, the Eurasians and a limited number of Chinese and Javanese. Promising pupils who have spent three years in the vernacular school may apply for entrance into a Link School, of which there were about sixty, with 5,000 students, in 1934. These schools were created in 1921 to bridge the gap between the vernacular and the Dutch educational systems. The course lasts five years and the graduates can go on to the Mulo school which prepares pupils for more advanced secondary and higher education

in Dutch. The Mulo School is the essential point in the transition from vernacular to Dutch education. It is not enough for a candidate to have had a good record in his previous schools. His parents must also have a monthly income of fifty guilders (about £6 12s.), which is rather high for Java and is liable to income tax. Parents are therefore unlikely to exaggerate the amount of their income in order to meet the requirements for admission. Boys whose fathers lack the necessary income but who are otherwise eligible are admitted to the Mulo School if there are any vacant places after the admission of those who are properly qualified. The result of the fifty guilders requirement is that only a few thousand Asiatics receive a Dutch secondary education, the majority being the children of Javanese government officials and of aristocratic families. The Dutch defend the financial qualification by saying that previous scholastic success alone is not a sufficient barrier to dam the flood of would-be clerks. The cost of giving a Dutch education to all who want it is prohibitive, and it is still more impossible to find them sedentary employment in a predominantly agricultural country. It is better not to let them become unsettled by a Western literary education which turns them against village life. The policy is therefore vernacular education for the vast majority and Dutch education for the leaders, a high proportion of whom will enter government service. This accords with the aristocratic traditions of the Javanese who, like the Malays, have great respect for high birth. The private Dutch school complicates the problem as it does in Malaya. Especially since the Great Depression many Western-educated Asiatics have established them in default of other employment. The teachers and methods of instruction are poor and the graduates are of the same type as those produced by similar schools in Malaya. The Dutch feel that there is a danger that the competition of these schools may compel them to alter their policy and increase the number of government schools. They are therefore trying to improve them by requiring their teachers to have higher qualifications and possibly by giving them grants.

The latest method adopted in Malaya for dealing with the demand for a literary education has been to lower the fees for primary English education to their former amount and to retain Clementi's enhanced fees for secondary education. As from 1st January, 1938, the monthly fee for each pupil up to and including Standard VI was reduced to $2.50, and for the higher classes it remains at $6.00 and $9.00. Not less than 50 per cent. of the pupils selected in

order of merit pay the lower fee and the others the higher.[27] A primary English education is given at a moderate cost, and this is as much as a boy requires if he intends to be an artisan. The pupil completes this stage of his education at fourteen or fifteen. The higher fees for secondary English education compel the parents to decide whether they will pay the heavier cost of a literary education in preparation for a clerkship, transfer their sons to a vocational school, or terminate their education. The Government is proposing that some of the English secondary schools should be strongly developed on the vocational side. In addition to a certain amount of literary education they would give a preliminary vocational training, and the graduates could go on to the Technical School at Kuala Lumpur. They would resemble the Junior Technical Schools which have been very successful in Great Britain.[28] A Director of Vocational Training has recently been appointed to expand and co-ordinate that branch. The Government has also tried to popularize vocational education and show that it has as much prestige as the older literary type, by employing as many as possible of the graduates. It is far too early to predict the result of the Malayan attempt to divert pupils from the traditional form of English education. So far, applications for admission to the vocational schools have exceeded vacancies. It is also encouraging that Chinese and Malays seem to be less wedded to a literary education than Indians. Undoubtedly they would rather be clerks, but apparently they prefer an assured livelihood even if it involves manual work and less social prestige. There are signs that parents are beginning to realize that knowledge of a trade carries more certain prospects of employment than a literary education.

In 1937 there were fifty-one government and fifty-eight aided English schools in the Straits Settlements and the Federated Malay States, with an average enrolment of 43,281, of whom 13,654 were girls. About 60 per cent. of the pupils were in aided schools; and out of the total number enrolled, 5,971 received a free English education, of whom 2,645 were Malays and 2,018 Chinese. Private unaided English schools in Malaya numbered about 141, with an enrolment of 13,713, of whom 3,544 were girls. A minority, like the three private hill-schools for Europeans, had European teachers and a high standard of work; but the majority were of the sort already described. The government Malay vernacular schools in the Straits Settlements and the Federated Malay States numbered 654, with 68,905 pupils, of whom 12,389 were girls. Chinese verna-

cular schools in the Colony and the Federated Malay States numbered about 933, with 79,993 pupils, of whom 21,465 were girls. Two were government schools, with an enrolment of 335, and all the rest were mission, Chinese charitable, or private Chinese schools. The majority of the Tamil vernacular schools were on estates, although a few were government or mission schools and a somewhat larger number were private. The total was 552, with 22,695 pupils, of whom 7,854 were girls. Altogether there were 228,587 pupils enrolled in the schools, of whom the 58,906 girls made up only a quarter. Figures based on the percentage of the population of school age receiving an education are of rather doubtful value, because the number altered considerably since the census of 1931 stated that there were 531,364 children between the ages of five and fourteen. On this basis about 43 per cent. of the children in the Straits Settlements and Federated Malay States were receiving an education. The Department of Education regards the school population as comprising the children between five and nineteen years of age, which may perhaps be characterised as an ideal, but certainly is far beyond the financially attainable, not only in Malaya but also in Great Britain itself. However, if this standard be adopted, 245,023 out of the 712,606 children of school age were attending school, or 34.3 per cent. Exact comparison with the Philippines cannot be made, since the Department of Education there considers the school age to be from six to seventeen; but on that basis the percentage attending school in 1935 was 38.43 per cent.[29] Vandenbosch has the following comment on the situation in the Netherlands East Indies: "If the goal is the provision of the entire East Indian population with a three-year school type, 30 per cent. of the task has been accomplished; if the goal is a general six-year school type, 20 per cent.; and if the objective is a seven-year school type, the East Indian government has only achieved 15 per cent. of its stupendous task."[30] In addition to the Malayan statistics already given there were in 1937 2,995 students in the trade, technical and commercial schools, the evening classes and the teachers' training colleges. Higher education was represented by Raffles College with 157 students, the Medical College with 180 and the School of Agriculture with ninety-two.[31]

Malayan secondary and higher education was examined in 1939 by a Commission of Inquiry.[32] The members reported that the subjects studied were adapted to Malayan needs, but that "altogether too much emphasis is laid on theoretical teaching and too

little attention is given to the use of the hands". They advised that wood and metal working should be added to the curriculum and inexpensive laboratories built for elementary work in general science. They considered that the Cambridge Syndicate had been "a most enlightened examining body" in the adaptations to Malayan requirements which it had introduced into its examination syllabus, and that "much benefit to school education in Malaya has resulted". They found, however, that some of the teachers regarded the School Certificate as the goal of education and thought that their duty was not to educate but to cram.* Old examination papers were scientifically studied to determine the most likely questions, and the perfect answer was dictated in a note which the pupils learned by heart, along with the exact words of the question. Which recalls an actual incident when a Chinese pupil who had passed with flying colours was asked the identical questions in different words. The result of varying the set formula was that she could not understand the questions, let alone answer them. The evil effects of this method of teaching were aggravated by the unfortunate gift for memorizing possessed by Asiatic students, and by their desire for the Certificate as the Open Sesame to a clerical position and not for an education. The Commission also found that the spoken English of the pupils was frequently poor. One reason was that only a small percentage heard English spoken in their own homes, and, also, the majority of the teachers were Asiatics who themselves spoke the language imperfectly. A third cause was that oral English received no marks in the certificate examination and wrong pronunciations were left uncorrected, because it would take time from the really important work of grooming the pupils for subjects that carried marks. Incidentally this criticism does not apply to all English schools: in the Victoria School in Singapore, for example, the principal purpose of each lesson is to make the boys learn the meaning and pronunciation of the English words used and only secondarily the facts of the subject itself.§ The pupils have shown remarkable improvement in

* This is an old story in Malayan education. In 1928, for example, school inspectors were warned to pay special attention to "the fluency, accent, and pronunciation of the pupils" and to combat "the grave and lamentable tendency to work solely for written examinations". They must try to stop the "use of cribs and books of notes" since "only by these means can unintelligent memorizing from textbooks which is the curse of Oriental educational systems be discouraged". (*Suggestions for Inspectors, Principals, and Staffs of English Schools in the S.S. and F.M.S., 1928*, p. 2.)

§ One method used in English Composition, for example, is for several boys to draw any pictures they choose upon the blackboard. Other boys then tell an *extempore* story taking in all the pictures, and to copy one another breaks the rules of the game. Instead of the old method of memorizing lists of names and places, pictures are used extensively to illustrate the meaning.

their ability to speak English, and the method is being adopted in other schools.

The Commission considered that it would be premature to raise Raffles College to the rank of a university. The standard attained by the students had improved since its foundation, but it was still "much below that necessary for the B.A. or B.Sc. General Degree in a British university". Owing to the methods of teaching in the English schools the students who entered the College had been taught to memorize and not to think, and they frequently had difficulty in understanding the lectures which were given in English. "The primary need is an improvement in the standard of the student on admission." A preliminary-year of liberal education for new students should be added to the curriculum, and only those should be admitted to the subsequent three-years' course who passed a special examination intended to determine intellectual maturity and not ability to memorize. Other suggestions were made for improving the College, such as the establishment of professorships of Malay and Chinese studies. The advisability of giving Raffles College the rank of a university should be reviewed in ten years in the light of the progress made during the interim. Meanwhile a University College should be created by amalgamating Raffles College and the King Edward VII College of Medicine. The latter had "arrived much further along the road to a University, for . . . its diploma in Medicine differs not greatly in its standard from that of those awarded by Licensing Bodies in Great Britain, while the aggregate contributions of the members of its staff to knowledge by research command respect". The Commission also made some important observations upon the graduates' prospects of employment. Sixty per cent. of the medical graduates were in government service and 40 per cent. in private practice; and while there were few government appointments in dentistry the existence of 454 unqualified Asiatic dentists in Malaya afforded a promising field for private practice. The Report concluded that there was no risk of over-production at present and that the number annually admitted to the Medical College might even be somewhat increased. The wisdom of limiting the number of entrants is shown by the experience of the Philippines, where a considerable number of doctors and dentists had to find employment as clerks. In Raffles College the number of students was less than the probabilities of employment, when allowance was made for the fact that, to date, 48 per cent. of the entrants had failed to obtain diplomas. The Commission anticipated

a reduction in this high rate of wastage if their recommendations for raising the standard were adopted. In the future as in the past the vast majority must look to the English schools for employment: at the present time all the women and 82 per cent. of the male graduates are teachers. Another 11 per cent. have been appointed to the Government administrative and technical services; but the Commission did not anticipate much increase in the number of vacancies likely to occur. Only 3 per cent. have obtained commercial posts, and there seemed little prospect of additional openings "until the passage of time establishes confidence in the abilities of the graduate of Raffles College for this type of employment". In view of the prospects of employment, the production of English school teachers must continue to be the most important work of the College.

The Malayan educational system has little in common with that of the Philippines, which has no vernacular schools and decidedly over-emphasizes literary education. Especially in recent years, attempts have been made to develop agricultural and vocational training; but the vast majority of Filipinos are still allured by the old goal of a profession or a clerkship. One reason is that literary education had been established for a long time before the attempt was made to divert pupils to more practical forms of training. By that time the habit had been formed of taking the older and, to the Asiatic, more attractive path. The lesson for Malaya would seem to be that it was well advised not to postpone its trade and agricultural schools any longer than it did, and also that the projected policy of strongly developing some of the secondary schools on the vocational side should be carried out promptly. A few years ago a somewhat similar change known as the Type A curriculum was introduced in a few of the Philippine high schools. Half the time was given to academic subjects and the remainder to iron or woodworking, interior decorating, business training, etc.

The present Dutch policy of giving an education to the mass of the population dates from 1907.[33] Previously it had been confined to the aristocratic class, the main object being to train native officials and the sons of notables in order that they might co-operate with the Government. Rural vernacular education is given in the *desa* or village schools, which have a three-years' course in the three R's, drawing and the cultivation of school gardens. They are followed by the continuation schools with a two or three years' course which provide for the needs of a group of villages. Vernacular education in the towns lasts for five or six years and is given in the second class

schools. The curriculum is similar to that of the rural schools, but also includes such crafts as batik making and woodworking. Fees are charged, as in practically all the Dutch schools. The Government is trying to provide a secondary literary education in the vernacular, and the first school of this type was opened in 1937 in Java, the text books having been translated and adapted from the Dutch. The new development is not intended to lead on to the Dutch language schools or encourage the pupils to become teachers, but to produce better educated cultivators who will remain on the land. Doubt has been expressed whether sufficient vernacular literature exists to make the experiment a success. In order to create it the Government some years ago established the Institute for Popular Literature. Like the Malayan Bureau of Translations it publishes translations of European works in the vernacular. Vernacular farm schools like those in Malaya give a simple training intended to improve village agriculture; but the difficulty has been that a large number of pupils hope to escape from the land by obtaining a post for teaching others how to farm. The Dutch have launched the experiment which has already been described, of training the village vernacular teachers to give the local cultivators instruction in elementary agriculture. There are vernacular trade schools for, e.g. carpentry and iron work, and colleges for training vernacular teachers. In spite of the great increase in expenditure on education the birth rate has been so high that the population of school age has increased more rapidly than the school-going population. In absolute numbers there are more illiterates than in 1900, and only a fraction of the children of school age are attending school. Wastage is very heavy, for only about 33 per cent. of the pupils in the *desa* schools finish the three-year course. Only 37 per cent. of the entrants complete the five years of the second-class schools, and less than 41 per cent. the seven years of the Dutch-Indonesian schools, which correspond to the Malayan English schools. It is estimated that about 60 per cent. of the children entering school do not remain long enough to become permanently literate.[34] The Dutch system of vernacular education has many resemblances to the Malayan, though the number of schools is far larger, as one would expect when the population is twelve times as numerous. Two of the principal differences are that Dutch is not taught in any of the government vernacular schools, and that transition from them to the Dutch language schools is discouraged rather than facilitated as in Malaya. The policy is to create a system of education which

is complete in itself, and is as far as possible separated from the Dutch schools. India, Ceylon and the Philippines have had a good deal of influence as examples of how not to educate. The Dutch feel that the British and Americans made the fundamental blunder of over-developing Western literary schools and either slighting vernacular education or ignoring it, as in the Philippines. This fitted in with the Asiatic desire to escape from manual labour, which was impossible for the vast majority in predominantly agricultural societies, and only created intellectual proletariats.

The Dutch language schools form a complete system extending from the primary classes to the university. The primary division has three separate schools, one for Dutch and Eurasian children and for those coming from native homes where Dutch is spoken (about 15 per cent. of the enrolment), another for Chinese and a third for Indonesians. The curriculum runs for seven years and is similar to that of schools of the same grade in Holland. Since the Chinese and Indonesians know no Dutch when they enter, they are taught in the vernacular during their first two years, with Dutch taken as a subject. Dutch becomes the medium of instruction in the third year when the pupil is ten or eleven. The Link Schools already described take children of promise from the vernacular schools and carry them to the same point as do the Dutch-Indonesian schools. Secondary schools, where Dutch is the medium of instruction, are of three types, the first being the General High School with a five-year course, which is attended principally by Europeans. Chinese and Indonesians usually attend the Mulo School, and a small number go on to its continuation, the General Secondary School, each of which lasts three years. The curriculum is modelled upon that of Holland, and graduates of the General Secondary or the General High School are admitted either to the University at Batavia or to those in Holland. The Mulo School resembles an American junior high school, and many of its graduates carry their education no further, or they enter a trade school. University education in Java was established between 1920 and 1927 and comprises the three colleges of law, medicine, and engineering, which are attended by a few hundred students. It is intended eventually to add an Eastern Literary College, but hitherto the emphasis has been upon professional education and not liberal arts. Special schools where Dutch is the medium of instruction, prepare Indonesians for subordinate positions in the veterinary, forestry and agricultural services and on Western plantations. There are also teachers' training colleges and

technical schools which resemble that at Kuala Lumpur. Finally, there are special schools where Indonesian probationers for the administrative service receive from three to five years' training. They are selected annually by the Dutch and Indonesian officials in accordance with the estimated needs of the service and the social and political position of the family. The principal criticism passed upon the Dutch system of education by a group of investigators some years ago was that it took too little account of Indonesian history and culture. "The schools in fact might almost as well be in Europe so far as their aims and accomplishments go. . . . They teach essentially the curriculum that one finds in America or Western Europe. In fact pupils may transfer from a Dutch European school to one in Holland without loss of standing."[35] One of the most striking differences between the Dutch and Malayan systems is that about 18 per cent. of the pupils in Malayan government and aided schools are receiving a literary, vocational or higher education in English, while the corresponding figure is about 8 per cent. in the Netherlands East Indies. The reason for it is the totally different policy of the two governments. Both have the same problem of a persistent and growing demand for a Western education and a very strong preference for a literary rather than a practical training. The British policy is to increase the opportunities for learning English and at the same time develop the vocational side. It will succeed if the parents have enough common sense to realize that it is useless to train their sons to be unemployed clerks. The Dutch are more sceptical of parental wisdom and prefer to give the population what it does not want. Their method is to restrict Western education to a carefully selected minority. One wonders what effect the growing number of private schools will have upon their policy.

PART TWO: HONG KONG

CHAPTER X

INTRODUCTION

Great Britain is a collector of islands and peninsulas—Gibraltar, Malta, Ceylon, Penang, Singapore, and Hong Kong for example. Either they are at the cross-roads of world trade or on the great ocean routes. None require large armies and all of them can be defended by sea power. The British Empire is precisely what one would expect from a race of shrewd sea-traders with a rooted aversion to continental entanglements. It is no accident that the Indian North-West Frontier is the only part of the Empire with a land frontier which presents a serious military problem of defence. The foundation of Hong Kong was typical of British imperial policy in its combination of the two elements of trade and sea power. Great Britain wished to obtain a position from which trade could be carried on without the insecurity that was so marked a disadvantage of the British settlement at Canton. Hong Kong's harbour and its geographical position marked it out as an excellent centre for trade; and the few miles which separated it from China meant that it could be defended by the navy. These were the reasons for its annexation at the end of the war with China in 1842. The difficulty of defending it to-day is no reflection upon the foresight of the statesmen of a century ago. British naval supremacy in the nineteenth century was based partly upon the geographic factor that the rival sea powers were all in Europe within convenient reach of Great Britain. The emergence of a great naval power halfway across the world placed the British fleet at an immense disadvantage, since it would have to operate so far from its base against an opponent fighting in his home waters. No one could foresee that feudal and isolationist Japan would evolve into the third strongest naval power, bent upon a new order in Asia. It was equally impossible to predict that simultaneously Great Britain would be attacked by the successors of a disunited congeries of German states dominated by Austria and of an Italy which was merely a geographical expression.

Hong Kong more than justified the foresight of its founders: the headquarters of a few pirates and fishermen became the trade and banking centre of South China. Its prosperity was based upon

geography, free trade, and security. It had the only good harbour on the South China coast, it lay on the direct trade route from Europe to the Far East, and it was on the Eastern side of the estuary of the Canton River, which was the main artery of trade into the interior of South China. The building of the Kowloon-Canton and Canton-Hankow Railways further extended the trade area. Low taxes and the absence of import duties and trade restrictions meant that business could be carried on cheaply; and British rule provided security for life and property which no Chinese city could rival. Canton could only watch with impotent jealousy the rapid rise of its new rival. The Colony became more than the gateway of British commerce with South China: practically all the ships from Shanghai and the whole of the China coast either called at the port or passed very close to it. Hong Kong stood guard over the greatest focal point of trade in the Pacific next to Singapore. It was the headquarters of the China Squadron, and the garrison acted as a reserve from which reinforcements could be sent to the troops in the foreign settlements. British prestige in the Far East rested in large measure on the possession of the island and the naval and military power that that implied.

The prosperity of Hong Kong was at its height during the nineteenth and early twentieth centuries. The majority of the merchants and bankers and, in the nineteenth century, most of the manufactures they sold, were British; and the commerce passing through Hong Kong formed a large part of the total British trade with China. American exports to China were still much less than British, and those of Japan were insignificant. Manufacturing in China did not exist, tariffs were low, and the export of Lancashire cotton textiles was the backbone of British trade. The shipping both coastal and ocean-going was to a great extent British, 65 per cent. in 1900, and as high as 75 per cent. a few years earlier. The political situation was equally favourable: Russia's advance in the North was beyond the limits of the Colony's trade area, and furthermore her wings were clipped at Tsushima and the Yalu River. The Anglo-Japanese Alliance made the powerful Japanese fleet an added protection and not a menace. In China itself the weak Manchu Empire was tottering to its fall, and the rise of Chinese nationalism with its strong anti-foreign attitude was far in the future. The Far Eastern policy of the British Government was to draw closer the alliance with Japan and aid the development of British trade and investments in China. To this end good relations were cultivated with the Chinese

Government and efforts were made to prevent it from falling unduly under the influence of Russia. Territorial conquests were not wanted: Great Britain preferred to support the Open Door with its equal tariffs for all foreign trade.

Analysis of the underlying reasons for the prosperity of Hong Kong reveals one ominous factor: far too many of them are determined by forces utterly beyond its control. Singapore would continue to be an important centre of trade even if it lost all its commerce with the neighbouring countries of South Eastern Asia. It would still have the hinterland of Malaya with its tin and rubber and its large consumption of manufactures. But Hong Kong lives by its re-export trade and foreign exchange banking: the goods retained for internal use are only a fraction of its imports, and few of its small factories could survive the loss of Imperial Preference. The prosperity of the Colony is dependent primarily on the condition of China and secondarily on that of its Western markets. Economic depression, high tariffs, or wars in China immediately react upon Hong Kong, and nothing that it can do will materially alter the situation. The principal cause of the fall in imports and exports from £155,793,964 in 1919 to £69,894,000 in 1938 was the wars and the insecurity of life and property in China. Additional loss resulted from the measures adopted by the Chinese Government to foster manufacturing and agriculture. Heavy (and in some instances semi-prohibitive) duties were imposed, which had a serious effect upon textiles and foodstuffs, the two principal exports of the Colony to China. The Sino-Japanese War further emphasized the interdependence of the prosperity of Hong Kong and China. In 1937 and 1938 there was a marked growth of exports, since the Colony was one of the principal avenues for the entry of munitions. Trade fell sharply when the Japanese captured Canton in October, 1938, and was still further curtailed as they closed most of the minor ports of South China.

The character of the manufactures re-exported from Hong Kong to China changed markedly during the past twenty years. The relative importance of textiles declined and that of machinery and electrical goods increased: the Chinese demand was changing from consumer's to capital goods. Great Britain's share of the trade fell heavily, her principal loss being in textiles, which had been her staple export. By the middle 'thirties the British share of this trade had shrunk to retail dimensions and was largely confined to supplying the limited demand for the more expensive grades of cloth.

The bulk of the market had been captured by the mills in China and by Japan. In the new and potentially more valuable trade in machinery, imports from Germany exceeded those from Great Britain. As in other countries Germany had more than recaptured her pre-1914 share of the trade. The volume of British shipping entered and cleared also declined, with the growth of Japanese and Western competition, and after 1918 it averaged 52.5 per cent. of the steam tonnage.

The attitude of China also radically altered owing to the emergence of nationalism and the accompanying hostility towards foreign interests. In the early days of the Kuomintang Party this led to the attempt to ruin the trade of Hong Kong by the general strike engineered in the Colony in 1925. The colonial government had the strong support of the leading Chinese as well as of the British community and broke the strike in a few weeks. It had been accompanied by a boycott which excluded British trade from all the ports of South China and inflicted immense damage before it came to an end in 1927. Until about 1931 several futile attempts were made, particularly by Communist agitators, to revive the general strike and promote unrest in the small industries of the Colony. The hostile attitude of the Chinese Government changed after 1931 and the relations with Great Britain became increasingly friendly. The principal reason was the conquest of Manchuria by Japan and the Chinese desire to obtain British support in the event of further aggression. This was unlikely to be granted so long as unrest against British rule was being fomented and the change of policy was dictated by expediency. The Government of China was not reconciled to the existence of British rule in Hong Kong, and if the threat from Japan had been removed it would sooner or later have demanded its rendition.

Hong Kong has been no place for a pessimist in the past quarter-century, with chronic civil wars in China, the general strike and boycott of 1925, rising tariffs, the growth of Japanese competition, the Great Depression, the American silver policy of 1934 and the Sino-Japanese War of 1937. The British bankers and importers have hung on doggedly, convinced that at long last the tide would turn and find them still in the field. By 1937 it seemed that the worst was over: the depression was lifting and China under Kai-shek was beginning to enjoy a degree of unity and security such as she had not known since the fall of the Manchus. Increasingly the stability of his régime seemed assured, and with it the growth of

purchasing capacity which the maintenance of peace and orderly government would bring. In the summer of 1937 Hong Kong's merchants and bankers faced the future with a subdued and chastened optimism. Then came the Sino-Japanese War.

The immediate effect was a remarkable growth in trade, since Hong Kong was one of the four points through which free China could still carry on trade with the West. A large part of the munitions bought abroad were shipped to the Colony and sent on to Chiang Kai-shek via the Kowloon-Canton and Canton-Hankow Railways, which were connected in August, 1937. When Shanghai and the Northern ports were closed, much of China's foreign trade was diverted to the Colony. The Exchange Equalization Fund was transferred there from Shanghai, and Hong Kong became the foreign exchange banking centre for the whole of China. The existence of the British colony was invaluable to Chiang Kai-shek. The capture of Canton in October, 1938, cut the main artery; but the merchants of Hong Kong salvaged more of their trade than is generally realized. Much of it was diverted to Swatow and the other minor ports of South China. When these were mined or occupied in the summer of 1939 Hong Kong promptly opened up alternative routes. Munitions were transhipped to Haiphong in French Indo-China and thence by the Yunnan Railway to the Chinese armies, or they were sent to Portuguese Macao and the French leased port of Kwong Chow Wan. A flourishing smuggling trade was also built up and the local Chinese pirates of a few years earlier ran junk-loads of arms to fishing villages and lonely beaches. The Japanese could not stop the traffic, since they were unable to occupy the whole coast of South China; and the shipments through Hong Kong continued until they were halted in 1940. The route through Indo-China was closed a little later, and this left the Burma Road and the long and difficult connection with Russia through Sinkiang Province as the Chinese Government's only direct means of communication with the outer world.

The Japanese have ruined the trade of South China for themselves and everyone else. How much of Hong Kong's trade can evade Japan's control of Canton and the other ports cannot be ascertained; but the loss to the Colony has been very severe. Only Japanese goods are sold in the occupied towns; but this has been of little benefit to Japan. Most of the Chinese population have fled, and Chiang Kai-shek's armies and guerillas do not allow Japanese goods to pass into the interior. The Japanese have envied Hong

Kong's prosperity for years, although they have been completely free to establish banks and business firms, and a considerable part of the exports of the Colony to China have been Japanese goods. Their anger has grown since 1937, as they saw how the existence of a British colony hampered their efforts to end the "China Incident". They realized, too, that this isolated British outpost might threaten their sea communications if they attempted to carry out the policy of expansion southward. The new order in Asia has no place for a British entrepôt and naval base off the coast of China. The threat of an attack on Hong Kong grows greater; and in the summer of 1940 the American and foreign European and most of the British women and children were evacuated. British subjects have been enrolled to help in the defence if the need arises, and meanwhile they keep trade and banking going as far as they can. The Volunteer Defence Corps includes artillery, engineers, machine-gun companies and infantry. Even before the war in Europe an Air Raid Precautions organization was set up, with posts manned by men and women air-raid wardens. The merchants and bankers have weathered crises before, and they know that their trade was not built up by running for shelter, but by riding out the storm. The danger now is greater than ever before; but the British in Hong Kong hold on.

British naval supremacy in the Far East thirty years ago was based on four factors: the geographic position of Hong Kong, its maintenance as a first-class naval base, the ability of the main fleet to reinforce the China squadron, and the alliance with Japan. Only the geographic factor remains, and the very position of Hong Kong raises the doubt whether it may not be a liability rather than an asset. It has become an outpost within the Japanese zone of naval power, at the very end of the long British lines of sea communication. The fortifications and the dockyard could not be modernized during the years when the disarmament treaties of the Washington Conference were in force, since the Colony fell within the *status quo* where only maintenance of existing strength was allowed. The fortifications have been considerably strengthened during the past four years and an air base established; but the naval station is still second-class and a battle fleet would have to use Singapore, 1,445 miles away, as its base of operations. Prior to the outbreak of the war in Europe the garrison consisted of ten batteries of artillery and four battalions of infantry, British and Indian. The number has since been increased and there is also the Volunteer Defence Corps. Hong Kong is the headquarters of the China Squadron, but while the dockyard can

handle the ships normally stationed there it is not large enough to take modern capital ships.

Hong Kong is about 1,200 miles from the first-class bases in Japan and 400 miles from the second-class bases in Taiwan (Formosa) and the Pescadores. Japan's southward advance during the past two years has partly encircled it and threatens its communications with Singapore. The naval and air bases on Hainan Island are about 200 miles to the south-west, and to the south of them are the Japanese-dominated ports of French Indo-China and Spratley Island. Not only would Hong Kong be exposed to air attacks, but if a British fleet were available to come to its assistance it would find the passage northward both difficult and dangerous. Incidentally the new Japanese possessions are also a danger to the Philippines about 600 miles away, partially encircling them on the West as the Marianne and Caroline Islands do on the East. Hong Kong has also to defend a land frontier of some twenty miles, the steep and barren hills of the New Territories facing China. Attack from the land side would have to be expected.

In the event of war between Great Britain and Japan Hong Kong would lie athwart the Japanese lines of communication. The pre-1939 defensive strategy of the British Empire was based upon delaying action by ships and submarines operating from Hong Kong. This was designed to hold up any rapid advance to the south while the main battle fleet hurried eastwards from the Mediterranean. Two new factors however raise the problem of how far the plan can be carried out. The first is that while the establishment of Japanese bases close to Hong Kong and to the south-west of it does not in itself make this naval strategy impossible it does affect it in a very serious degree. Far more important, there is no British battle fleet free to go to the Far East; and there can be none until the ships now under construction are completed. This is the result of the naval strength accepted at the London Conference and the agreement which forbade additional building, until the treaty was terminated by Japan at the end of 1936. This meant that until the new ships then laid down were completed the British fleet assisted by the French would be strong enough to deal either with Italy and Germany or with Japan. It could cope with a war in Europe or in the Far East, but not with both simultaneously. The intervening years until the gaps made by idealistic disarmament had been filled must be a time of danger for the British Empire; and the danger was accentuated since Berlin, Rome and Tokyo knew it. Finally, British

strategy had been based on the combined action of the British and French fleets. It had not counted upon the sudden collapse of its ally and still less on the possibility that Germany might gain control of the ships which remained in the possession of the Vichy Government. At the present time no forces which the Empire could spare from the European theatres of war could hope to check Japan. The action of the British ships in the Pacific would be determined to some extent by the policy of the United States. If there were a certainty that she would immediately declare war and send her Pacific fleet to check the southward drive of Japan, the scheme of delaying-action based on Hong Kong might still be carried out. Unless the American attitude were very certain, however, there would be no point in risking the loss of valuable ships. If American policy were uncertain the ships would probably fall back upon Singapore, while trying with submarines and mines to inflict damage upon the Japanese fleet in its advance southward. In these circumstances the fall of Hong Kong could only be a matter of time. Singapore, however, is the strategic key to the situation, and even if the naval forces there were weak it would be a potential threat. The British fleet will not be tied to Europe forever, and as long as its base is waiting for it any conquests Japan might make are insecure. The capture of Hong Kong would not finally settle its fate. The decisive factor would be victory in the main theatre of war, and if Japan were defeated here no amount of success in sideshows would make any difference.

The Government of Hong Kong.

Hong Kong is nothing without the market of South China; but South China has an equal need of the Colony. Neither Canton nor any other port can offer the same advantages as a focal point of trade. Prosperity depends upon Anglo-Chinese collaboration; and this is equally true of conditions within the Colony itself. The Chinese are over 96 per cent. of the population and are found in every walk of life, from wealthy merchants and bankers to coolies. The Government's policy has been based upon the necessity of conducting a Western administration amongst a predominantly Chinese population with the maximum of harmony and co-operation and the minimum of friction and obstruction. To translate this general principle into practice has at times been difficult, owing to the wide divergence between the British and Chinese points of view on the duties and methods of government. The British have evolved a

modus operandi which might be defined as Anglo-Chinese co-operation based on mutual explanations and persuasion and on respect, wherever possible, for Chinese wishes and customs. Where compromise is impossible the population is required to obey; but the administration has often modified Western standards and, above all, has tried not to move too far in advance of Chinese public opinion.

The structure of government affords some typical British contrasts between constitutional theory and actual practice. Legally, Hong Kong, like the Straits Settlements, is an orthodox Crown Colony with a Governor who has sole control of administration, legislation and finance, subject of course to the final decision of the Colonial Office. He is assisted by the Executive and Legislative Councils, each of which is purely advisory and has an official majority which he controls. In practice the Governor keeps himself well informed of the wishes of the people, and proceeds towards his goal by compromise and persuasion rather than by using his legal powers. If it is clear, for example, that a measure will meet with the unanimous opposition of the European and Chinese popular representatives in the Legislative Council, then a compromise will almost certainly be arranged. Indeed this is more likely to have been worked out already when the question was in the preliminary stage of discussion before the Executive Council. The minority of British and Chinese members who represent the unofficial community there are also members of the Legislative Council; and if they support a proposal in the Executive Council, custom, though not law, requires them to do the same in the Legislative Council. On the other hand, if they oppose it in the former it is a warning that they will do the same later on; and since they are prominent and influential, their colleagues in the Legislative Council are likely to support them. Normally therefore the Governor will arrange a compromise to disarm subsequent opposition. He also, as it were, takes soundings by frequent and informal meetings with leading residents, which are easily arranged since the Colony is in reality one large city. The result is that, as a rule, questions have been largely settled before they come up in the Legislative Council, and the opposition to Government measures is rarely uncompromising and still more rarely unanimous. A debate reads like an antiphonal chant by Government and opposition members on "the voice that breathed o'er Eden." It was not ever thus: a generation ago legislative sessions could be refined versions of Roman gladiatorial shows. Since 1918 however, harmony has really been disturbed only on the rare

occasions when the Colonial Office has imposed a policy exciting general popular disapproval.

One of the most important organs of government in Hong Kong is an apparently obscure body of fifteen Chinese known as the District Watch Committee. Legally it is merely a group appointed by the Governor to meet under his chairmanship, or that of the Secretary for Chinese Affairs, to manage a small number of Chinese police known as the District Watch Force. In reality the members of the District Watch Committee are the most prominent and influential leaders of the Hong Kong Chinese, and constitute the Governor's informal but very important advisory council on all questions affecting their community. Their advice carries great weight, and they are of much assistance to Government in guiding and directing the mass of the population, owing to their wide influence among their fellow-countrymen. The Committee would seem to be unique in its combination of legal insignificance and actual importance: its duties have grown with the years, and since the results have been so satisfactory to all concerned it has never seemed necessary to enshrine its powers in a statute. Ten other committees composed of influential Chinese and of the Secretary for Chinese Affairs play a similar rôle in more restricted spheres. The Public Dispensaries and the Tung Wah Hospital Committees, for example, do more than merely manage the free hospitals and dispensaries built by philanthropic Chinese. They help to bridge the gap between the Western and Chinese points of view on sanitation and public health, a field in which differences of opinion are peculiarly likely to arise.

The Secretariat for Chinese Affairs, which is composed of the Secretary and three European Assistants, all of whom can speak Chinese, was established over eighty years ago as a *liaison* department between the Government and the Chinese. One principal duty is to ascertain the wishes and grievances of the Chinese, to remove misunderstandings and to persuade them to obey government orders when these cannot be altered to meet their desires. Here the Secretary for Chinese Affairs is greatly assisted by his close association with the leading Chinese of the Colony on the various Committees. He is also the special adviser of Government on all matters affecting the Chinese and is a member of both Councils, so that policies affecting them are shaped in intimate collaboration with him. Since nine-tenths of the work of Government in Hong Kong affects the Chinese his time is somewhat fully occupied. The tradition has

become firmly established among the Chinese that the Secretary is a benevolent and powerful official to whom they can appeal with confidence. They insist on bringing before him as arbiter many cases which would otherwise be settled by the courts. An appeal from his decision is practically unknown, and his customary influence far exceeds his legal powers.

The Government's policy has been a success: the Chinese feel that Hong Kong has been administered with a proper consideration for their wishes. They have come to the Colony because the opportunities for making money are better than in China, and the majority eventually return home with their savings. Only 38.5 per cent. have been over ten years in Hong Kong and only 6.4 per cent. over thirty years. They are not interested in government and there is little demand for an elected popular majority of members in the Legislative Council. Although the education in the schools has been predominantly literary it has not so far produced the political discontent observable in India. This may be because, at least until very recently, all graduates of the English schools were able to obtain clerical work in government or business offices. The intellectual proletariat is small, unorganized, of very recent growth and without political significance. The only demand which the educated Chinese have put forward is for increased employment in government departments, particularly in the clerical and technical services. Apart from this, the general attitude of the Chinese is, that while many are supporters of Chiang Kai-shek and contribute to his party funds, they do not want to see his government established at Hong Kong. They fully appreciate the material advantages of British rule; and this attitude has been strengthened by their knowledge of the very different conditions which prevail in China. The result is seen whenever the Colony is faced with a crisis, as in the general strike and boycott. The Government can count on the strong support of the leading Chinese and the exertion of their influence, because their material interests are bound up with its continuance and because they consider that in the past it has treated them with justice and consideration.

Finance and the Government Services

Hong Kong is in the predicament that it would like to spend much more extensively than it does on social services, but that it is prevented by a small and inelastic revenue. Most tropical colonies have some local industries, mineral or agricultural, on which taxes

can be levied Hong Kong has no mines, a few score thousand farmers, and lives by its re-export trade. Import duties would injure it and cannot be levied save on a few luxuries like tobacco and alcoholic liquors. The other principal source of revenue is the tax on property, but the rate which can be imposed is limited because one reason for Hong Kong's commercial success has been the low cost of carrying on business. Heavier taxation would defeat its own object if it killed the goose that laid the golden eggs.

The appropriations for Public Works have been considerably heavier than for any other department. The Government has carried out an expensive programme of harbour improvements, land reclamation and roads, since these were necessary to maintain the Colony's position as a great trading centre. Apart from these, most of the Public Works expenditure has been upon health and education in the form of hospitals, schools, sewage installations and waterworks. This last item has been particularly costly, since one of the principal occupations of the government engineers has been the interminable building of larger and still larger reservoirs. They now cover a great part of the suitable vacant land on Hong Kong Island, and the most recent have been built in the New Territories on the mainland. The latest and largest, the Shing Mun reservoir, has the highest dam in the British Empire; and plans are being prepared for waterworks of even greater capacity. In spite of the heavy expenditure the supply of water is insufficient for the needs of the population and has to be rationed during part of the year. The causes of this situation are the uncertain rainfall, combined with the heavy and constant influx of immigrants from China. They arrive in such numbers that they always defeat every attempt of the Colony to make itself self-sufficient in water.

The medical and health services have had an exceptionally difficult problem owing to the proximity of China and the close economic connection between it and the Colony. Only a tiny minority of the inhabitants of Hong Kong regarded themselves as permanent residents: over nine-tenths returned to their original homes after periods varying from a few months to forty years. Thousands entered and left Hong Kong every day by train, steamship and junk; and no medical examination was made save of those who were going or returning from overseas. The expense of maintaining an adequate staff of medical inspectors to deal with some 9,000 arrivals a day would have taken a large part of the medical appropriation. The delays and regulations inseparable from control of immigration

would also have interfered with the complete freedom of movement between Hong Kong and China which was one reason for the growth of trade. An obvious result of the absence of medical inspection was the impossibility of preventing periodical outbreaks of plague and other diseases introduced by new arrivals. Another was that Hong Kong provided free medical attention for a considerable part of the population of Kwangtung Province.

The Medical and Health Departments have been reorganized and greatly expanded during the past twenty years. They have had constantly to deal with the problem that the bulk of the population were ignorant coolies mediæval in their ideas of hygiene and obstinately opposed to many Western health regulations. Here, as in other fields, the official policy has been to defer to their prejudices where possible and to use compulsion only when it was unavoidable. There are, for example, two varieties of hospitals, the government hospitals with Western medicine and the Chinese hospitals which receive a government grant and dispense the traditional Chinese remedies. Another typical example of solicitude for Chinese prejudices is that the Director of Medical and Sanitary Services has only partial control over public health. It is feared that he might develop a passion for sanitation which would outrage the subjects of his misdirected attention! So he is provided with a committee of officials and influential European and Chinese unofficials who keep the zeal of the expert within the limits of prudence. Overcrowding is a serious problem in some of the older parts of Hong Kong, and a programme of slum clearance has been under discussion. One difficulty is that the poorer Chinese cannot afford a rent which would reimburse the landlords for the cost of rebuilding, and the other is that the Government lacks the money to do the work itself.

Vernacular education in Hong Kong is provided by private Chinese schools, most of which are unsatisfactory. Apart from a minority of government, missionary and Chinese charitable schools, they are run for profit by their proprietors; and it might almost be said of many of the teachers that schoolmastering is the last refuge of the educated unemployed. Small government subsidies are given to the better schools; but the majority receive no assistance because they fail to reach the standard of efficiency laid down by the Department of Education. The Government has been anxious to improve the quality of vernacular education, and in 1939 it was investigating the problem with a view to giving increased financial

aid. The amount of money available for education has been limited, and the bulk of it has been spent on the English and technical schools and on the University. The Chinese themselves have insisted on an English education because it is in reality a vocational training, owing to the large number of openings for clerks in government and business offices. Technical education is provided by a Trade and a Junior Technical School. The University is divided into the three Faculties of Medicine, Arts, and Engineering, and has done excellent work, although it has been hampered by an inadequate revenue. The Government has given generous support so far as the other calls upon the Treasury permitted; but to provide an adequate income is beyond the financial resources of the Colony.

CHAPTER XI

THE GOVERNMENT OF HONG KONG AND THE CHINESE

The Population of Hong Kong

The Colony consists of Hong Kong and several other islands and the Kowloon Peninsula, which are British possessions and were ceded by China in 1841 and 1860, and the New Territories. The latter were leased to Great Britain by China in 1898 for ninety-nine years. The area of Hong Kong Island is thirty-two and that of the whole Colony about 391 square miles. By far the greater part of the population is concentrated in the towns of Victoria and Kowloon, which lie on either side of the harbour, the former on Hong Kong Island and the latter on the mainland. The rest of the Colony is sparsely inhabited by fishermen on the islands and along the coast of the New Territories, and inland by cultivators. The census of 1931 gave a population of 849,751, of which 632,815 lived in the two towns, the remainder being fishermen and cultivators.* An unusual feature was the number of Chinese, 68,721, who lived in junks and sampans either in the harbour or in the sheltered bays. A large part obtained their living as lightermen or from the other work of the port. The Chinese numbered 821,429, or 96.67 per cent. of the population, and came principally from Kwangtung Province. Nearly nine-tenths were dependent for their livelihood directly or indirectly upon the trade of the Colony or upon manufacturing. They ranged from wealthy merchants, shipowners and bankers through professional men, small shopkeepers, manufacturers, and clerks to domestic servants, artisans and manual labourers. A small though increasing number regard Hong Kong as their home; but the great majority retain their connection with their original birth-place in China. Even though they may live for years in the Colony they regard it merely as a temporary residence to which they have come for the purpose of making money. They intend eventually to return to their original home and in the majority

* In 1938 the population was estimated to be 1,028,619, in addition to 600,000 refugees from China (*C. Reps. No. 1914, Annual Report of Hong Kong, 1938*, p. 17).

of cases do so with their savings in their old age. Meanwhile they remain in touch with their families in China and revisit them periodically. Especially in the past, children born in Hong Kong were frequently sent to their relatives in China for their education and later returned to the Colony. This applies not only to the recent arrivals, but to the majority even of those settled in Hong Kong; apart from a growing minority in the towns the cultivators of the New Territories and part of those who live afloat are the only section of the population which looks upon the Colony as a permanent home. Exact figures are unobtainable; but by far the larger part of the population is migratory and not permanent. The proximity of China fosters the situation: less than an hour by train takes the traveller across the border and a few hours by boat brings him to Macao or Canton. Prosperity in Hong Kong always brings an influx of immigrants attracted by the prospect of wages higher than are obtainable in China; while depression leads to the departure of many of the unemployed to their villages until conditions improve.

The non-Chinese, according to the census of 1931, numbered 28,322, composed of the following races:—European British subjects 14,366; other Europeans and Americans 2,036; British Indians 4,745; Japanese 2,205; local Portuguese (originally from Macao) 3,197; Eurasians 857; others 836. Of the European British subjects 7,682 belonged to the army or navy, and the remaining 6,684, apart from the civil servants, were engaged in business, as were the other Europeans, the Americans, and the Japanese. The British Indians included the troops forming part of the garrison, the Sikh contingent of the police, and a small number of merchants and clerks. The Portuguese were for the most part permanent residents, and were shopkeepers or clerks. The Europeans and Americans do not regard the Colony as a permanent home but, as in other tropical and subtropical dependencies, return eventually to their country of origin.[1]

Comparison with previous census returns shows the rapid growth of the urban population, as well as its predominantly Chinese character. The total population was 456,739 in 1911: 625,166 in 1921: and 849,751 in 1931. The increase of population between 1911 and 1921 was 36.87 per cent. and between 1921 and 1931 34.44 per cent. Little change occurred in the population of the New Territories, which was 80,622 in 1911 and 97,781 in 1931, or in that which lived afloat, which was 60,948 in 1911 and 68,721 in 1931. The increase was almost entirely in the towns of Victoria and Kowloon. The latter grew phenomenally between 1921 and 1931 from 123,448 to

263,020, an increase of 113.06 per cent. The explanation is to be found in the rapid expansion of the business area in Victoria, combined with its topography. Apart from the flat land recently reclaimed from the harbour, the town is built on the slope of a low mountain which varies from a gentle declivity almost to the perpendicular. A combination of winding roads and ingenious terracing reminiscent of Japanese rice-fields, has done marvels in providing sites for dwelling houses in the most unlikely quarters. An expanding town which is largely on end, however, means that building eventually becomes a costly feat including hydraulic engineering, owing to the torrential summer rains. Hence the expansion of Kowloon across the harbour, where there is a considerable area of comparatively level ground between the hills and the sea. Even with this relief, the population of the 211 acres of the crowded central portion of Victoria is 917 per acre.

The number of Chinese permanently settled in Hong Kong has been increasing, although the bulk of the population is still migratory. One change has been the growing tendency of the Chinese to bring their wives with them instead of, as formerly, leaving them in their villages in China. In 1901 the percentage of females was 381.07 to each 1,000 males; but by 1931 it had increased to 749.47 per 1,000. The censuses also showed an increasing number of children, married women and widows in the Colony, evidence of the growth of family life and, therefore, of a more stable population. On the other hand, the census of 1921 showed that the vast majority regarded China as their home, because only 15,645 of the urban population claimed to be British subjects, although the number born in the Colony was much larger. In 1931 270,478 or 32.93 per cent. of the Chinese stated that they had been born in Hong Kong; but it should be emphasized that they did not on this account regard it as their permanent home. Of the urban Chinese of Victoria and Kowloon in 1931 only 38.5 per cent. had been over ten years in the Colony, under 16 per cent. had been there over twenty years, and only 6.4 per cent. over thirty years. The non-Chinese, who were principally European, actually proved to be less migratory than the urban Chinese: 8.55 per cent. of them had been residents for over thirty years. Further evidence of the migratory character of the population is afforded by the fact that in 1935, a normal year, the number of arrivals in the Colony was 3,347,473, and the departures 3,412,020, making the daily average 9,171 arrivals and 9,348 departures.[2] These figures are, however, somewhat mis-

leading since they include not only those arriving to settle in Hong Kong and leaving it for China, but also the passengers and crews of vessels, and the Chinese leaving for or returning from overseas. Most of the emigrants to British Malaya and the Netherlands East Indies come from South China, and Hong Kong is their principal port of departure and return. One factor which has played a part in creating a class of Chinese who regard Hong Kong as their home is the insecurity which prevailed for many years in China. Chinese revisiting their native villages ran great risk of being robbed by bandits or mulcted by the exactions of officials. In consequence, visits became more infrequent and a tendency grew up to regard Hong Kong as their native country and not as a temporary place of exile. The establishment of the Chinese permanent cemetery at Aberdeen was a significant proof of the existence of what one might call the Hong Kong Chinese. In the other Chinese cemeteries the bones are periodically exhumed and sent to China for interment in the family burial ground near the tombs of their ancestors. The request to Government of certain Chinese families long resident in the Colony for a permanent cemetery, meant that they no longer regarded their ancestral village in China as home, and that they (as it were) proposed to found a new family in Hong Kong where their own graves would fill the rôle of the first ancestor. A site was granted and the cemetery is controlled by a Chinese committee under the chairmanship of the Secretary for Chinese Affairs. Requests for grave-sites became so numerous that the Committee has been compelled to require applicants to prove their eligibility by showing that they possess the necessary residential qualifications.

The Governor and the Councils

Owing to the small size of the Colony and the predominantly urban character of the population, the problems of government are in the main those of a town council, although the form is that of a Crown Colony. At the same time the predominantly Chinese character of the population and the proximity of China invest these problems with a peculiar character and complexity which sharply differentiate them from those of a Western municipality. The necessity of cultivating good relations with Canton has also created a quasi-diplomatic problem even though the conduct of foreign policy is controlled by the British Ambassador at Peiping. In many respects the Government of Hong Kong is more analogous to the Municipal Council of Singapore, for example, than to the Govern-

ment of the Straits Settlements. A former Governor, Sir Cecil Clementi, summed up the position very neatly: "This colony is so small and so compact that it is in effect a large township, and the Government of Hong Kong is and must always be mainly concerned with municipal affairs. I regard myself as being in effect Mayor of Hong Kong; and were I and the principal officers of this Government to divest ourselves of our municipal duties there would be little left for us to do."[3] Subject to the final control of the Colonial Office, the Governor is in law a benevolent despot assisted by the two Councils which fill the usual advisory rôle of the British Crown Colony system. The Executive Council is composed of six official and three unofficial members, the officials being the Senior Military Officer, the Colonial Secretary, the Attorney-General, the Secretary for Chinese Affairs, the Colonial Treasurer and the Director of Public Works. The first five hold office *ex officio*, the last is appointed by the Governor. The three unofficial members, one of whom is Chinese, are appointed by the Governor for five years, from among the most important residents of the Colony. The Legislative Council has since 1929 been composed of nine official and eight unofficial members.* The officials include the six on the Executive Council together with three others appointed by the Governor, viz., the Inspector-General of Police, the Harbour Master and the Director of Medical and Sanitary Services. The eight unofficial members include the three who are members of the Executive Council and five others appointed by the Governor, the term of service being four years. Two of the unofficials are appointed by the Governor on the nomination of the Justices of the Peace and of the Chamber of Commerce, the total membership being four Europeans, three Chinese and one Portuguese. The Governor is a member of both Councils. The Finance Committee is made up of the Colonial Secretary as Chairman and the unofficial members of the Legislative Council. The Urban Council, despite its name, is concerned only with public health and can make by-laws, subject to an overriding power in the Legislative Council. Finally, there are a number of advisory boards frequently consulted by Government, such as the Board of Education, Harbour Advisory Committee, etc., which are composed of both official and unofficial members.

No question of importance can be decided and no major policy adopted without the approval of the Colonial Office. At the same

* In 1929 the Legislative Council was enlarged by the addition of the Harbour Master, the Director of Medical and Sanitary Services, one unofficial representative of the Portugese and a third Chinese (*HK Hansard*, 24th January, 1929, p. 2).

time the Governor retains considerable freedom of action, and his despatches form one of the principal sources of information upon which the Colonial Office makes its decisions. As everywhere in the British colonies, the improved means of communication have for three generations progressively diminished the independence and initiative of the man on the spot. The same inevitable process is observable in the dependencies themselves in the ever-tightening control of the central administration over the District Officers. The development has both advantages and defects. It makes for greater continuity of policy—the lack of which has at times been painfully in evidence in, e.g. French Indo-China—and counteracts the natural tendency of a new Governor to prove his originality and ability by studying his predecessor's policies and then deviating from them. The Colonial Office also has a broader point of view than the Governor, who, in his desire to promote the interests of his colony, is exposed to the danger of seeing only its local interests, to the exclusion of those of the Empire as a whole. The Colonial Office has the educative advantage of controlling the interests and problems of many diverse colonies, and of contact with the Foreign Office, the Department of Overseas Trade, and the various bodies concerned with British overseas interests. It is thus much less likely to lose sight of the whole in the part. On the other hand its very detachment perhaps tends at times to lead it unduly to standardize its policies and not to pay sufficient attention to the local peculiarities which so constantly differentiate colonial problems. With this very important qualification, the Governor is legally supreme in the Colony. Through his principal adviser and first lieutenant, the Colonial Secretary, he has complete authority over the department of government, with the exception of the judiciary and the auditors, whose independence of the administration is a cardinal principle of British colonial administration. He may, for example, direct what policies they are to pursue; he recommends the more important officials to the Secretary of State for the Colonies for promotion, and he may after proper investigation suspend them and recommend their dismissal by the same authority.

The Governor is required as in other colonies to consult the Executive Council on all matters save those which are too trivial or too urgent. This regulation is not always observed and, furthermore, he is not required to follow the advice tendered. The essence of the Crown Colony system is that power and responsibility are concentrated in the sole person of the Governor. To him alone officially

belong the credit or discredit resulting from the government's policies. Since he bears the full responsibility for decisions, he alone must determine what course of action is to be adopted, from which it follows that the rôle of the Executive Council must be purely advisory. Since the majority of the members are the heads of the principal departments, it has a predominantly official character, though the three unofficials play an important part in its deliberations. The Legislative Council, despite its official majority, might be described as the popular advisory body. Legislation, taxation and expenditure require its assent, and the members have power to bring up any subject for discussion and to press for legislation upon it. The Governor and the Colonial Office have each a veto upon its proceedings, and, if it is thought desirable, legislation may be enacted for the colony by means of Orders in Council. The official majority ensures the control of the Governor over proceedings, since civil servants are required to support his policy in all questions where he demands their vote. Owing to these limitations upon the power of the Council, the rôle of the unofficial members is purely advisory. Their duty is to present the views and grievances of the local European and native population, as the official members of the Executive Council present those of the principal departments. Since the Governor of a Crown Colony is solely responsible for legislation and finance, as well as for administration, it follows that he alone must have full legal power to decide what measures shall be adopted. The unofficial members have done all that is compatible with the system when they have advised him of the point of view of their communities. The presence of representatives of the principal races and economic interests in Hong Kong secures that all questions are freely and openly ventilated and that the Government is publicly criticized and required to defend its policy. There is little criticism in Hong Kong of the official majority or demand for an elected majority of members of the Legislative Council. The unofficial members rarely oppose Government measures to the bitter end; and their attitude is distinctly more friendly than in the Legislative Councils of, e.g. the Straits Settlements and Federated Malay States.

The existence of an official majority has been attacked in many dependencies, and the general trend of post-war British policy in the more advanced colonies has been in the direction of substituting an elected popular majority. Experience has shown that the abolition of the official majority and the substitution of representative government makes it impossible to retain the Governor's control

over the administration. The powers of veto and certification and other safeguards are no substitute for an official majority. Once the control of legislation and finance has been transferred to a Legislative Council with a popularly elected majority, the colony will pass from representative to responsible government much faster than may be desirable in its own interests. This was the experience of Ceylon under the constitution of 1924 to 1931. Events quickly falsified the theory upon which it was based, that the popular members would co-operate with the administration and not seek to extend their control over it. The spectacle of powers withheld was far more enticing than that of powers granted. Moreover, power was divorced from responsibility, since, under the constitution, the unofficial members of the Council could not assume office and therefore were in no danger of having to translate their criticisms into action. They gradually became a permanent and irresponsible Opposition, and through their control of expenditure they in practice largely controlled the administration despite its theoretical independence. The Governor was faced with the alternative of still further alienating the popular representatives by using his powers of veto and certification or of trying to conciliate them by submitting to their encroachments upon the sphere of the administration. He chose the latter course, with the ultimate effect of "reducing the Government to impotence". The Donoughmore Commission in 1927–8 reported that representative government had become unworkable; and in accordance with their recommendations practically complete self-government was established in Ceylon in 1931. The experience of India under the Montagu-Chelmsford reforms confirmed the lesson of Ceylon that once the legislature was placed under popular control its powers advanced faster and farther than the architects of the constitution had ever anticipated. If the Governor's reserve powers are enforced, as in Cyprus, constant friction is likely to make the constitution unworkable. If they are relaxed; as in Ceylon, the legislature assumes powers never contemplated. The only solution has been the abrogation of the constitution, as in Cyprus and Malta, or a further advance towards responsible government, as in Ceylon and India. Hitherto no permanent and satisfactory compromise has been found between Crown Colony government and self-government. Representative government with safeguards has always proved utterly unsatisfactory as a compromise. Its operation since 1918 has repeated the history of its failure in the West Indies and North America during the eighteenth and nine-

teenth centuries. To abolish the official majority in the Legislative Council therefore implies, or at least should imply, that the local population have attained such a degree of political development that a rapid and successful transition to responsible government can be confidently anticipated. Otherwise the alternatives are soon presented of a premature advance to self-government or a return to Crown Colony government with all the agitation and ill-will engendered by the abolition of political liberties.

The introduction of representative government in Hong Kong would be as premature as it is generally unwanted. Only a minority of the minority born in the Colony regard it as their home and themselves as British subjects; the great majority propose to return to China as soon as they can afford to do so. They are birds of passage who naturally have no concern with the permanent interests of Hong Kong, and who would inevitably favour such policies as would enable them to leave the sooner. The vast majority of the Chinese are drawn from the coolie class, have a low standard of literacy and no conception of the meaning of self-government. Their interests are confined to accumulating a competence in as short a time as their acumen and remarkable industry can contrive. Democratic government has been established in only a few tropical countries, such as the Philippines and Ceylon, and it has been in existence so short a time that it is difficult to draw conclusions for guidance in other dependencies. In the Philippines it seems clear that constitutional advance has been too rapid and that the present trend is from democracy to a form of dictatorship. There, as in Ceylon, the very wide extension of the franchise has had unfortunate results, and has not promoted the prospects of ultimate success. A similar franchise would be even less satisfactory in Hong Kong, owing to the migratory character of the majority of the population. On the other hand, to confine the vote to the small minority of Chinese and other races in Hong Kong who have the education and political maturity to understand its use, would place control of the government in the hands of a small oligarchy. Omitting historical examples of the result, this course has been adopted in some of the French colonies with far from happy consequences. Given the existing situation in Hong Kong the Crown Colony form of government is the type best adapted to its needs. The administration has not escaped blunders, any more than others; but it has promoted the interests of the Colony very much better than the vast majority of the inhabitants are capable of doing.

To describe the government as an autocracy, as is so frequently done, is very far from correct. Legally the Governor is an autocrat, and when the Imperial Government decides that any policy must be adopted, legality and actuality coincide. This is far from being an everyday occurrence, and at other times the inhabitants of the Colony have much more power in reality than constitutional appearances would indicate. The typical Governor resembles in certain respects Queen Elizabeth. He is a benevolent despot who keeps himself well informed as to the sentiments of his subjects and proceeds towards his goal by compromise and persuasion rather than by insistence upon his legal authority. The means by which he attains this end are rarely to be found in Ordinances or constitutional documents, nor do they satisfy any canons of logic or symmetrical evolution. They work to the reasonable satisfaction of those concerned, however, which after all is the most important requisite of any government. From one point of view, indeed, the British Empire belongs to the realm of phantasmagoria rather than of sensory perceptions: outward forms have no necessary relation to actual realities. Failure to realize that things are probably not what they seem has proved a pitfall for many painstaking and learned commentators. The Governor's power of veto and the official majority in both Councils give the superficial appearance of complete control of legislation and taxation. In reality his relations with his Councils are very different from those which appear on the surface, and go far to explain the amicable relations which prevail with the unofficial members. All legislative and financial proposals are discussed in the Executive before they are introduced in the Legislative Council. The three British and Chinese unofficial members have full opportunity to discuss them, and if they assent they are required by custom, though not by law, to support them in the Legislative Council. This support of three of the principal unofficial members by itself considerably weakens any opposition which may subsequently develop there. If on the other hand they disapprove the proposed measure, they inform the Governor that they will oppose it in the Legislative Council. Their opposition will be supported in the English-speaking press, which is free from censorship and does not hesitate strongly to criticize the Government. Furthermore, there is always the chance that a controversy might be reported in the papers of the United Kingdom or might lead to questions in Parliament. While the Governor's attitude will depend upon his personality, normally he will arrange a compromise in order

to avoid subsequent opposition. This course will almost certainly be followed if the measure would be unanimously opposed by the unofficial members in the Legislative Council. With the official majority there is no doubt of its enactment; but all instances of unanimous unofficial opposition must be immediately reported to the Secretary of State for the Colonies. The Colonial Office tends strongly to support the Governor as the man in control; but at the same time it prefers an official who administers his colony with the minimum of friction and does not refer to it quarrels between himself and his unofficials. Repeated incidents of this nature would lead to the conviction that he was lacking in the essentials of tact and the ability to co-operate, and would militate against his prospects of promotion to a more important post. Even when the Governor is carrying out a policy laid down by the Colonial Office he is likely to cable suggesting a compromise if the threat of unanimous opposition develops. The consequence is that most legislative and financial proposals have been discussed and arranged before they leave the Executive Council and have been assured of the support of the three leading unofficials who are members of it.

Two committees of the Legislative Council also play their part in promoting harmonious relations. The Finance Committee, which is composed of all the unofficial members under the chairmanship of the Colonial Secretary, discusses fully all financial measures before they are brought up in the Council. Of recent years a second committee has been established to discuss the draft estimates of the budget. The proceedings are not published as are those of the Legislative Council; and the result is that all contentious questions are very fully and frankly debated before they are formally introduced in the Council.* Another means by which the Governor ascertains popular sentiment is by informal conversations with prominent British and Chinese residents on questions of importance. The small size of the Colony makes these frequent inter-

* e g. Governor Sir Cecil Clementi (*HK Hansard*, 23rd January, 1930) congratulated the Legislative Council on the 'whole-hearted collaboration between official and unofficial members in preparing legislative and financial measures. . . Difficulties and debatable points are threshed out in the freedom and privacy of informal discussion whether in the Executive Council or by means of specially appointed committees, prior to the introduction of bills, regulations, or money votes for the formal approval of the legislature. So there is seldom any need for long debates in this Chamber and divisions are very rarely called for . . . the great debt which as Governor I owe to the unofficial members for facilitating and expediting the work of the administration' particularly to those who were members of both Councils, 'for it is in the Executive Council that most of the preparatory work for this Chamber is done. The Executive Council meets every week and, while meetings of the Legislative Council are usually brief, meetings of the Executive Council are often very long.'

views easy to arrange and reduces the chances of friction. One might perhaps hazard the conjecture that the frequency of these interviews partly accounts for the friendlier relations which prevail than in the Councils of the Straits Settlements and Federated Malay States. There the attitude of the unofficial members towards the Government has been described as one of "friendly ferocity", and the tone of opposition in Council meetings seems decidedly more marked than in Hong Kong. Owing to the much greater size of Malaya it is impossible for the Governor to keep in close touch with unofficials, except those living in the capital, Singapore. The journey from Penang to Singapore, for example, takes twenty-four hours as against a few minutes from the business quarter of Hong Kong to Government House.

One final body of very great importance in this connection is the District Watch Committee. Here appearances are peculiarly deceptive, for legally it is merely a committee of fifteen Chinese who meet under the chairmanship of the Secretary for Chinese Affairs to manage the District Watch Force. This is a body of some 120 Chinese constables and detectives recruited and paid by the Committee, which operates in the districts that are preponderatingly Chinese. In reality the Committee is the Chinese Executive Council of Hong Kong and is consulted on all matters affecting them. Candidates are suggested by the Chinese from among the most influential and wealthy men in the Colony, but are appointed by the Governor. Usually, though not invariably, the members have had a long period of service upon less important Chinese semi-official committees, such as that which controls the Tung Wah Hospital. Appointment is very eagerly sought after because of the great prestige attached to the office, and of certain marks of distinction to which the members are entitled. They have the right, for example, to a guard of the District Watch Force on the occasion of weddings and other festivities. Moreover, the Chinese representatives upon the Executive and Legislative Councils are often selected from the District Watch Committee. The Committee still controls the Watch Force, but its other duties are of far greater importance. In addition to the meetings under the chairmanship of the Secretary for Chinese Affairs, the Governor presides once a month. All members take the oath of secrecy, which is strictly observed; and, the discussions being frank and free, the advice ultimately given is often of very great value to the Government, which consults it on all questions affecting the Chinese. The members have wide influence among their compatriots

and give important assistance to Government in guiding and directing the mass of the population. During the general strike and boycott of 1925, for example, the Committee gave whole-hearted and valuable help to the administration. The characteristics of the Chinese coolies—their ignorance and credulity, their strong latent dislike of foreigners, and the difference between the Western and Chinese point of view which makes mutual understanding so difficult —renders a Committee of this nature peculiarly valuable. An amusing example of the misunderstandings which sometimes arise was afforded by the inability of the census enumerators in 1921 to ascertain the number of Chinese children between the ages of four and ten. Many were removed from school, and they were sometimes confined to their homes for days. The reason was a "widespread belief . . . that the Government intended to build a huge bridge across the harbour to Kowloon resting on ninety-nine piers, and that a certain number of young children of both sexes were required to be buried alive under the foundations of each pier in order to ensure its stability. The numbers increased as the rumours grew, and the highest number which came to my notice was 300 of each sex, while the final embellishment to the tale was the addition of an unfixed number of pregnant women. In the perverted view of the frightened mothers the very object of the census was to enable the Government to make a suitable choice of its victims. Inquiries made showed that the story had gained wide credence and caused no little alarm throughout Hong Kong and Kowloon".[4]

The duties of the District Watch Committee have not been defined in any Ordinance: they are based upon unwritten custom and convenience. In its original function, of directing the actions of its police, the Committee inevitably dealt with matters of wide general interest. The custom thus grew up for questions affecting the Chinese to be referred to it by the Government for advice, and so it gradually became the unofficial Chinese Executive Council of Hong Kong. The absence in Malaya of any comparable body provides an interesting contrast, for the various Chinese advisory committees there are much less important. Conditions are so different that it would be impossible to establish a comparable body in Malaya. The great majority of the Hong Kong Chinese come from Kwangtung Province and especially from Canton and its environs. This homogeneity makes it possible to control them through their leaders in the District Watch Committee. The Chinese in Malaya are drawn from various provinces and are divided by provincial hostilities of

long standing. The wealthy and educated Chinese in some districts come from a different province from the majority of the coolies; and, in addition, the interests of the recent immigrants often differ from those of the Straits Chinese who are permanently settled in Malaya. A committee representing the Chinese of Malaya would necessarily reproduce the various schisms which divide them, and its members would in some cases have no influence over the coolies in their districts. It would probably divide into factions and could neither advise Government nor exercise a guiding influence over the mass of the population.

The Secretariat for Chinese Affairs

In administration as in trade, Chinese affairs absorb a large part of the attention of Government. This is inevitable, since the Chinese are 96.67 per cent. of the population and fill all posts save the small number of higher positions in Government service, commerce and banking which are held by Europeans and Americans. From the very beginning the prosperity of Hong Kong has depended upon the co-operation of the two races; and one principal aim of Government has always been to foster good relations between them. Although normally amenable to administrative control, the Chinese have what might be described as strongly marked views of, at times, a peculiar character upon matters affecting their own interests. While fully appreciating the advantages of Hong Kong as a place where money can be earned without official "squeeze" as in China, they vastly prefer to be left alone to manage their affairs in their own way. Their attitude towards government as a necessary evil whose interference should be kept at a minimum, would have won the approval of Victorian advocates of *laissez-faire*. The official policy has been to ascertain their views and, where possible, to modify British ideas regarding the duties of government, so as to accommodate them to Chinese wishes. It was typical of this policy that the first Chief Magistrate of Hong Kong was instructed on 30th April, 1841, to "exercise authority according to the laws, customs and usages of China as near as may be . . . over all the native inhabitants".[5] In addition to Chinese representation on the Councils and the District Watch Committee, a special department, the Secretariat for Chinese Affairs, was established over eighty years ago to deal with all matters affecting Chinese, and to advise the Government. A very similar department, the Protectorate of Chinese, was created in Malaya. The Bureau of Chinese Affairs in the Netherlands East Indies also.

resembles it in so far as it advises the Government on Chinese questions; but apparently it does not have the extensive powers of control possessed by the Hong Kong and Malayan departments. No agency of this sort exists in the Philippines; but the Chinese there form a very small fraction of the population and have also intermarried to a considerable extent with the Filipinos. Furthermore, it is shrewdly suspected that a good many of them have entered the country illegally, since Chinese immigration has been forbidden for many years. They therefore try to avoid differences of opinion with the Government; and for all these reasons a department of Chinese affairs has not been essential as in the other dependencies.

The staff at Hong Kong is made up of the Secretary for Chinese Affairs (formerly known as the Registrar-General) and three European Assistants, with Chinese occupying the subordinate positions. The Europeans are members of the Cadet or Administrative Service and are required to have a command of the Chinese language. The offices of the Department are close to the principal Chinese quarter of Victoria; and everything is done to facilitate easy access of any Chinese to one of the Europeans. Every attempt is made, for example, to prevent the Chinese doorkeepers from exacting a bribe for admission; but the habit of giving and demanding "squeeze" is so ingrained that this is not always possible. The absence of an interpreter is an important factor in placing the applicant at his ease. He is encouraged to state his case, is heard patiently, and, even if the decision goes against him, he is left with the feeling that he has been given a full hearing and has been justly treated. This confidence of the Chinese in the power and benevolence of the Secretary for Chinese Affairs is the basis of the whole system. The Department is the official channel for all communications between the Chinese and the Government; and they are encouraged to state their wishes or grievances to the Secretary. It is also one of his most important duties to take the initiative in ascertaining and making these known, and in preventing any misconceptions arising as to the purposes of Government. The Secretary is the especial adviser of Government on all questions affecting the Chinese and is a member of both Councils. Policies affecting them, e.g. proposed legislation are expected to be shaped in intimate collaboration with him. Other departments are expected to work with him in carrying out policies affecting the Chinese, and complaints against their actions are frequently handled by him. He is expected to make a report to Government on any subject affecting the Chinese where it appears to him

desirable, whether he has been asked to do so or not, and also to point out the probable effect upon Chinese public opinion of any contemplated action or Ordinance. Another very important duty is to explain intended policies and to obtain Chinese co-operation. Where possible, the Government will adapt its policies to their wishes, especially if the Secretary supports them. At the same time instances arise when this is impracticable, and it is then the duty of the Secretary to explain the circumstances and persuade the Chinese to obey the Government's decision. One might perhaps characterize the basic principle of the Colony's Chinese policy as co-operation based on mutual explanations and persuasion, and on respect wherever possible for Chinese customs and wishes.

The actual powers of the Secretary for Chinese Affairs are much wider than those which have been conferred upon him by Ordinances. This is due to the Chinese themselves, who insist upon submitting to him many problems which elsewhere would be settled for example by the courts. The reason is that the Department has gained their confidence and the tradition has been established of accepting it as arbiter in many disputes. The Department indeed has at times actually to discourage applicants to prevent itself from being swamped with complaints. Intimate private and family quarrels, e.g. the allegation of a concubine that she has been ill-treated by a jealous wife, or charges of witchcraft, are frequently settled by the Secretary, sometimes with the assistance of a committee of Chinese which he appoints for the purpose. On one occasion two families living on opposite sides of a narrow street had so bitter a dispute that one of them placed the image of a devil on the verandah facing that of the other family. Malign influences were thus brought to bear until the situation was reversed by a counter-attack conducted by the image of a devil of superior potency. The original devil, now on the defensive, was enabled to regain the tactical ascendancy by the hasty procurement of a reinforcing devil. The second family also called out reserves, until two pantheons of devils stood entrenched on the two verandahs. What might be described as the shock troops of devildom were brought into action by placing on one verandah the image of a tiger; but the opposing family captured the Hindenburg Line by placing a mirror in the tiger's line of fire. This, as it were, turned his guns upon his own side. The feud had now reached such intensity that personal assault was likely to supplement supernatural violence; and both families agreed to submit the case to the Secretary for Chinese Affairs. He settled the quarrel to the com-

plete satisfaction of all concerned by confiscating the devils, the tiger and the mirror. Legal disputes, which in other countries would be settled in court, are sometimes referred to the Secretary, though this is less common than formerly. An interesting feature of cases where he acts in a semi-judicial capacity is that lawyers cannot appear without his permission. The purpose is to ascertain the facts and dispense justice with the minimum of legal technicalities and delays. An appeal against the decision of the Secretary for Chinese Affairs is practically unknown.

The Secretary's authority is still further enhanced by the strong support accorded him by the wealthy and influential Chinese of Hong Kong who make up the various Committees. They exalt his power to their fellow countrymen and urge obedience to his orders. The Committees are eleven in number and have from seven to twenty-two Chinese members together with, as a rule, the Secretary for Chinese Affairs. The members are appointed for one year by the Governor after consultation with the Secretary for Chinese Affairs and the District Watch Committee, whose advice has great weight. The appointees are the leading Chinese of the Colony, and represent fairly the various groups into which the population is divided. · Appointment is eagerly sought, since it carries great prestige and is the first step in the *cursus honorum* which leads to membership of the District Watch Committee, of the Legislative and Executive Councils, and perhaps to a place in the Honours list. The Chinese share to the full the natural human desire for marks of distinction which in Great Britain, for example, may reward the endowment of hospitals and other institutions by elevation to the House of Lords, and in Russia led to the establishment of the Order of Lenin and similar embellishments of the "classless" state. Other marks of distinction granted in Hong Kong are the Certificate of Merit, or appointment as a Justice of the Peace. The principal direct control of the Secretary over the Committees is financial: in the past their funds were often mismanaged, and his duty is to supervise the expenditure and the audit of accounts, which is performed by members of the Committee. The friendly relations which he establishes through his membership enable him to exercise an indirect influence over their proceedings through the medium of advice and discussion. They also assist in his work of securing the harmonious co-operation of the Government and the Chinese in the administration of the Colony. The attitude of Government is that, though in some instances it grants a subsidy, the bulk of the funds has been

subscribed by the Chinese. The expenditure should therefore be regulated by them with only as much tactful supervision as is necessary to avoid misappropriation. The result is that the standard of financial honesty on the Hong Kong Committees is in striking contrast to that of China; but at the same time the members feel that they control the disposition of their own funds.

The principal duty of the most important, the District Watch Committee, has already been described. Its original but less important function arose because of the attitude of the Hong Kong Chinese towards the Government police. They were reasonably content to accept their services; but at the same time they were and are imbued with the traditional Chinese attitude that the police are an alien and hostile body addicted to squeeze and oppression which it behoves all law-abiding persons to shun. They therefore tolerate but do not assist them, and in the early days of the Colony they employed private watchmen for their shops and warehouses. Important streets formed committees representing the subscribers for their control till with the growth of the city the system became unwieldy from the number of committees. The Government, with the concurrence of the Chinese, consolidated the watchmen and the street committees into a single body, and placed it under the control of the Secretary for Chinese Affairs. The separate watchmen were combined into the District Watch Force composed of forty detectives and eighty constables, who do duty only in the districts which are preponderatingly Chinese. The men are uniformed and armed, have all ordinary police authority and responsibility, and are paid from a fund raised by a voluntary assessment on all Chinese shops. They are under the control of British non-commissioned officers seconded from the police for training and discipline. The District Watch Committee recruits and pays the men and approves all punishments for breaches of discipline. All clerical work connected with the force is done in Chinese in the office of the Secretary for Chinese Affairs. There is no Government audit of accounts, but a monthly audit by two members of the Committee. The policy of the Government is to collaborate in maintaining an efficient force while at the same time making the Chinese of the Colony feel that this is their own and not the Government's police. The quality of the men is excellent: the Committee is very careful not to waste its own money in engaging worthless candidates. The force is of very great value in combatting crime and obtaining information, since Chinese will give information to its members which they would never volunteer

to the Government police. It thus supplements information gained by the Secretary for Chinese Affairs from other sources.

Several other committees deal with charitable and educational matters, the most important being the Tung Wah Hospital Committee. The hospital was opened in 1872 to provide free treatment for Chinese in accordance with Chinese medical practice, Western methods being added later. The hospital has been principally supported by voluntary subscriptions, although a small annual grant has been made by Government. The management became unsatisfactory, especially as regards hygiene and finance. To introduce the needed reforms the Government placed the Chinese Committee under the chairmanship of the Secretary for Chinese Affairs and gave the Medical Department powers of inspection and control. To-day there are three general and maternity hospitals, each having as Medical Superintendent a Chinese Medical Officer who is paid by Government. The staff includes Chinese qualified in Western medicine, as well as herbalists, the patients choosing whichever type of treatment they prefer. There is also a Tung Wah infectious diseases hospital with thirty beds, where treatment is left almost entirely to the herbalists. In addition to managing the hospitals, the Committee performs a host of other valuable services. To cite only a few of them: it gives relief and buries destitute Chinese, organizes food kitchens in times of severe unemployment, returns the destitute to their villages in China, sends home the bodies of Chinese who have died abroad, controls some Chinese elementary schools, and collects funds for the relief of disasters in China. The one subject with which the Committee has refused to concern itself within or without the Colony has been politics. The Chinese Public Dispensaries Committee is an offshoot of the Tung Wah Hospitals. Periodical epidemics of smallpox, plague and other diseases demanded drastic action by Government along Western lines, but much prejudice and opposition were encountered, especially among women. To combat this attitude, public-spirited Chinese established nine dispensaries staffed by Western-trained Chinese who treat outpatients, particularly women and children, by Western methods alone. An important duty of the doctor is to visit premises where infectious disease has occurred, disinfect them, and explain to the inmates the reason for its necessity. Each dispensary has a mortuary with the top of the table so arranged that the weight of a body on it rings a bell in the caretaker's room. The dead are buried by the Committee; but this extension of its work has not ended the

peculiar custom of the Hong Kong Chinese of dumping dead bodies in the streets after nightfall. About 1,000 a year are found by the authorities, usually destitute and friendless persons who are thus disposed of by the other inmates of the house as the easiest way of getting rid of them. The funds for the dispensaries are raised by the Chinese themselves and administered by the Committee under the supervision of the Secretary for Chinese Affairs.

The Po Leung Kuk, founded in 1878 to aid in the suppression of kidnapping, especially of women and girls and to provide a refuge for them, is managed by a similar Committee and supported almost entirely by voluntary subscriptions. The Committee sits almost daily and returns runaway girls to their families, even in the middle of China, settles matrimonial disputes, arranges suitable marriages for inmates of the Refuge, and advises the Secretary for Chinese Affairs in all cases affecting Chinese family life. The Government has been exceedingly careful not to interfere with Chinese religion; but in 1928 a Chinese Temples Committee was established, under the chairmanship of the Secretary for Chinese Affairs, to control all the revenues of the temples and to use any surplus for general Chinese charities. Temples of all kinds are dotted over Hong Kong and derive their revenue from the sale by tender of the right to manage them over a short period of years. This right can be very valuable if the temple is popular, and in some cases abuses crept in. The Government's intervention was at the urgent request of the principal Chinese. All legitimate rights of the local committees managing the temples and the cost of observing the customary ceremonies were fully safeguarded, and a fairly large sum was saved which has been used for Chinese charities.[6] Other Chinese Committees manage the permanent cemetery to which reference has already been made, the industrial school at Aberdeen, a recreation ground, and several other concerns of interest to the community. Altogether, a large number of charitable enterprises are conducted by the well-to-do Chinese, and are of material assistance to a Government which is never over-burdened with funds.

The Government's Chinese Policy and Its Results

The guiding principle of the Government's Chinese policy has been to carry on a Western administration among a predominantly Chinese population with the maximum of harmony and co-operation and the minimum of friction and obstruction. To translate this general principle into practice has at times been difficult, owing to

the wide difference between the British and Chinese points of view. The Secretary for Chinese Affairs and such bodies as the District Watch Committee have assisted the Government to attain this end through such means as ascertaining the wishes or grievances of the Chinese, removing their misapprehensions and persuading them to comply with official policies. Where possible the Government has also modified Western requirements, and above all has tried not to move too far in advance of Chinese opinion. The fields of action which have particularly affected the Chinese have been trade and labour, law and order, public health and social services. From the first there has been practically no special control of Chinese trade organizations, whether of merchants or workmen. There have always been a Chinese Chamber of Commerce, associations of merchants and, more recently, trades unions. Ordinances have been passed improving labour conditions in factories and workshops, so that they are superior to the general standard in China. Western requirements, however, which increase costs of production, must be introduced with discretion. Hong Kong factories have to compete with rivals in China and elsewhere, whose working condition are inferior; andcompetition would become impossible if industries in the Colony were too severely handicapped by reforms based on Western ideas. Legitimate action by trades unions has not been interfered with; but those which fomented sedition under the cloak of normal labour methods have been suppressed. In 1927, for example, the Chinese Seamen's Union was banned: it had been one of the principal causes of the general strike of 1925 and in subsequent years had attempted to revive it. Some communistic organizations which combined the fomenting of labour disputes with seditious agitation against Government were also suppressed. Communist activity was fairly pronounced for some years after 1925, but has become unimportant owing to the effective measures of control adopted, and also it would seem to lack of funds. Resources were depleted by the general strike and do not seem to have been renewed. In Hong Kong any Society has a legal right to be formed and carry on its business without obtaining official permission to be incorporated. The law requiring Government registration before it had the right to exist was repealed some years ago, since it was held that a Society which intended to carry on a subversive or criminal course of action would provide a highly moral camouflage which would deceive the elect. The civil servant who passed the application for registration—in practice a junior officer of about five-years' service in the Department of the

Secretary for Chinese Affairs—might quite possibly fail to detect the real purpose. Therefore the wisest course was to permit a Society to come into existence and await developments, the Government reserving the right to suppress any which had proved itself to be undesirable. In British Malaya, on the contrary, no Society can be formed until its purposes and managing committee have been investigated and approved by Government. The Malayan authorities are confident of their ability to discover its real purposes before granting it registration. Also they contend that while in theory the Government may have the right to suppress an undesirable Society, in practice it is more difficult to do so once it has acquired a legal right of existence. They prefer therefore to apply preventive measures at the beginning rather than at a later stage.

As regards law and order, the Chinese have appreciated the advantages of a system of courts and police which affords far greater security and justice than in China. At the same time they have followed the Chinese tradition of regarding the police as a body which respectable citizens should avoid. This attitude is derived from their experience in China and is not justified by the general conduct of the Hong Kong police. It is of course true that despite all the efforts of their officers there have been individual instances of taking or demanding bribes. It would be idle to expect a uniformly unblemished record in a body of 2,094, especially in a country where for uncounted centuries the tradition has been firmly established that those in authority exact squeeze as a prerogative of office, and ordinary citizens actually press bribes upon the police without solicitation. The Hong Kong police have performed an unusually difficult task with marked success. Owing to the proximity of China the Colony has far more than its fair share of criminals: those who find their own country too attentive can easily enter Hong Kong on one of the large number of junks and local steamers which constantly ply between the two. To cope with this problem there is a regular force composed of fourteen British officers and 255 constables, 803 Sikhs, and 1,022 Chinese, in addition to approximately 120 of the District Watch Force. The British contingent is unusually large for a Colony, but is required by the peculiar geographic problem of Hong Kong. Malaya, by way of contrast, receives a much smaller number of criminal immigrants, owing to the far greater cost of reaching it, and requires fewer British police. Hong Kong has the problem of criminal Secret Societies which are found in all countries where the Chinese have

migrated. As elsewhere, their activities go in waves: they were a serious problem about a dozen years ago, but since then have been quiescent. A spurious variant which appears from time to time is the gangs of ne'er-do-wells who masquerade as branches of the powerful Triad Society and thereby extract blackmail from prostitutes and others. The success in dealing with criminal and seditious Societies is due partly to the size and efficiency of the police and in part to the smallness of the rural area outside the two cities. There is not, as in Malaya, a large and sparsely policed hinterland with a numerous Chinese population in which criminals can conceal themselves. In Hong Kong the headquarters of a Society are soon detected, and thereafter its members are kept on the run until they are arrested or return to China.*

While the Chinese approve the work of the police in suppressing crime they are less appreciative of their enforcement of the municipal regulations necessary in a crowded city. China until recently had little or nothing of the sort, and immigrants to Hong Kong find it difficult to appreciate the Western attitude towards such questions as road traffic, the regulation of street hawkers, Chinese theatres, or street and night noises. As regards these last, anyone who has lived in a Chinese city must feel that their nerves or ears or both belong to a totally different species from those of Europeans. Hong Kong has made great progress without undue friction by following its policy of co-operation and avoidance of too precipitate an advance. Sanitary regulations are the most likely and frequent cause of trouble in any Asiatic city. Apart from the cost of sanitary improvements, to which the attitude of the Chinese is the same as that of other ratepayers, it is difficult to convince the average Asiatic of their necessity. His point of view is very similar to that of Europeans in the Middle Ages. What harm is there in over-crowding? Why object to a bad smell? Here again Hong Kong has advanced by a wise and slow guidance of the Chinese, and has avoided wherever possible any drastic interference with their customs. The collaboration of the leading Chinese and particularly of the Tung Wah

* Hong Kong has created for itself a peculiar problem, owing to the improved conditions provided in its new prison at Stanley. Board and lodging have been so superior to those enjoyed by many criminals while at liberty that a sentence was in some danger of being regarded as a reward. Owing to the serious overcrowding, a rapid turnover of lesser offenders has become unavoidable, many being released before their sentences expire, to make room for applicants with more serious qualifications for admission. The difficulty has been that the ejected seemed to look forward to returning, and Chinese banished from Hong Kong on pain of imprisonment if they re-entered the Colony were far from being deterred by the penalty. Finally a Commission of Inquiry was appointed to devise means of making prison less attractive.

Hospital and Public Dispensaries Committees has been of very great assistance in their educative as well as in their medical aspects.

The result of the Government's policy is that the Chinese feel that Hong Kong has been administered with a proper consideration for their wishes and customs, and that their point of view has received a sympathetic hearing. They have come to the Colony to make money, and, from the great merchant to the coolie, they are far more concerned with that than with, for example, the establishment of a democratic majority on the Legislative Council. Most of them intend to return to China eventually; and meanwhile they fully appreciate the material advantages of British rule. Their appreciation is increased by their knowledge of the very different conditions which have prevailed in China. Many of them are supporters of Chiang Kai-shek and send him voluntary contributions; but at the same time they do not want to see his government established in the Colony. The racial bitterness which has caused so much trouble in India is not found in Hong Kong, although British and Chinese have separate clubs and, on the whole, social intercourse between the races is limited. Many individuals however are on friendly terms; and perhaps also one may hazard the guess that the Chinese is too content with the society of those of his own race to trouble himself with his exclusion from European circles. He has a robust sense of his own superiority, and has none of the hyper-sensitiveness and inferiority complex which make so many Indians, for example, bitterly resent their exclusion from Western society. The result is seen whenever the Colony is faced with a crisis, as in the general strike and boycott. The Government can then count on the strong support of the leading Chinese and the exertion of their influence, because their material interests are bound up with its continuance and because they consider that in the past it has treated them with justice and consideration. Patriotic loyalty in the sense in which it is found in Great Britain does not exist save in a few instances. The vast majority are loyal because their self-interest dictates it. Civil servants and merchants often live for years in Hong Kong without becoming naturalized British subjects or concerning themselves with their Chinese nationality. The Government for its part follows a policy of live and let live: it makes no inquiry into the nationality of its Chinese officials or of other residents unless they display violent hostility to British rule. The attitude of the Chinese is what one would expect, seeing that the

bulk of the population are temporary immigrants without roots in the Colony, and that so many of them maintain close connection with their ancestral homes in China.

The education afforded in the schools of Hong Kong is predominantly literary; but so far it has not produced the political effects observable in, e.g. India. This may be because as yet the intellectual proletariat is small, unorganized and of very recent appearance. It is chiefly made up of those who have received a partial education in English, but who have not completed the school course. Their ambition is a clerical post under Government or in business; but their education is too inadequate for them to obtain it. At the same time they have too much education to be content with manual labour. They therefore find it difficult to obtain congenial employment and become discontented. They have no political significance, however, and have not advanced any demand for a change in the form of government. The smallness of the intellectual proletariat is perhaps attributable to the limited number attending the schools, and because in the past the demand for clerks in Government and business absorbed those who had an adequate education. The graduates of Hong Kong University usually try to obtain a position in the Colony, and do not go to China as it was hoped and expected they would when it was established. Graduates in medicine find employment by acquiring practices at the expense of the European doctors. Those with a B.A. degree obtain clerical posts in Government or business offices. Cases were cited where they have been glad to find clerical employment at from HK $75 to HK $150 a month (about £5 to £10). They have no political discontent in the sense of wishing to democratize the form of government; but they are pressing for increased appointment of Chinese to Government service.

The relations of the Colony with the National Government of China have very greatly improved since the days of the general strike and boycott. After the failure of that attempt, anti-British propaganda continued on a considerable scale until about 1930, though it would seem to have been less serious than in Malaya. The vernacular schools in Hong Kong were not used as they were there for the propagation of seditious teachings. Formerly wealthy Chinese were intimidated into joining the party and contributing to its funds, but this is no longer so. There has been little anti-British sentiment in the vernacular press; but censorship has been necessary to prevent periodical advocacy of a boycott against

Japanese trade which would lead to serious protests. Furthermore, since Cantonese politicians when defeated have usually taken refuge in Hong Kong and bought a newspaper in order to attack their successful rivals, the Government has had to control their writings in order to avoid protests from Canton. The policy of Government towards the Kuomintang was that illegal actions were promptly dealt with by the police, who were able to break up any seditious organization pretty quickly owing to the small size of the Colony. At the same time the Kuomintang was not banned as an illegal Society, so that membership and contributions to its funds were legitimate. Communist agitation was also fairly extensive until about 1930, but was unable to cause any serious trouble after the failure of the general strike. As in Malaya, the hostility between the Kuomintang and the Communists in China after 1927 was reflected in Hong Kong, and after that date the two parties attacked one another as well as the British. Since about 1930 the amount of Kuomintang seditious activity has been negligible, and the relations of the British and Chinese Governments have become increasingly friendly. The principal reason for the change has been the growing menace from Japan, and the desire of the Chinese Government to cultivate friendly relations with Great Britain in the hope of obtaining her aid in the struggle. The attainment of this purpose was obviously incompatible with anti-British propaganda or with any renewal of the boycott. The Kuomintang was not reconciled to the existence of British rule in Hong Kong; and if the threat from Japan had been removed it would sooner or later have demanded its rendition and perhaps recommenced an intensive anti-British campaign. It is also probable that the Chinese leaders realized that in the unsettled state of the Far East they might need Hong Kong as a refuge in the future as in the past; and since the outbreak of the Sino-Japanese War many Chinese have gone there for safety. Furthermore, even if the Chinese Government had succeeded in getting rid of British control Japan would not have allowed the principal trade centre of South China to remain long under Chinese sovereignty. At the present time there is no organized branch of the Kuomintang Party in Hong Kong, perhaps because of the proximity of China. The party's officials in Canton are able to keep in touch with their adherents in the Colony through the medium of certain members of its Chinese community.

The Malayan Governments have had to deal with more protracted and intensive attacks from the Kuomintang, and their policy

has been somewhat more severe. The organization of branches of the party was made illegal, although individual Chinese could be members and contribute to its funds. Both the Malayan and the Hong Kong Governments agree that it is impossible to prevent Chinese sympathizers with the Kuomintang from supporting it financially, but that strict measures must be taken against overt unlawful acts such as intimidation or seditious agitation. They differ as to the method to be adopted, Hong Kong considering that it is impossible to prevent the formation of branches in the Colony and Malaya believing that it is possible. Hong Kong has of course a peculiarly difficult problem in its proximity to China: this, and the heavy and unrestricted immigration, make it impossible to prevent the entry of Kuomintang agents. Moreover, unlike Malaya, the prosperity of the Colony is almost entirely dependent upon its China trade, and it is therefore much more essential for it to conciliate the Kuomintang. It therefore does not interfere with the party so long as no overt unlawful acts are committed, and, as in the case of other Societies, depends on the efficiency of the police to deal with them if they arise. The distance of Malaya from China, combined with the Registration of Aliens Ordinance which permits the exclusion of undesirable immigrants, gives it advantages which Hong Kong does not possess. In banning party organizations Malaya has adopted its usual policy with regard to undesirable Societies; but it has less than its usual powers, in that individuals may legally be members. In these circumstances it would seem *a priori* difficult to prevent the establishment of unofficial but nevertheless effective party organizations; and if reports are correct they have been formed in various towns. As in Hong Kong, the cessation of anti-British agitation has apparently been due principally to the desire for British support against Japan.

The Colony of Hong Kong is more fortunate than many in the lack of racial antagonism and the friendly relations which prevail between the British and Chinese. As has been suggested, this is probably to some extent due to the characteristics of the Chinese; although it is equally true that the widely divergent outlook of the two races on many questions might easily have led to acute friction. To a very large extent the existing situation is the result of the Colony's consistent policy of conciliation and co-operation and of the various media which have been evolved for carrying it into effect. These have enabled a nominally autocratic government un-

officially to transform itself into one which is neither a despotism nor a democracy, but an effective blend of both. In the present state of the Colony this would seem to be the form of government which is most suited to its needs.

CHAPTER XII

ADMINISTRATION AND FINANCE

The Government Services

The administration of Hong Kong is carried out by twenty-eight departments, the most important of the purely administrative being the Secretariat, the Secretariat for Chinese Affairs, the Treasury, the Post Office, the Imports and Exports, the Harbour, and the Police and Prisons Departments. With the exception of the two last the principal posts are held by cadet officers who are members of the Colonial Administrative Service. The heads of some of the technical departments, such as Education, are also cadet officers. Including three cadets on probation, the administrative officers in 1937 numbered thirty-five.[1] The Secretariat is made up of the Colonial Secretary, his four assistants, and a large staff of European and Chinese clerks. Following the normal British practice, the Colonial Secretary is the head of the Colony's civil service and the Governor's principal adviser. His department is the central and co-ordinating organ of the colonial government, controlling all other branches of the administration with the exception of the Judiciary and of the Audit Department. To it come reports and proposals for action from all the other departments, and from it proceed directions as to their work. The immense expansion that has taken place during the twentieth century in the duties of a colonial government, especially in the technical services, has increased beyond recognition the work of the Secretariat. Merely to list the principal departments indicates the volume of work involved even in so small a colony as Hong Kong. On the administrative and financial side, directions must be sent to the revenue departments, the posts and telegraphs, police and prisons, the registration and survey of lands, the Secretariat for Chinese Affairs, the District Officers, the Imports and Exports and the Harbour Departments. The Secretariat also supervises and controls the technical departments, which include Public Works, Railways, Public Health, Education, Botanical and Forestry, and the Royal Observatory. In addition, the Colonial Secretary deals with the correspondence with the Colonial Office and receives

the representations, criticisms and complaints of the unofficial European and Chinese population. Legally, all decisions are made by the Governor and he alone is solely responsible for every action of his government, the permanent officials being merely his advisers and subordinates. In practice it is obvious that no human being could have the time and local expert knowledge to decide such a multiplicity of problems. This inability is increased because the Governor's term of office is limited to five years. Usually he has had previous experience in administering other colonies; but while this has given him a valuable general knowledge of colonial questions—which have a certain family resemblance with marked local differences—he has no acquaintance with the peculiar local situation in Hong Kong which arises from the presence of the Chinese. The result is that a Governor is to a large extent dependent upon the advice of the Secretariat, especially during his first couple of years while he is learning the problems and needs of his new sphere of action. As with a member of the Cabinet in Great Britain, the advice of the permanent official tends to become the policy of the responsible head, the extent to which this occurs depending upon the personal character and ability of the men concerned. In practice, even though not legally, there is a delegation of authority, and only the most important questions are laid before the Governor for his decision. The rest are decided by the Colonial Secretary or his subordinates, according to their importance. For the same problem of time which makes it impossible for the Governor to consider all the questions which arise applies also to the Colonial Secretary; and he in turn is compelled to leave routine matters to his assistants.

Of the other administrative departments, conduct of Chinese affairs is the especial duty of the Secretariat for Chinese Affairs and of the two District Officers who administer the areas into which the agricultural part of the New Territories has been divided. Few questions can arise in Hong Kong which do not affect the Chinese to a greater or less extent, and for this reason the Secretary for Chinese Affairs is one of the most important members of the administration. The Governor is expected to consult him on all questions concerning them; and he is the special agent of Government for ascertaining their point of view and for securing their cooperation. The Inspector-General of Police is also concerned chiefly with the Chinese, in what might be described as their uncooperative aspects, and many phases of his work bring him into close contact with the Secretary for Chinese Affairs: the fourteen principal

appointments are held by Europeans, who are members of the Hong Kong Police Service. The Treasurer is required to keep watch on all receipts and disbursements of public funds, to provide for the local currency and the service of all loans, and to act as the financial adviser of Government. The Imports and Exports Department registers the commodities imported into and exported from the Colony. The Harbour and Air Services Department is of essential importance in a colony which exists because of its entrepôt trade. Following the usual practice, the Harbour Master and his Deputy are retired officers of the Royal Navy. In addition to a native staff, there are thirty-five European Boarding Officers, Inspectors and Surveyors. The Colonial Auditor and his three Assistants are members of the Colonial Audit Department, which, with its headquarters in London, audits the accounts of the majority of the British dependencies. He is almost an independent power and may challenge the action of the Governor himself, who cannot overrule his opinion without reporting the matter for the decision of the Secretary of State. He is one of the principal means by which the Imperial Government maintains that strict and detailed control over colonial expenditure to which the financial solvency of the British dependencies is in large measure due. The ten principal posts in the Judicial and Legal Departments belong to the unified Colonial Legal Service which was established in 1933. These include the Chief Justice and Puisne Judge, the Registrar of the Supreme Court, the Official Receiver in Bankruptcy, the Attorney-General and the Crown Solicitor. Owing to the recent establishment of the Service, however, several of the above posts are held by officers of the Administrative Service. The minor judicial posts, the four magistracies in Hong Kong and Kowloon, are filled by administrative officers. The two District Officers in the New Territories are members of the Administrative Service, but are listed in the Judicial and Legal Departments.[2]

The largest of the technical departments is Public Works, which deals with the construction and maintenance of roads, buildings, waterworks and piers, land survey, etc. The European staff numbers approximately 148 and the non-European 557. The section of the Kowloon-Canton railway in the New Territories is, as in most British tropical dependencies, owned and operated by Government. There are through trains from Kowloon to Canton, the British and Chinese administrations cooperating in the running of the railway. Owing to the short length of the line which is on British territory the Railway Department is composed of only five Europeans. The

Government also operates a commercial radio station, the range of which extends from Shanghai to the Netherlands East Indies. Public Health is controlled by the Medical and Sanitary Departments, the latter having as head a member of the Administrative Service. The technical staff of Medical and Health Officers, Senior Sanitary Inspectors, etc., number forty-six. The Education Department, the Director of which is an administrative officer, has a staff of thirteen European and four Chinese Inspectors, Head Masters and Head Mistresses. The Botanical and Forestry Department (which includes agriculture) has a European Superintendent and Assistant Superintendent. Owing to the limited area of agricultural land the principal work of the Department is reafforestation. The Royal Observatory, with four Europeans, is an important minor department, since one of its principal duties is to warn shipping of approaching storms.

In addition to the European British subjects who fill most of the higher appointments, every department employs a large staff recruited from the local population for the subordinate positions. A large number of clerical and minor technical appointments which in most British dependencies would be filled by natives of the country are, however, held by Europeans. Owing to the expansion of the social services during the past twenty years the technical departments especially have considerably expanded both their European and Asiatic staffs. The Secretariat has also augmented its clerical staff to carry out its task of controlling and co-ordinating their work. The total number of Europeans increased from 647 in 1923 to 975 in 1935. The Europeans in the Senior Clerical and Accounting Staff, which included the more important subordinate posts with clerical duties, grew from twenty-four in 1923 to sixty-three in 1935.[3] Furthermore the rising cost of living after 1918 made it necessary to increase salaries in 1920 and 1930. These increases were advised by Committees of the Legislative Council composed of official and unofficial members appointed to investigate the problem. The combined result of these factors was that the cost of salaries and pensions formed a heavy and increasing charge upon the revenue. The Public Works Department, for example, in 1923 paid in salaries to Europeans $579,963 (£65,850) and to non-Europeans $225,859 (£25,644), a total of $805,823 (£91,494). In 1935 the salaries to Europeans were $1,105,375 (£108,235) and to non-Europeans $620,143 (£60,722), a total of $1,725,519 (£168,957).[4] The serious fluctuations in the exchange

value of the Hong Kong dollar introduced further complications. While the salaries of almost all subordinate positions were fixed in terms of Hong Kong dollars those of many of the minor posts held by Europeans, such as police constable, and practically all the higher appointments, were stated in sterling. In 1935 923 of the European civil servants were in receipt of sterling and fifty-two of dollar salaries, those paid on a sterling basis constituting 9.52 per cent. of the total number of Government servants.[5] In the few instances where a Chinese held a higher post, he received the same salary as would a European, since in the British colonial services the salary is attached to the position and does not alter in accordance with the race and standard of living of the office-holder. For officials paid on a sterling basis the amount of the salary was fixed and paid in sterling when on leave and when they retired on pension. When in Hong Kong the sterling value was paid in Hong Kong dollars at a rate fixed by Government. One might almost say that, in consequence, sterling salaries became a gamble in exchanges. In 1920, for example, salaries were raised in accordance with the recommendations of a Committee of Inquiry which based its conclusions upon exchange fluctuations and the rising cost of living. In a few years, however, the increases became inadequate and had to be supplemented by a special allowance, partly on account of the rise in the cost of living, and also because the exchange value of the dollar fell from an average of 4*s.* 5*d.* in 1920 to around 2*s.* in 1928. A Committee appointed in that year advised the increase of sterling and dollar salaries, basing its recommendations on the existing cost of living and on the assumption that the above rate of exchange was likely to endure. The recommendations were carried out in 1930, by which time the dollar had suddenly fallen to about 1*s.* 4*d.*, so that the cost to the Treasury of paying the increased sterling salaries in Hong Kong dollars was considerably greater than had been contemplated in 1928. During the depression the dollar fell to an average value of about 1*s.* in 1931, rose to 1*s.* 11*d.* in 1935 and fell to 1*s.* 3*d.* in 1936. The result was that from 1930 to 1934 and in 1936 the burden of sterling salaries upon the revenue (which of course was paid in dollars) was considerably heavier than had been anticipated in 1928 when the exchange value was 2*s.*[6]

The heavy burden of salaries and pensions and the large number of Europeans in Government service have caused much adverse criticism in the Legislative Council and in the press. Both British and Chinese opposed the increase of salaries in 1930, particularly

those on a sterling basis, pointing out that they absorbed a disproportionate amount of the revenue and that the business of the colony could not afford the increase in rates which would be needed to cover the additional expense. The Government insisted, on the grounds that the proposed increases were no more than adequate in view of the cost of living, and that the existing salaries made it difficult to fill vacancies, particularly in the Administrative, Medical and Educational Departments. It also contended that the Colony was so lightly taxed that it could afford the intended additional taxation. The annual *per capita* revenue was $28.40 (£2 14*s*.), of which direct taxation provided $7.17 (13*s*. 7*d*.) and the remainder came from indirect taxes on liquor, tobacco, etc., the proceeds of land sales and other sources of revenue. By contrast, the annual *per capita* revenue of the Straits Settlements was $63.00 (£7 6*s*.) and that of the Federated Malay States $72.00 (£8 4*s*.). The increase in salaries was financed by introducing a tax on petrol and amusements and raising the rate of assessment on property from 13 per cent. to 17 per cent. The rates in Singapore were 24 per cent. and in Penang 22 per cent.[7] The British and Chinese in the Legislative Council also demanded a reduction in the number of officials and the substitution of Chinese in clerical posts and in the technical services. Their motive was largely economic, since Europeans must be paid a far higher salary to maintain their standard of living. Some of the Chinese have also been influenced by the desire to obtain Government posts for themselves or their relatives, or to improve their prospects of promotion if already in Government service. The majority of the graduates of Hong Kong University, for example, try to obtain a livelihood in the Colony and do not go to China, as was anticipated when it was established. About 40 per cent. are members of families living permanently in Hong Kong and some of the others have relatives there. Given the limited opportunities in a small colony and the traditional Chinese respect for the government official, the demand for increased employment in the services is inevitable.[8] In 1932 the Government accepted part of the recommendations of the Retrenchment Commission and made some reduction in the number of positions. It also set aside some of the posts in the Senior Clerical and Accounting Staff to be filled by promotion from the Junior Clerical Service which was staffed by Chinese. In this way the number of Europeans in subordinate posts was lessened, more chances of promotion were provided for locally recruited officials, and the cost of Government was slightly de-

creased since the salaries were altered to the dollar basis.[9] The policy was also introduced of appointing Asiatics as nurses and Sanitary Inspectors and in the Medical Service. In 1936 Governor Sir Andrew Caldecott laid down the policy that in future no vacancy would be filled until the feasibility of abolishing the position had been considered, and that no appointment would be made in Great Britain until the qualifications of Hong Kong candidates had been first examined. Salaries were reduced in accordance with a graduated scale, to lessen the large deficit which the sudden and heavy fall in the exchange value of the dollar threatened to produce.[10] Owing to the considerable improvement in the revenue, salaries were restored on 1st July, 1937, with the result that renewed criticism occurred of the excessive cost of the Hong Kong Government. It was pointed out that in 1936 salaries, allowances and pensions amounted to approximately $13,287,745 (£840,866) and the military contribution to $4,250,000 (£268,945), or about 60 per cent. of the total revenue of about $30,000,000 (£1,898,438).

Admittedly the proportion of salaries and pensions to the total expenditure is very high; but at the same time the Government is confronted by a very difficult problem. Salaries could be considerably reduced by the substitution of Chinese for Europeans, but even those who advocate the change most strongly are very clear that the standards of the services must not be impaired by the substitution. Suitable candidates for the clerical and the various technical services cannot be found for the mere asking in a small colony. Moreover, there is the problem of the existing officers: providing their services have been satisfactory they have a moral even though not a legal right to expect that their employment will continue until they reach the retirement age.* There is also the practical consideration that if once the impression, whether true or false, becomes established that a service no longer offers reasonable prospects of security and promotion, the number and quality soon decline. The experience in India after the Montagu-Chelmsford reforms is a typical instance. During the Great Depression the urgent need for economy led to the premature retirement of civil servants on proportionate pensions. A world-wide depression, however, was a patently exceptional condition almost approaching an Act of God; and the consequence was that the reduction

* *The Dominions Office and Colonial Office List, 1937, Colonial Regulations*, p. 833. 'The Regulations as to appointment to public offices . . do not constitute a contract between the Crown and its servants . . such offices are held during His Majesty's pleasure'

in salaries notably increased the expenditure on pensions. Apart altogether from its unfairness in normal times this expedient would be very unwise for a colony with such a small revenue as Hong Kong. The only solution appears to be the policy which the Government has adopted that no vacancy will be filled until the possibility of abolishing the position has been considered, and that no appointment will be made in Great Britain until candidates in Hong Kong have been considered. This must mean in practice that the cost of salaries can only diminish slowly as the existing civil servants reach the retiring age.

Revenue and Expenditure

The real cause of the financial burden is the expansion which has occurred since the Great War in the technical far more than in the administrative departments. Improved social services have been demanded in Hong Kong as in most of the other parts of the world, and the result everywhere has been increased departmental staffs and salaries and heavier taxation. Improved facilities in health or education, for example, do not involve merely the building of hospitals or schools: their principal and permanent legacy is the cost of upkeep and the salaries of the new appointees needed to staff them. There is a real danger in imposing contemporary social services on a tropical dependency. They were evolved in the wealthy industrialized Western nations which have a taxable capacity sufficient to support them; but at the present time there are few colonies in this situation. A limited number happen to control so large a proportion of some essential raw material that they can partially finance them out of a moderate export tax like the Malayan tax on tin. The majority, however, are in the position of India, of which Clemenceau once remarked:—"Your services are magnificent. You have provided for everything except the money to pay for them." Hong Kong is in a worse situation than most dependencies since it is for taxable purposes merely one large city which lives by its entrepôt trade. Very many colonies raise a large part of their revenue from import duties; but free trade is the essential basis of Hong Kong's prosperity. Most colonies have a large agricultural industry which, despite the normal mediævalism of native methods, can yield in the aggregate a substantial land tax. Hong Kong has a few score thousand farmers in the New Territories. Moreover it has no mineral wealth, and it cannot impose heavy taxes on its small industries, most of which manufacture primarily for export and have been

unable to replace their lost market in China. To impose an income tax is not feasible: to give only one example, the post-war experiment in Malaya failed because it was impossible to ensure correct returns. Hong Kong is therefore restricted to a limited number of taxes, and, though the burden is light according to Western standards, it seems probable that the taxes are about as heavy as is expedient in a trade entrepôt.

The following table giving the revenue and expenditure of Hong Kong from 1918 to 1936 is perhaps rather misleading if the amounts in dollars alone are considered. A revenue which increased from $18,665,248 (£3,013,660) in 1918 to $26,671,845 (£1,687,826) in 1936 and amounted in more prosperous times to $33,549,716 (£2,219,174) in 1932 might seem capable of further substantial expansion. The fluctuating exchange value of the dollar to some extent conceals the real situation; and the sterling figures cannot be ignored, since a considerable proportion of the revenue is ultimately transferred to the United Kingdom in the form of pensions, leave pay, remittances by civil servants to their families, purchases of engineering and other supplies by the Public Works Department, etc. On the other hand a large part of the revenue is spent in the Colony as, e.g. living expenses of Government officials, wages of Chinese labourers employed on public works, etc. This part of the expenditure is not affected by the exchange rates, so that to consider the sterling statistics alone is as misleading as to ignore them. It appears impossible to decide how far the growth in revenue represents a real increase in the Government's financial resources; but one can safely say that the situation is decidedly less favourable than a financial statement expressed in dollars alone would indicate.

	Revenue.	*Expenditure.*
1918 .	$18,665,248 (£3,013,660)	$16,252,172 (£2,624,049)
1919 .	$16,524,975 (£3,081,219)	$17,915,925 (£3,340,574)
1920 .	$14,689,672 (£3,243,969)	$14,489,594 (£3,199,785)
1921 .	$17,728,132 (£2,363,751)	$15,739,652 (£2,098,620)
1922 .	$22,291,065 (£2,809,605)	$18,563,003 (£2,339,712)
1923 .	$24,783,762 (£2,813,990)	$21,571,904 (£2,449,309)
1924 .	$24,209,640 (£2,874,895)	$26,726,428 (£3,173,763)
1925 .	$23,244,366 (£2,711,842)	$28,266,818 (£3,297,795)
1926 .	$21,131,582 (£2,333,279)	$23,524,716 (£2,597,521)
1927 .	$21,344,536 (£2,134,454)	$20,845,065 (£2,084,507)
1928 .	$24,968,399 (£2,522,849)	$21,230,242 (£2,145,139)
1929 .	$23,554,475 (£2,257,304)	$21,983,257 (£2,106,729)
1930 .	$27,818,473 (£1,927,009)	$28,119,646 (£1,947,871) [11]
1931 .	$33,146,724 (£1,735,024)	$31,160,774 (£1,631,072)

	Revenue.	*Expenditure.*
1932	$33,549,716 (£2,219,174)	$32,050,283 (£2,119,993)
1933	$32,099,278 (£2,165,029)	$31,122,715 (£2,099,162)
1934	$29,574,286 (£2,225,773)	$31,149,156 (£2,344,298)
1935	$28,430,550 (£2,783,824)	$28,291,636 (£2,770,222)[12]
1936	$30,042,984 (£1,901,157)	$29,513,520 (£1,867,652)
1937	$33,196,368 (£2,048,838)	$32,111,222 (£1,981,864)
1938	$36,735,854 (£2,276,852)	$37,175,897 (£2,304,130)[13]

The decrease of revenue in 1919 to 1921 was due to the world-wide disorganization which followed the Great War, and was aggravated by the decline in trade caused by the disturbed state of Kwangtung and of China. Eventually the civil wars benefited the revenue, since thousands of refugees migrated to the Colony and many wealthy Chinese invested their money by buying Crown land and building lodging houses. The result was that the revenue from land sales rose from $263,960 (£49,218) in 1919 to $3,488,797 (£396,124) in 1923. The following yea rthey began to fall, and by 1926 amounted to only $286,342 (£31,617).[14] The growth of population and of building also led to a marked increase in the rateable value of the Colony, the most important source of taxation. Revenue declined sharply owing to the general strike and boycott of 1925, but by 1928 was larger than before. Land sales recovered rapidly about the same time and by 1931 had risen to $3,177,808 (£166,338).[15] To a minor extent they accounted for the very marked increase in the revenue of 1931; but this was almost entirely due to the heavier taxes introduced to finance the new scale of salaries. These included an increase in rates, stamp duties, postal rates, port and harbour dues, duties on liquors and tobacco and an entertainment tax.[16] The revenue reached its highest point in 1932, but thereafter declined steadily and rapidly as the depression increasingly affected the trade of the colony. The decrease appeared in almost all items, including land sales, the fall in which was particularly marked, the amount realized in 1935 being only $244,957 (£23,985).[17] Heavy investment had led to inflated land-values and overbuilding, and the depression accentuated the inevitable reaction.[18] Property has been a favourite investment of Chinese from neighbouring provinces because of the security afforded; but the amount of Crown land bought has varied very widely. Revenue from land sales has proved to be a fluctuating and uncertain source of income. Opium as a source of revenue has declined markedly, and while in 1918 it brought in $8,047,289 (£1,299,302) by 1935 it produced only $297,286 (£29,109).[19] The sale is a Government monopoly and

the policy has been to decrease consumption by raising the price. The fall in revenue is due partly to this and in part to the competition of illicit opium smuggled into the Colony. The sharp rise in revenue in 1937–8 was due to the diversion of a large part of China's trade to Hong Kong and the influx of refugees, many of whom were well-to-do. Receipts from customs duties, assessment tax, land sales and the government railway all showed increases.

In 1938 $5,997,100 (£371,715) or 16.32 per cent. of the total revenue came from the assessment tax. The rates varied from 15 per cent. to 17 per cent. of the annual value of the property and provided for police, lighting, water, etc. 26.24 per cent. or $9,637,660 (£597,334) came from import and excise duties and, to a minor extent, from port and harbour dues. The import duties applied to liquors, tobacco and motor spirit, and there was also a registration fee of 20 per cent. of the value of a motor vehicle not produced in the British Empire imported for use in the Colony. Receipts from the post office, government wireless station, the British section of the Canton-Kowloon Railway and the charge for excess water, represented 19 per cent. or $7,016,000 (£434,845). In explanation of this last, since 1932 water has been supplied direct to all rated property, which is entitled to a free allowance, the volume of which depends upon the amount of the assessment tax. All water consumed in excess of this quantity is charged at a special rate, the real purpose being to reduce wastage rather than to obtain revenue. Hong Kong suffers from a periodical shortage of water and a great deal is wasted, particularly in the lodging houses in the poorer Chinese districts.

Rent of Government properties, interest and miscellaneous sources provided $3,312,200 (£205,287) or 9.0 per cent., land sales $1,199,500 (£74,344) or 3.27 per cent. and the opium monopoly $345,000 (£21,382) or .95 per cent. The rest of the receipts came from licences, court fees, stamp and estate duties and other forms of internal revenue.[20] Since an income tax and customs duties, except on a few articles, are impracticable, the Government's sources of revenue are limited. It is compelled to concentrate upon property taxes in the form of rates, rents and excess water charges and to augment these principally by licences, stamp duties, fees, customs and excise. Customs and excise might perhaps be increased, but one would not expect any phenomenal growth in the revenue unless the inhabitants could be persuaded that it was their patriotic duty to drink and smoke the Treasury into affluence. The other principal

sources of revenue are also inelastic, since any marked increase by raising costs of operation might injure trade, which depends for its prosperity, in part, upon the cheapness of conducting business transactions. As it is, wages and the cost of living are substantially higher than in China. As far as extending the social services is concerned it is difficult to see where any large additional revenue can be found.

Expenditure has normally been less than revenue so that a reserve fund was accumulated which could be drawn upon in years when a deficit was unavoidable. This occurred, for example, in 1925 and 1926 as a result of the strike and boycott and again in 1934 during the depression. Despite these inroads the reserve fund amounted to $13,562,235 (£840,575) on 31st December, 1938; and in 1935 the Government adopted the policy of maintaining its reserve at about $10,000,000 (£979,167). Any amount above this was to be available for non-recurrent expenditure and particularly for the construction of public works.[21] For a generation after 1897 the development of the Colony was financed entirely from current revenues, with the exception of a small sterling loan floated in 1906 to defray the cost of the British section of the Canton-Kowloon Railway. In addition to heavy expenditure on waterworks, roads, public buildings, dredging and improving the harbour and reclaiming the land at East Praya, the Colony financed out of its revenue the rapid transformation of Kowloon from a small town to a large modern city. During the Great War the construction of necessary public works and the expansion of the medical and educational services was to a large extent postponed as in other colonies. For several years thereafter available revenue was largely devoted to clearing off the arrears of public works.[22] Public Works expenditure increased from $4,643,706 (£619,161) in 1921 to $11,638,373 (£1,357,810) in 1925, or 43.71 per cent. of the total. After this date annual appropriations decreased, since the more urgent necessities had been met. Construction on a considerable scale was still necessary, however, the expenditure from revenue and loan funds in 1938 being $8,137,984 (£504,385). Provision for education and public health, particularly preventive medicine, was admittedly inadequate, the amount allocated in 1921 to the former being $589,324 (£78,576), and to the latter only $914,567 (£121,942). Government and Legislative Council, however, were agreed that these services must await the completion of the public works programme; and an additional reason was the fall in revenue which followed the boycott. Appropriations increased slowly, and in 1929 the expenditure upon

public health was $1,580,477 (£151,462) and upon education $1,152,375 (£110,436). Thereafter the recovery of the revenue, combined with the decreased expenditure upon public works and the need for expansion, led to increased appropriations. To a limited extent the decline of the revenue during the depression checked development; but nevertheless the expenditure in 1938 upon public health was $3,457,630 (£214,301) and upon education $2,139,241 (£132,589).[23] The amounts spent upon education refer only to the expenditure upon the vernacular, English and vocational schools, and do not include the annual grant to the University of Hong Kong. This was increased about 1932 from $50,000 (£3,307) a year to $350,000 (£23,151). The post-war period has seen a very real expansion of Government action in the Public Works, Medical and Sanitary Departments and to a lesser extent in Education. The growing financial stringency of the depression did not lead to any marked decrease in general expenditure, although some economies were introduced by, e.g. the abolition of posts and temporary reduction of salaries. A large part of the increased expenditure was in the form of salaries for the additional staff and no great saving could therefore be effected without destroying the recent expansion of the social services.* When a deficit occurred in 1934 it was met from the reserve fund which the Government had built up by its careful system of budgetting.

The policy of financing development from current revenue was broken in 1927 when a 6 per cent. loan repayable in 1932 was floated for the construction of new waterworks and for dredging the harbour. In 1933 this was converted into a 4 per cent. dollar loan for $4,838,000 (£326,313) repayable in 1953.[24] In 1934 an Ordinance was passed authorizing the Government to float a dollar loan of $25,000,000 (£1,881,510) bearing interest at the unprecedentedly low rate of 3½ per cent., and bonds were issued to the amount of $14,000,000 (£1,053,646). The loan was to be redeemed by annual drawings of one twenty-fifth of the issue, commencing in 1935. Part of the loan was used for repaying the portions of the sterling loans of 1893 and 1906 for £1,485,733 which were not covered by the sinking fund of £998,000. The loans were not repayable until 1943, but the condition of the London stock market made the earlier repayment profitable. The bulk of the 1934 loan

* In 1936, for example, approximately $1,400,000 (£88,594) out of a total appropriation of $1,900,000 (£120,234) for the Education Department went in salaries, and $1,160,694 (£73,450) out of $1,651,378 (£104,501) for the Medical Department (*HK Hansard*, 19th March, 1936, pp. 54, 66).

was to finance the construction of various public works which had been begun during the previous four years and had to date been paid for out of the reserve fund. Owing to their magnitude the Government had always intended to pay for them by a loan and not from revenue, but had postponed floating it until the conditions were favourable. The balance of the amount authorized in the loan, $11,000,000 (£827,864) was to be floated as required for the construction of public works.[25] On 31st December, 1938, the total public debt of Hong Kong was $16,598,000 (£1,028,733).[26]

The apportionment of the expenditure among the various departments cannot be determined with complete accuracy, since divergent statements as to the amount of a department's expenditure in a given year are often found in the different government reports. The discrepancy appears to be due to the employment of different systems of classification of expenditures in the various financial returns.* A second difficulty is that a considerable part of the expenditure, particularly of the Public Works Department, is really upon health or education. It has proved impracticable to analyse the actual expenditures into the various categories and so determine the amount really spent in each year upon the various social services.†

* To cite a typical case, the Medical and Sanitary Report for 1934 stated that the expenditure of the Medical Department in 1930 was $1,224,096 (£84,794) (*Hong Kong Administration Reports, 1934, Medical and Sanitary Report for the Year 1934*, p M 27), and the Report of the Sanitary Department for 1934 gives its expenditure in 1930 as $980,601 (£67,927) (*HK Admn. Rept. 1934, Rept of Sanitary Dept., 1934*, p M (1) 18) In the Estimates of Revenue and Expenditure for 1937 the actual expenditure for 1930 is stated to have been $1,186,250 (£82,172) for the Medical and $868,950 (£60,193) for the Sanitary Department (*Colony of Hong Kong Estimates of Revenue and Expenditure for the Year 1937*, p. 11 This volume includes a statement of *actual* expenditure for 1926 to 1935). The explanation of the discrepancy appears to be that different classifications of expenditure are employed, so that certain items, such as the salaries of clerks employed in the department which are included in the statements of the Medical and Sanitary Departments, are entered under a different heading in the Estimates. Neither the medical nor the administrative officers would venture any categorical statement as to precisely how much was spent in 1930.

† The estimates of expenditure for the same year, 1930, show that the total intended expenditure on public health was as follows (*HK Admn Reports, 1930. Appendix M. Annual Medical Report, 1930*, p M 18)

	$
Medical Department	1,209,611
Sanitary Department	791,563
Public Works Department (drainage and waterworks)	1,000,000
Police Department (ambulances)	9,000
Subsidies to charities (e.g Tung Wah Hospital)	111,704
Miscellaneous	11,000

This amounts to a total estimated expenditure of $3,132,878 (£217,017) as compared with the $2,055,200 (£142,365) quoted above from the Estimates of Revenue and Expenditure for 1937, as actually spent by the Medical and Sanitary Departments. In other words the expenditure upon public health in 1930 was about 13 75% of the revenue instead of the 7 31% officially credited to it (*Hist. and Stat Abstract of Hong Kong, 1841-1930*, Appendix, p. 9).

The following table of percentages therefore is based on the amount spent by each department on salaries and certain other charges such as living allowances and cost of equipment. It does not make any allowance for the portion of the expenditure of the Public Works and certain other Departments which should really be credited to health, education and other social services.*

	Non-effective charges.	*General Administration.*	*Undertakings of Government.*	*Public Health.*	*Public Instruction.*	*Public Order.*	*Public Works.*	*Defence.*
1913	11·21	10·87	10·03	7·02	3·19	13·43	25·59	18·66
1918	6·50	42·44	3·50	4·05	2·11	7·83	16·41	17·16
1920	7·59	17·34	7·54	5·88	3·72	12·22	26·45	19·26
1925	5·48	13·94	3·66	4·83	3·61	9·39	43·71	15·40
1930	12·29	20·16	4·66	7·31	5·91	12·67	22·93	14·07
1935	10·48	14·72	5·30	8·62	6·00	14·13	20·90	18·93
1938	10·92	17·32	6·45	9·67	5·75	14·56	15·93	19·40

The percentages for 1918 reflect the abnormal conditions caused by the Great War. The construction of public works was as far as possible postponed; the filling of vacancies and still more the expansion of the various services was practically suspended; and in the main the administration was carried on by the depleted pre-war staffs. The post-war period was marked by a heavy expansion in public works expenditure. At the same time a considerable increase

* *Non-effective Charges* include pensions and interest on the public debt. *Undertakings of Government* include the revenue-producing departments, viz the Post Office, Canton-Kowloon Railway, and the Wireless Station. *General Administration* includes the Governor's Office, the Departments of the Colonial Secretary, Secretary for Chinese Affairs, Audit, Treasury, Harbour, Air Service, Imports and Exports, Observatory, Charitable Allowances, and Miscellaneous Services. *Public Order* includes the Supreme Court, Magistracy, Law Officers, Land Registry, District Officers, Police, Fire Brigade, and Gaol. *Public Health* includes the Medical, Sanitary, Botanical, and Forestry Departments Since the expenditure of this last has usually been less than $120,000 (£11,750) yearly, it does not greatly affect the percentage *Public Instruction* includes the expenditure upon schools but not the grant to the University of Hong Kong. If this were added, the percentage for 1938 would be 7 0. *Defence* includes the military contribution to the Imperial Treasury and the cost of the Hong Kong Volunteers (*Op cit.*, pp. III-V and Appendix, pp. 8 and 9.)

The expenditures in 1937 from revenue and exclusive of the Public Works expenditures from loan funds were as follows (*HK Admn. Repts. for the Year* 1938, *Appendix A*, p. A 22) —

	$	£
Non-effective Charges	4,058,023	251,513
General Administration	6,435,178	398,845
Undertakings of Government	2,398,119	148,633
Public Health	3,596,708	222,926
Public Instruction	2,139,241	132,588
Public Order	5,413,250	335,508
Public Works	5,924,737	367,218
Defence	7,210,626	446,908
Total	37,175,897	2,304,130

of personnel took place both in the clerical and in the higher appointments. Ultimately this was inevitably reflected in the cost of the pensions which were included in Non-effective Charges. In 1938 this item accounted for about two-thirds of the expenditure under this head, the remainder being interest and sinking fund on the public debt. The small amount required to meet the debt services is due to the Government's policy of refusing to borrow save in a few exceptional cases, and of incurring only as much expenditure as it could pay out of current revenue. The fiscal history of the Colony is on the whole a good illustration of the successful application of orthodox financial principles. Roughly three-fifths of the expenditure for Public Order is the cost of the police: the special problems of Hong Kong make considerable expenditure under this heading inevitable. Apart from minor items such as a small grant to the Volunteer Defence Corps the expenditure upon defence represents the contribution to the Imperial Treasury for the cost of defending Hong Kong. The long established policy is that dependencies must pay for the cost of their own defence when they are in a financial position to do so. Where the defence serves Imperial as well as local interests the colony is required to pay the percentage of the total which represents the cost of protecting it. Hong Kong fulfils this dual rôle: the fortifications, dockyard and China Squadron are maintained not merely for its defence but also for the protection of British interests in China. The division of the total cost between the colony and Great Britain is a periodical cause of complaint in Hong Kong as in other dependencies. To allocate exactly the respective shares is difficult and provides obvious scope for widely varying opinions. The colonial taxpayer has a rooted and genuine conviction that he is overtaxed, and it cannot be denied that to spend from 14 per cent. to 19 per cent. of the revenue upon defence is a heavy burden. On the other hand he is no more impartial where his own interests are concerned than any other taxpayer and in almost every colony is far more lightly taxed than in Great Britain. Hong Kong's military contribution to the Imperial Treasury in 1938 was 18.54 per cent. of the total revenue or $6,880,723 (£426,461).[27] This does not seem an excessive charge for local defence, although at the same time it is a large proportion of the revenue, which is small owing to the necessity for moderate taxation.

Considered over the whole period of twenty-two years the relative percentages allocated to the various duties of Government show more uniformity than change. The principal increases have

been in the expenditure upon health, education and general administration, due largely to the growth in personnel particularly in the more highly paid appointments held by Europeans. The heaviest appropriation of revenue, on a rough average about a fourth, has consistently been for public works. To a large extent this has really been expenditure upon health and education in the shape of buildings, waterworks and sewage installations. The other main head of public works expenditure has been harbour improvements, land reclamation and roads, all of them essential to maintain the prosperity of the port. The criticism has been advanced that Hong Kong spends too little upon social services and too much upon other branches of government. It is true that the cost of administration could be reduced by the increased employment of Asiatic rather than European officials, and the Government has taken steps in this direction. The amount of revenue thereby released for social services, however, would be far less than the need for them. The only way in which the money could be raised would be by increased taxation, which, as already pointed out, might injure the prosperity of the port, upon which its taxable capacity depends. In any state the first charge upon the revenue must be the basic services which maintain security, that is the administration, police, courts and defence. Only less essential are the maintenance of the Government's financial credit through payment of its debt and avoidance of over borrowing, and the construction of the public works which are essential to promote the general material prosperity of the country and incidentally its capacity to pay taxes. The misfortune of a colony, with a limited revenue, such as that of Hong Kong, is that when the cost of these basic necessities has been met only a limited amount remains for such important fields as public health and education.

CHAPTER XIII

A TRADE ENTREPOT IN TRANSITION

Trade Area

The economic importance of Hong Kong is due to a combination of geography, free trade and the *pax Britannica*. At the date of its cession in 1841 it was uninhabited save by a few thousand Chinese pirates and fishermen: in 1938 it was one of the world's largest ports in tonnage of shipping entered and cleared. The Colony has been the entrepôt for the bulk of the trade of South China not only with foreign countries but also with North China. It has filled the same rôle for a substantial part of the trade of the other Asiatic countries which lie between Japan and India. It has also been the centre for the foreign exchange banking of South China, in addition to its use by many wealthy Chinese for the investment or temporary deposit of their funds when security in China has been threatened by civil wars or other disturbances. Local manufactures have been in the main a post-war development and are unlikely to attain much importance despite the growing export of a few articles like rubber shoes. They probably account for less than one-tenth of the exports; and owing to the limited size and population the internal consumption of the goods imported amounts to only about one-tenth of the imports.[1]

Hong Kong has the only deep sea harbour between Shanghai and Indo-China which provides safe anchorage in almost all weathers, adequate facilities for docking, storage of goods and repairs, and convenient access to the interior. Sheltered bays provide secure anchorage when a typhoon visits the harbour, the only exception being on such very rare occasions as that of September, 1937, when a typhoon made its appearance so suddenly that there was insufficient time to warn shipping of its approach. In addition to the natural anchorage in the harbour, which is approximately ten square miles in area, the wharves at Kowloon provide accommodation for twelve vessels up to 750 feet in length. Omitting the numerous small Chinese-owned warehouses, the three public warehouse companies have a storage capacity of 500,000 tons. The normal supply

of fuel available for bunkering merchant ships is 60,000 tons of coal and 55,000 tons of oil. The dry docks of the two large dock companies can take vessels up to 750 feet; and there are a number of other yards, mostly Chinese-owned, which deal with repairs to small craft.[2] The harbour lies on the eastern side of the estuary of the Canton River, which with its tributaries is navigable for about 630 miles by small river steamers. The smaller tributaries and the intersecting network of canals are navigable by Chinese-owned junks wherever there is sufficient depth of water. The existence of these waterways opens up a large part of South China to trade; and an additional area has been made available by the recent completion of the Canton-Hankow Railway. Hong Kong thus forms the natural harbour for the trade of this very extensive area. The Japanese attempts to divert trade to Taiwan (Formosa) failed because it is several hundred miles distant from Hong Kong's trade area, and also because it is much more exposed to typhoons.

The Cantonese have in practice viewed this situation with a notable lack of appreciation, despite the official assurances of co-operation which have been periodically exchanged. Apart from dislike of the fact that Hong Kong is a British possession, the merchants and coolies of Canton have coveted the profit which its elimination would bring them in such items as charges for storage or trans-shipment of goods. One illustration of their attitude was the refusal to allow the junction of the Canton-Hankow and Canton-Kowloon Railways. The two termini are in Canton about five miles apart, and the guilds of merchants and coolies have insisted on this separation since it has enabled them to collect handling and storage charges on goods in transit from Hong Kong to the interior or *vice versa*. The Cantonese proposal to construct a harbour at Whampoa would involve extending the Hankow-Canton line so that it would intersect the Kowloon-Canton railway. Hong Kong therefore urged that the crossing be effected in such a way that through trains could be run from Kowloon to Hankow, but the Canton Government refused. The Kuomintang National Government at Nanking, which obtained control of Canton in 1936, agreed, however, to the request of the British Government, and the two lines were connected in 1937. Nanking regarded the question from the point of view of the interests of China as a whole which urgently required improved means of communication, and not from the purely local standpoint of Canton. Canton, however, has the very great disadvantage of being a river port several hours distant from the sea; and it seems improbable

that the efforts to divert trade from Hong Kong will succeed. A recent proposal has been to build a harbour at Whampoa, some distance below Canton. This economically indefensible duplication of Hong Kong could be carried out, although very heavy expense would be incurred in constructing harbour works and dredging a harbour and a passage to the sea. Constant dredging would be required to maintain the depth of the channel; and it seems doubtful in any event whether ships drawing more than at most twenty-two feet would go up to Whampoa. To call there would add some hours to the length of the voyage; and it seems improbable that liners which run to schedule would do so. They carry much of the freight between China and Western countries, since ocean-going tramp steamers do not play an important rôle in the South China trade. Furthermore, a large part of the freight which would be unloaded at Whampoa would be intended for distribution in the interior and not for Canton, and it would as now be sent up country in river boats, since water is cheaper than rail transport. There would therefore be no advantage in transferring this freight from ocean-going to river boats at Whampoa instead of as now at Hong Kong. A final and very important advantage possessed by Hong Kong has been that the port dues were lower than in China, the governmental formalities in regard to landing, storing and trans-shipping goods were reduced to a minimum, and the absence of import duties obviated the necessity of bonded warehouses with their attendant regulations. The much greater security and the absence of illegal exactions have also given it an advantage of the utmost importance over Chinese ports. For all these reasons it is improbable that the construction of a harbour at Whampoa would have any serious effect upon the trade of Hong Kong. Only small steamers would be likely to use it, or larger boats the whole cargo of which was destined for Canton.

The security provided by British rule has been one of the most important causes of the prosperity of Hong Kong from the date of its foundation. Speaking generally, Western commodities intended for the South China trade have been stored in the Colony until sold to Chinese merchants who came there to buy them. Save in a few cases Hong Kong merchants have not themselves sent commercial travellers or agents into the interior of China to effect sales, but have waited for the arrival of the Chinese merchants. Goods may thus have been in storage for some time before they were loaded into junks or small coastal steamers for transmission

to their destination. Obviously, large quantities of valuable commodities would be stored in the port which assured the greatest measure of security, and this elementary accompaniment of British rule has never existed to the same degree in China. The propensity of Chinese officials for exacting "squeeze" has been a strong factor in creating the prosperity of Hong Kong. To a large extent the same cause has made it the banking centre of South China. Even in normal times many Chinese deposited their money in Hong Kong banks because of the complete security from official molestation; and the inflow of funds became much larger whenever disturbed conditions in China increased the usual degree of insecurity. Furthermore, the lack of confidence abroad in the Chinese Government and the fluctuating values of the various dollars in circulation led foreign firms to insist on payment for their goods in Hong Kong dollars. The preference of the Chinese themselves for its currency was shown by the fact that at least until 1936 its coin and notes circulated widely in China.

For the foregoing reasons Hong Kong has been the distributing centre for the imports and exports of Kwangtung Province, which has an estimated area of 100,000 square miles and a population of 32,000,000. It has filled the same rôle for Kwangsi and for Fukien as far north as Amoy, the latter province conducting part of its trade through Shanghai. Part of the trade of Kweichow, Hunan and Kiangsi Provinces has also been conducted through Hong Kong. Roughly speaking, four-fifths of the foreign trade of the Colony has consisted of the re-export of goods destined for South China from overseas or from North China, or *vice versa*. About a quarter of the total overseas trade of China has passed through the port. The trade with North China has also been considerable, though the commodities exported have varied in accordance with requirements and with the price at which they were obtainable at Hong Kong. Finally, there has been an entrepôt trade of decreasing importance with the Philippines, Indo-China, Siam, British Malaya and the Dutch East Indies. Owing to the Colony's position as a focal point for the commerce between China and the West its prosperity has inevitably been determined in the main by causes beyond its own control. It has been affected primarily by conditions in China and in the second place by the situation in Western countries. It has never been an economic entity but "as a community and as a trade centre it is a portion of China from which it is separated by political barriers". Civil wars or other disturbances

on the mainland, particularly South China, have soon been reflected in a reduced volume of overseas imports into Hong Kong, owing to the decreased ability of the Chinese to produce goods for export and so to purchase foreign commodities. The increasing prosperity which resulted from Chiang Kai-shek's growing success in unifying and pacifying China in the years immediately preceding the Sino-Japanese war were reflected in the partial recovery of Hong Kong's volume of trade in 1936. The political and economic policies of China have also had a very important effect: the decrease of Hong Kong's exports to China since 1931, for example, was partly due to the National Government's policy of fostering Chinese industrialization by imposing high tariffs on textiles and other imports. The second principal influence determining the prosperity of Hong Kong has been the economic situation in Western countries and their tariff and monetary policies. The Great Depression, for example, reduced the ability of the West to buy Chinese products and in consequence lessened Chinese purchases of Western commodities, owing to their decreased capacity to pay for them through the sale of their exports. The imports and exports of Hong Kong were thus substantially reduced. The entrepôt trade conducted with the Philippines, Indo-China, the Dutch East Indies and other countries of South Eastern Asia has been seriously affected by the imposition of quotas and increased tariffs consequent upon the depression.

Imports and Exports

The lack of trade statistics from July, 1925, to March, 1930, makes it difficult to trace the post-war history of the Colony's trade. Furthermore the figures available for imports and exports are only approximate, and comparisons made over a period of years are frequently misleading owing to the fluctuations in value of the Hong Kong dollar. Moreover, the returns prior to 1930 omitted the imports from ports in South China, Macao, and certain ports in Middle China.* With these reservations the trade of Hong Kong in merchandise excluding treasure has been as follows:—

* The collection of trade statistics was not begun until 1918, was discontinued after June, 1925, and was recommenced in April, 1930. The officials employed have been too few to make an exhaustive inventory of every cargo, and the business community have opposed the added expense which a larger staff and more accurate statistics would entail. Their reasons have been that the value of the information for trade purposes would be dubious and would be counterbalanced by the facts that 'Hong Kong is virtually a free port, that the object of the authorities is to impose as small a burden as possible on trade and that the production of accurate and detailed statistical information is costly' (*Trade Depression Report*, p. 13). They have also been afraid lest the

	Imports	*Exports*	*Total*
1919 . .	£68,058,888	£87,735,076	£155,793,964
1920 . .	103,932,602	108,369,937	212,302,539[3]
1921 . .	68,143,059	67,691,877	135,834,936
1922 . .	61,213,363	60,978,464	122,191,827
1923 . .	61,954,498	61,372,331	123,326,829
1924 . .	72,155,478	63,674,794	135,830,272[4]
1925 (1st January to 30th June . .	30,800,000	29,300,000[5]	
1926, 1927, 1928, 1929 not available.			
1930, 1st April to 31st Dec.	£29,889,864	23,416,593	53,306,457[6]
1931 . .	39,192,473	28,796,398	67,988,871
1932 . .	40,953,124	30,965,793	71,918,917
1933 . .	33,917,731	27,292,699	61,210,430
1934 . .	31,518,825	24,636,837	56,155,662
1935 . .	35,453,409	26,326,939	61,780,348
1936 . .	28,625,285	22,203,162	50,828,477
1937 . .	38,084,416	28,842,574	66,926,990
1938 . .	38,233,000	31,661,000	69,894,000[7]

institution of detailed inquiries with their attendant formalities and delays should make the port less attractive to Chinese traders

The value of the Hong Kong dollar has fluctuated violently as, until 1935, it was on a silver standard. The reason for this has been that 'Hong Kong is economically part of China and must remain on a silver standard as long as China does' (*op. cit.*, p. 41). In consequence the statistics of import and export trade do not present an entirely accurate picture, since they represent not merely the rise or fall in the value and volume of the various commodities, but also the fluctuations in the foreign exchange value of the Hong Kong dollar. It has seemed advisable to convert all Hong Kong statistics into sterling since sterling's greater stability will enable the reader to apprehend the situation more readily than if values were expressed in a protean medium. The average annual value of the Hong Kong dollar in terms of sterling has been as follows .

	s.	*d.*		*s.*	*d.*
1913 . . .	1	11½	1928 . . .	2	0⅛
1918 . . .	3	2¼	1929 . . .	1	11
1919 . . .	3	8¼	1930 . . .	1	4⅝
1920 . . .	4	5	1931 . . .	1	0 9/16
1921 . . .	2	8	1932 . . .	1	3⅞
1922 . . .	2	6½	1933 . . .	1	4 5/16
1923 . . .	2	3½	1934 . . .	1	6 1/16
1924 . . .	2	4½	1935 . . .	1	11½
1925 . . .	2	4	1936 . . .	1	3 3/16
1926 . . .	2	2½	1937 . . .	1	2 13/16
1927 . . .	2	0	1938 . . .	1	2⅞

(*Parliamentary Paper* [*Cmd. 2738*] *of 1926. Statistical Abstract for the British Empire for 1909 to 1923*, p. 6.

Parl. Pap. Cmd. 4819 of 1934–35. Stat Abstract for the British Empire for 1924 to 1933, p. 1.

Parl. Pap. Cmd 5582 of 1937 Stat. Abstract for the British Empire for 1927 to 1936 p. 172. Footnote)

The principal imports into Hong Kong have been rice, sugar, wheat, flour, cotton yarn, cotton, woollen and silk piece goods, drugs, petroleum, coal, iron and steel goods, machinery and tin. Since the local industries are only of minor importance the exports are practically the same as the imports, apart from the small amount (about one-tenth) retained for local consumption. Altogether the imports and exports include about 650 very miscellaneous items, among which are Chinese medicines, ginseng, ginger, sandalwood, rattans, fire crackers, and Chinese curios. One of the most curious has been eggs from China which were exported principally to Great Britain. Part of the foodstuffs has been imported to feed the population of Hong Kong, since the local agricultural production was only a fraction of the requirements; the greater part, however, has been re-exported to China. Rice, the most important foodstuff, was imported principally from Indo-China and Siam, cleaned, graded, mixed and repacked in sacks in Hong Kong, and re-shipped to China. Smaller quantities were shipped to the Philippines and elsewhere; but this trade has been dwindling owing to the policy adopted during the past few years of fostering the cultivation of home-grown rice. The handling of the rice has been a very important source of income to the warehouse owners and the Chinese coolies employed. The wheat flour also destined principally for China has been imported from the United States, Australia and Canada. Sugar for the Chinese market has come from Java, but of recent years the importance of the trade has greatly declined owing to unsettled conditions, decreased prosperity and the protection of home-grown sugar. Foodstuffs, however, are still the largest item of imports, amounting to £9,448,104 in 1938. Coal has been imported largely from Japan and China, principally for the bunkering of ships. The petroleum oils have come from the Dutch East Indies and the United States, and apart from the amount retained for fuelling ships and other local requirements have been re-exported chiefly to China. An important minor branch of trade has been the transhipment of paraffin wax from the Dutch East Indies for the manufacture of candles for the temples in China. Drugs have formed an important element of both import and export trade, those from the West coming principally from Great Britain, the United States and Germany. Approximately half the imports have been Chinese medicines from North and Central China; but it is at first somewhat startling to learn that the second largest source of supply was the United States, particularly for ginseng root. The bulk of the drugs, both

Western and Chinese, were re-exported to South China and to the Chinese communities overseas in the United States, Japan, Malaya and elsewhere. So high a proportion, about a third, of the Chinese medicines remain in Hong Kong that indulgence in the Chinese pharmacopœia would appear to be one of the favourite relaxations of the Colony. Tin has been imported from China, smelted in Hong Kong and exported to the United States, Japan and China. Most of the textiles, cotton, silk and woollen, formerly came from the United Kingdom; but the British share of the trade has declined more and more during the last twenty-five years, The causes have been the growth of cotton manufacturing in China behind the protection of a high tariff, the immense increase in Japanese exports to China, and to a minor extent the competition of Germany. At the present time cotton yarn and piece goods come principally from Japan, North China and Great Britain, and are exported chiefly to French Indo-China and China. Artificial silk comes principally from Japan and in a much smaller degree from Germany, China and the United Kingdom, and is exported to China, India, Siam, Malaya and the Philippines. As described below, since the recent imposition of quotas upon the entry of Japanese silks into Malaya and the Philippines the export of silks from Hong Kong has flourished exceedingly. An ingenious alliance of Japanese exporters and Chinese manufacturers in Hong Kong performs the miracle of converting Japanese silks into "Silks Produce of the British Empire", to the profit of the participants and the confusion of Inspectors of Customs. Woollen yarn and piece goods come mainly from Japan and Great Britain, but form a much less important item of trade than cottons and silks. The trade in machinery has increased in importance as that in textiles has diminished, and will increasingly replace it as one of the principal exports to China from the West. Owing to the growth of cotton and other manufactures in China the demand is changing from consumers goods to machinery and industrial equipment of all kinds. Germany, the United Kingdom, and the United States hold the dominating position in this field. The same three countries are the principal source of supply for the important trade in iron and steel goods, which include implements and tools, hardware and cutlery, bars and tin plate.

The following tables give the percentages of Hong Kong's export and import trade in merchandise with the principal countries of origin and destination.

Hong Kong Exports [8]

	1924.	*1931.*	*1932.*	*1933.*	*1934.*	*1935.*	*1936.*	*1937.*	*1938*
	%	%	%	%	%	%	%	%	%
China	61·1	54·2	59·2	56·3	48·0	49·0	42·7	40·7	45·1
Macao	unstated	4·7	4·7	5·3	5·3	4·9	3·7	3·7	4·1
Kwong Chow Wan	unstated	3·4	2·8	2·5	2·5	3·4	3·0	2·1	1·9
Japan	5·0	5·0	2·8	3·2	3·5	4·2	5·1	4·2	2·6
Netherlands East Indies	1·8	2·6	2·2	2·4	2·6	2·3	2·8	3·3	2·
United Kingdom	1·0	·9	·7	1·1	2·0	2·8	3·8	4·5	4·1
British Dominions and Colonies	9·1	10·6	9·0	9·1	12·2	11·1	13·7	15·2	12·2
U.S.A.	3·8	3·7	3·8	4·8	5·7	7·8	8·1	8·8	10·2
French Indo-China	8·0	6·2	6·3	6·0	7·4	5·3	5·0	5·1	4·5
Siam	4·9	4·2	3·5	3·6	4·5	3·9	4·1	3·0	3·1
Philippines	unstated	unstated	unstated	2·3	1·6	1·8	3·3	2·8	1·9

Hong Kong Imports [9]

	1924.	*1931.*	*1932.*	*1933.*	*1934.*	*1935.*	*1936.*	*1937.*	*1938*
	%	%	%	%	%	%	%	%	%
China	13·0	26·9	27·2	31·0	35·2	33·8	33·6	34·2	37·0
Japan	12·6	9·3	3·4	5·0	8·8	11·8	12·8	9·4	3·7
Netherlands East Indies	13·3	10·9	9·9	7·8	8·3	6·2	8·5	7·6	6·6
United Kingdom	13·0	10·6	12·3	10·4	7·8	6·5	6·4	7·6	9·1
British Dominions and Colonies	9·6	5·1	—	9·2	7·0	7·4	4·9	8·6	8·1
U.S.A.	8·1	7·8	7·4	6·2	7·1	7·3	7·1	8·4	8·8
French Indo-China	15·2	7·1	8·4	8·5	6·3	8·9	5·7	6·6	5·6
Siam	8·6	6·4	9·3	10·0	8·0	5·6	6·6	3·7	5·9
Germany	2·5	5·1	4·1	3·8	3·3	4·5	5·2	5·0	6·3

The trade with China, Macao and Kwong Chow Wan has amounted to roughly three-fifths of the exports and from a quarter to a third of the imports, thus showing very clearly how largely Hong Kong is dependent upon the Chinese market for its prosperity. The significance of the percentages is emphasized when one remembers that the value of the total exports of merchandise fell from £63,674,000 in 1924 to £31,661,000 in 1938. The British Empire is the second largest customer; while Indo-China has taken a decreasing and the United States an increasing percentage of the exports. Japan's imports have been very much less than her exports to Hong Kong.

The four industrialized nations which have supplied the Hong Kong market have been Japan, the United Kingdom, the United States and Germany. The principal imports from the United States have been petroleum oils such as kerosene, metal goods including tin plate and wire, paper, tobacco, motor vehicles, drugs and chemicals. These have not conflicted with the principal commodities imported from Germany (save for drugs and metal goods) and Japan, or with manufactures in China itself, as do those from the United Kingdom. American staple exports have therefore not suffered as have the British from Japanese and German competition and from Chinese protective tariffs, though during the depression they declined seriously in volume and value as well as in their percentage-share of the imports into Hong Kong. Since 1934, however, American trade has recovered its lost ground. Exports to Hong Kong were £5,915,000 in 1924, £3,038,750 in 1931 and £3,364,000 in 1938; the relative share in the trade was not greatly lessened however, since the total imports into Hong Kong in 1931 and 1938 were roughly half what they had been in 1924.[10]

After the Great War the Germans made a determined and successful effort to recover their former position in the Chinese market. Their share of the imports into Hong Kong increased from 2.5 per cent. in 1924 to 5.1 per cent. in 1931, and despite its decline to 3.3 per cent. in 1934 it had risen to 6.3 per cent. in 1938. The actual value of German imports was £1,836,000 in 1924, £1,995,375 in 1931, and £2,408,000 in 1938. Their principal exports to Hong Kong have been manures, drugs and chemicals, dyeing and tanning materials, metal and electrical goods and machinery. The increase of German trade has been especially noticeable in aeroplanes and machinery. This last item is still a minor one in the exports to China and is far surpassed by the textile trade, which is declining,

however, under the effects of Japanese competition and Chinese tariffs. One hears in business circles the judgment that "the textile trade is dead"; and the opinion is widely held that machinery will eventually replace it in importance. It is significant therefore to compare the imports of machinery and engines into Hong Kong, most of them for re-export to China, from the three principal countries of origin. In 1931 the value of those imported from the United Kingdom was £244,906; from the United States £89,500; and from Germany £77,669. During the depression the imports from the first two countries declined, while those from Germany increased, until in 1936 the imports from the United Kingdom were £125,486; from the United States £60,686; and from Germany £149,660. The same story is shown by the statistics for the importation of aeroplanes and parts, most of which are re-exported to China. In 1931 the imports from the United Kingdom were £18,732 and from the United States £25,202. In 1936 the imports from the United States ceased and those from the United Kingdom fell to £13,422. Germany and Japan, which first appeared in the field in 1935, exported to Hong Kong in 1936 £115,994 and £76,253 respectively. In motor vehicles, on the other hand, Germany made no headway. In 1931 sixty-three of the 498 vehicles imported were from the United Kingdom, one from Germany and 376 from the United States. Of the 490 imported in 1936 177 were from Great Britain, 118 from the branches in Canada of American firms, 150 from the United States, and ten from Germany. In the case of motor vehicles, however, Imperial Preference had introduced a new and important factor in the imposition on all motor-cars used in the Colony of a foreign registration fee of 20 per cent. of the value of all vehicles not produced within the British Empire. Machinery and aeroplanes cannot be thus protected since they are intended for re-export to China to a greater extent than motor vehicles; and it is significant that in the unprotected branches of a new and increasingly valuable trade German exporters outstripped British. The situation is not confined to Hong Kong, but is equally true of the China trade generally. Since 1935 British exports to China have fallen to fourth place, being surpassed by those of the United States, Japan and Germany.[11]

One explanation often advanced for the decline of British trade is that British merchants in the Far East are less enterprising than their rivals. On the whole they carry on business in the traditional manner through the Chinese compradore of the firm. Following

Chinese custom his integrity is guaranteed by wealthy and reliable compatriots who are under bond to make good any defalcations. The compradore, or at times some other reputable Chinese, similarly guarantees the honesty of the Chinese employees of the firm. Occasionally a compradore has embezzled funds, but instances of dishonesty have been rare since no guarantor would render himself liable to make good defalcations unless he were certain that the necessity of doing so was most unlikely to occur. The compradore is paid a small salary and receives a commission on all business which he brings to his firm. With a few exceptions British and other Western firms do not employ commercial travellers to solicit business in China. They wait at their godowns or more usually in their offices until Chinese merchants themselves come to Hong Kong to place orders, when negotiations are conducted through the compradore. Critics declare that while this system was excellent fifty years ago when Britain controlled the bulk of the China trade, it is outworn in this age of keen competition. They point out that British merchants rarely speak Chinese and in consequence can neither establish friendly relations with their customers nor dispense with the intervention of the compradore, who has sometimes taken advantage of his position to defraud his firm. German merchants learn the vernaculars, mix with the Chinese much more freely than the British and send agents into the interior of China to obtain orders. On the other hand the advocates of the compradore system reply that in a country afflicted with the curse of Babel it is of little use to learn one dialect; and that Bret Harte's description of the peculiarities of "the Heathen Chinee" embodied shrewd observation as well as poetic gifts. Whatever may have been the case in the past, the modern Chinese merchant's word is not necessarily his bond, and his financial standing may or may not warrant the sale of goods to him on credit. The compradore has means of his own of ascertaining the integrity and financial status of his fellow countrymen which the Western merchant cannot command, and therefore he is an essential intermediary for the conduct of business. There are undoubtedly strong arguments for existing trade methods; but at the same time it is undeniable that German firms forged ahead by going to look for trade instead of waiting for it to come to them. Furthermore it is significant that several of the leading firms, such as Jardine, Matheson and Company, the Asiatic Petroleum Company, and the British American Tobacco Company, employ Chinese agents in the interior to obtain business for them.

The principal reasons for the decline of British trade, however, lie outside the control of the firms in Hong Kong. These firms are not independent merchant adventurers, but are the agents for the products manufactured by companies in the United Kingdom and abroad. The agencies are not confined to staple articles like textiles, but include such diverse products as soap, whisky and cod liver oil which were once contemptuously ignored as the "muck and truck" business. The Hong Kong importers have to give a strict accounting to their principals, who alone are in a position to make decisions of importance. There is good reason to believe that a more enterprising spirit on the part of United Kingdom firms combined with visits to China by their principal members and a careful study of trade possibilities, would have given them many additional contracts which, in fact, went to competitors with a personal knowledge of the market.[12] German manufacturers, for example, have studied the requirements of their customers far more carefully than British or American companies. They have also gained orders because they have given credit far more lavishly and for much longer periods than British firms. There is reason to suspect that in some instances this may prove to have been a policy of making immediate sales at the cost of future bad debts; but within limits a greater extension of credit would have benefited trade. It is believed that government aid enabled German firms to obtain long-term credit from their banks which they then extended to their customers; while British firms in the past had to rely on their own unaided resources in seeking for bank loans. It was not until 1936 that the Imperial Government decided to extend the Export Credits Guarantee Department to the Chinese market. The Department does not give any subsidies to exporters, but helps them by guaranteeing the credit risks.[13]

Japan's exports to Hong Kong suffered heavily owing to the severe Chinese boycott which followed the invasion of Manchuria, the percentage share of the merchandise imported falling from 12.3 per cent. in 1930 to 3.4 per cent. in 1932. Thereafter her trade steadily recovered and the advantage which had temporarily accrued to British piece goods because of the boycott waned, until in 1936 Japan's share of Hong Kong's imports was 12.8 per cent. The value was £3,628,437 in 1931 and £3,670,312 in 1936, a recovery of trade both in actual value and in percentage-share much more marked than that of Great Britain or the United States.[14] The principal imports from Japan have been textiles, coal, foodstuffs,

metal goods, building materials such as cement, and paper. As in other markets the most striking advance has been in textiles. In 1931 cotton and woollen textiles formed 31 per cent. of the Japanese and 49.5 per cent. of the United Kingdom exports to Hong Kong; while in 1936 they were 35 per cent. of the Japanese and 25 per cent. of the United Kingdom exports. The yardage of cotton textiles imported in 1931 was 174,145,399, of which Japan supplied 78,856,973, North China 35,303,030, and the United Kingdom 44,567,534 yards. The yardage imported in 1936 was 145,882,558, of which Japan supplied 99,134,594, North China 37,879,760, and the United Kingdom 3,040,861 yards. The demand for British cotton textiles "is now only of relatively retail dimensions confined to a narrow range of specialities". In cotton yarn the bulk of the imports have come from the mills in North China, the two principal foreign sources of supply having been the United Kingdom and Japan. Comparison of the imports for 1931 and 1936 discloses that the imports from the United Kingdom have fallen from 3,499,229 lbs. to 1,665,682, while those from Japan increased from 925,419 to 2,812,990 lbs. Imports from North China were 34,171,444 lbs. in 1931 and 28,468,093 lbs. in 1936. In woollen goods the same remarkable progress was shown, Japanese imports having grown from 202,401 yards in 1931 to 2,499,222 yards in 1936. United Kingdom woollens fell from 2,933,851 yards in 1931 to 502,403 yards in 1936. Germany and Italy which both far outstripped Japan in 1931 fell steadily until in 1936 they supplied 128,970 and 45,000 yards respectively. Expressed in terms of percentages, in 1931 36.3 per cent. of the cotton and woollen textiles were imported from the United Kingdom, 24.1 per cent. from North China, and 19.9 per cent. from Japan. In 1936 the shares of the same three countries were 14.3 per cent., 37.8 per cent. and 40 per cent.[15] Next to foodstuffs, textiles are still the largest item of import into Hong Kong, and apart from the imports from North China the bulk of the market has been captured by Japan. A generation ago the United Kingdom had almost a monopoly; but to-day she supplies a dwindling percentage of goods of high quality. The importation of United Kingdom silks and rayons, formerly of considerable importance, has become insignificant as a result of Japanese competition.

The primary reason for Japan's success was the same as in other Asiatic and African markets with a low standard of living: especially during the depression, cheapness and not durability has been the

dominating consideration in the mind of the purchaser. British goods are superior in quality and durability and still hold their own in so far as there is a demand for the more expensive grades of cloth. It is only just to say that Japanese goods are durable considering their price and that their quality is improving. Geographical propinquity has given the Japanese an additional advantage over his British competitor in low cost of transport; but the principal factor has been the inability of Lancashire to reduce costs of production to the Japanese level. It has been estimated that Japanese goods are from 15 to 25 per cent. under the lowest possible cost of production in Lancashire. Japan, however, has not by any means been responsible for the whole of the loss of trade; a considerable part of it has been due to the high tariff on imported textiles which was imposed by China after the grant of tariff autonomy in 1929 to foster domestic manufacture.[16] The result has been the growth of cotton factories in Shanghai and elsewhere, competition which Japan can meet better than Lancashire owing to her much lower production costs and her geographical propinquity.

The United Kingdom's exports to Hong Kong amounted to £9,451,000 in 1924, £4,157,031 in 1931, and £3,479,000 in 1938.[17] Even when allowance has been made for the heavy shrinkage in the total import trade of Hong Kong during the period this represented a marked decline in the percentage of the merchandise supplied by Great Britain. Her proportion fell from 13 per cent. in 1924 to 10.6 per cent. in 1931 and 9.1 per cent. in 1938. Cotton and woollen textiles still constituted the largest single item, in 1936 amounting to 25 per cent. of the British trade. The next largest item, 13 per cent. of the total, was metal goods including tools, hardware, cutlery, and tin plates. Heavy though lesser importations came from the United States, Belgium, Japan, Germany and Malaya. Germany, the United Kingdom and the United States continued to dominate the market in the minor but potentially very important trade in machinery and electrical goods. Other important commodities imported from Great Britain were tobacco, liquors, chemicals and drugs, manure, and motor-cars and aeroplanes (for the local Hong Kong market). The replacement of British by Japanese and Chinese textiles in the trade of Hong Kong is typical of the post-war transitional stage in which the old-established industrial nations of the West are losing their traditional markets to former customers who have now become rivals. In China as in India the demand in recent years has been shifting from consumer

to capital goods. It was therefore not an encouraging omen for British trade that imports of machinery from Germany exceeded those from the United Kingdom in 1937. The causes appear to have been lack of enterprise on the part of British exporters and lack of that governmental assistance which, however deplorable in economic theory, has now become unavoidable in a world of ecomonic nationalism. Of the other commodities mentioned, English cigarettes seem to have secured a firm hold upon the affections of the Chinese. The failure of English manufacturers of motor-cars to develop overseas markets is an old story; but there have been symptoms of a more active policy of recent years. In the case of aeroplanes the Imperial Government's theoretically admirable but impracticable policy of the 'twenties that "aviation must fly by itself" led to stunted commercial services and aeroplane factories, owing to the heavily subsidized competition of foreign rivals. The tardy reversal of this policy is unlikely to have any marked effects for some time owing to the entrenched position of competitors.

Shipping, Banking and Currency

The statistics for shipping entered and cleared from Hong Kong reflect the vicissitudes in the history of the port during the past twenty years and also show the importance of British interests in this field. The tonnage registered during 1918 and 1919 was much less than it had been before 1914 owing to the large number of vessels which had been withdrawn for war service. Their return to the Far Eastern trade coincided with the appearance of new steamers, particularly American and Japanese; and by 1922 the tonnage had surpassed the pre-war maximum of 22,939,134 tons in 1913. During the next two years it continued to increase rapidly and the 38,770,499 tons registered in 1924 surpassed all previous records. The very serious general strike and boycott which for a time almost paralyzed the trade of Hong Kong were reflected in the decrease of the total tonnage to 28,371,104 tons in 1926. Recovery was rapid and shipping continued to increase until 1931, when the total tonnage was 41,933,748, the highest in the history of the Colony. Thereafter the influence of the Great Depression and the Sino-Japanese War caused a shrinkage to 29,530,384 tons in 1938. The preponderant share of British ships in the trade of Hong Kong has declined during the present century and is no longer 65 per cent. to 75 per cent. of the total as it was forty years ago. Since 1918 it has averaged 52.5 per cent. of the steam tonnage, ocean-going and domestic, and 47.5 per

cent. of the combined tonnage of steamships and junks engaged in foreign trade.[18] American, German and above all Japanese subsidized competition has been far more severe than before the Great War. The Japanese in particular have made heavy inroads and on some routes such as that between the Far East and India have captured a large part of the carrying trade. Nevertheless, although profits have seriously declined in recent years, a list of the British lines calling at Hong Kong still reads almost like a recital of the principal steamship companies of the Empire. In addition to the ocean-going steamers, the British controlled in 1930 about 20 per cent. of the steam shipping in the whole of China's domestic trade and carried a considerably larger fraction of the freight and passengers. About two-fifths of the foreign shipping engaged in the domestic trade was British.[19] This included both coastal shipping between treaty ports and river boats plying between treaty ports and places which were not open. The growth of Chinese nationalist sentiment in favour of creating their own domestic shipping services has of late years visibly threatened the continuance of this important foreign interest. Chinese attempts to develop their own marine have not however been very successful owing to the greater effectiveness of their foreign competitors. Although some vessels are the property of Chinese British subjects, the greater number are owned by a few large companies with their headquarters in Hong Kong or one of the treaty ports. Besides their fleets they have valuable properties in the shape of wharves, docks and warehouses. In addition to steamers a considerable part of Hong Kong's trade with China is carried in junks of native ownership and small tonnage. The final item in the shipping frequenting the port of Hong Kong is made up of the craft engaged in local trade. In numbers they constitute over a half, but in tonnage less than a twentieth of the total. They include steam launches, ferries, fishing fleets, conservancy barges and cargo lighters. Many steamers at Hong Kong anchor in the harbour and discharge and load cargo from lighters. The sight of a freighter surrounded three or four deep by lighters, with their Chinese crews feverishly active, reminds one irresistibly of an ant-hill afloat.

Hong Kong has been a very important banking centre owing to its position as the entrepôt for South China's trade, combined with the security of British rule. The Chinese Government has never been able to provide comparable conditions or to inspire equal confidence in the value of its currency. Payment for the imports

and exports of South China has been made in Hong Kong dollars through the medium of the Hong Kong banks. The banks of the Colony have therefore been pre-eminently foreign exchange banks which also performed the ordinary functions of domestic banking. Furthermore, three of the British banks have provided the note issue of the Colony, which, in addition, circulated widely in the neighbouring provinces of South China. The principal bank in Hong Kong has been the head office of the Hong Kong and Shanghai Banking Corporation, founded in 1866. It has been the backbone of British financial interests in China and has had very important relations with the Chinese Government in connection with foreign loans and with railway construction in association with Messrs. Jardine, Matheson and Company. In addition there are three other British, nine Dutch, French, American and Japanese banks, and a number of Chinese "Western style" and "native" banks, some of which command considerable resources.[20] The security of Hong Kong has had an important influence in deposit banking, particularly when conditions in China were more disturbed than normally: on such occasions the banks were inundated with funds transferred to them for safekeeping. The arrival was frequently followed by that of the owners, for especially of late years Hong Kong has become very popular with Chinese political leaders who have fallen from power and felt that residence under the British flag would be conducive to longevity. Many of them have invested heavily in house property in the Colony; and an all too common trait has been the establishment of a newspaper for the castigation of their supplanters. The resultant protests from China have on occasion caused much embarrassment to the Government and have necessitated more stringent control of the press to curb the exuberance of editorial jeremiads.

An important feature of Hong Kong banking has been the receipt of remittances from Chinese abroad for transmission to their families in China or for investment there. The majority of Chinese emigrants come from South East China and are to be found in every country bordering on the Pacific Ocean. They are especially numerous in British Malaya, Siam, Indo-China, the Netherlands East Indies and the Philippines, where they have achieved a high degree of economic success. Some have been settled abroad for several generations and have lost touch with their relatives in China. It has been estimated however that between three and four million send remittances to their families or for investment there, and that

the annual average for 1914 to 1930 was Chinese $200,000,000. This amount did not represent merely the earnings of coolies, but also the returns from businesses, sometimes on a large scale, which were owned by families in China and managed by their relatives settled overseas. The Chinese indeed may be said to have invested a part of the family abroad and to draw a comfortable dividend from the proceeds. Part of the annual remittances were sent direct to China; but the great bulk went first to the banks in Hong Kong for transmission to the recipients through their branches in Canton, Swatow, Amoy and other cities of South China.[21]

Until 1935 the currency of Hong Kong was based on silver, either silver dollars or notes issued by three of the British banks, which were redeemable in silver dollars at the banks' Hong Kong offices. The silver standard led to violent fluctuations in the value of the Hong Kong dollar: between 1921 and 1936, for example, the average annual value varied from 2*s.* 8*d.* to 1*s.* This seriously hampered the trade and finances of the Colony; but no change was possible so long as China remained on a silver basis, since economically Hong Kong formed part of China. The American policy (adopted in 1934) of raising the price of silver not only decreased China's imports and exports of merchandise, but also caused a sharp rise in the exchange value of the dollar and led to heavy exports of silver owing to the high price for which it could be sold abroad. The export of silver had already begun in 1933, but the outflow was tremendously accelerated by the silver purchase policy. In the three months of August to October, 1934, alone, $195,000,000 left the country. On 15th October, 1934, the Chinese Government virtually abandoned the silver standard by imposing variable duties on the export of silver to check the drain; and on 9th November, 1935, the Hong Kong Government followed suit by prohibiting the export of silver. On 5th December, 1935, silver coin in circulation was called in and a managed currency substituted for the silver standard. The stability of the exchange value of the Hong Kong dollar has been maintained by an Exchange Fund with power to buy and sell foreign exchange, which has taken over the silver formerly held against their issues by the note-issuing banks in return for certificates of indebtedness against which the Fund may hold silver or foreign exchange. The exchange value of the Hong Kong dollar, which had gradually risen during 1934 in conformity with the price of silver, reached a maximum of about 2*s.* 6*d.* in April, 1935, and thereafter continued to follow silver until the prohibition of

export in November, 1935, when it fell to between 1*s.* 4*d.* and 1*s.* 6*d.* Since the introduction of the managed currency the exchange rate has fluctuated slightly around 1*s.* 3*d.* and was held at an almost constant ratio to the Chinese currency until 1938. The Hong Kong dollar was not devalued when the Chinese dollar fell heavily in value, since it was felt that war conditions were completely abnormal. On 3rd November, 1935, China finally abandoned the silver standard and substituted a managed paper currency, the value of the dollar being a fraction of a penny less than that of the Hong Kong dollar. The National Government successfully substituted a national dollar for the various local dollars previously in circulation, the people accepting it in place of silver without protest. When in 1936 the Government obtained effective control over Kwangtung Province it proposed to make the national dollar the sole medium of exchange on 1st January, 1938, in place of the Hong Kong, Canton, and other dollars of varying value previously in use. The foreign banks, with the exception of the Japanese, assisted the establishment of the new currency by accepting national dollars in exchange for their holdings of silver, which they could have sold abroad at a profit. The silver called in was sold to the United States through the medium of London, and foreign exchange was purchased with the proceeds to provide backing for the new currency. From 1936 to 1939 the new paper currency was managed with great success; and while the time was too short to form a final opinion the auguries seemed favourable.[22] From information supplied by foreign banks, the note issue of the eleven Chinese banks in May, 1937, was $1,481,577,000. The reserves at that date were $922,298,000 in silver and foreign currencies and $484,279,000 in Chinese Government bonds and other securities. The establishment of a stable currency was of assistance to Hong Kong trade in that it ended the considerable and rapid fluctuations in value of the various Chinese dollars formerly in use. This had invested trade with an element of uncertainty and risk, since a Chinese merchant who had placed an order abroad might suffer heavy loss owing to a sudden change in the foreign exchange value of his local Chinese dollar.

Great Britain's economic interests in Hong Kong are far from limited to British import and export trade, shipping and banking. The majority of the firms in the Colony are British and to an increasing extent they are agents for the products of foreign as well as United Kingdom manufacturers. Sales-commissions and charges for loading, unloading and storing goods form an important source

of profit. Large additional revenue comes from freight rates both on ocean-going and coastal shipping and from the repair and supply of shipping by the local British firms. Another British interest in Hong Kong is the British section of the Canton-Kowloon Railway which is owned and operated by the Government. Its direct land communication with China enabled munitions to be sent into China without danger of molestation from Japanese ships; and for this reason the line received systematic attention from Japanese bombing planes. Private British companies own the electric tramway and the Peak railway which connects the business part of the town with the residential districts on the hill behind it. The value of the British business investments in Hong Kong was estimated in 1929 to be £18,455,300, or 9.3 per cent. of the total British investments in China.[23]

Manufacturing

Industries in Hong Kong form a minor but moderately important branch of enterprise. The principal European industry is shipbuilding and repairing, including both ocean-going and local craft. Sugar refining is less important than formerly owing to the high tariff imposed in China on imported sugar in order to develop refineries in South China. Cement manufacture has suffered severely from the competition of low-priced Japanese cement which is imported in large quantities for local use and for re-export. Industries owned and managed by Chinese have increased considerably in importance during the past twenty years; and their value was estimated in 1934 to be about HK$51,244,300 (£3,883,334). Altogether there were over 754 factories and workshops employing 40,500 persons and producing a very varied assortment of goods. The principal enterprises are knitting and weaving, the manufacture of rubber-soled canvas shoes, electric torches, medicines, perfumes and preserved ginger. Ginger is imported from China, preserved and exported to the United Kingdom, Australia, Holland and the United States. The growth of these small Chinese industries was fostered by the cheapness of raw materials owing to the absence of customs duties, and they produced largely for the adjacent Chinese market. The grant of tariff autonomy, however, was followed by successive increases of the tariff to foster the development of factories in China, which practically closed the Chinese market to foreigners. The prosperity of the Chinese industries in Hong Kong was seriously affected; and tariffs and quotas have also decreased the

sale of their products in the Philippines, Siam, French Indo-China and the Netherlands East Indies, which were formerly important markets. During the depression there was much discussion of the proposal that the manufactures of the Chinese factories in Hong Kong should be exempted from the import duties in China while at the same time the Colony retained its political independence and its status as a free port. This was urged on the ground that although the manufacturers, capital and labour were technically classed as British, since they carried on business in a British colony, they were in reality almost exclusively from China, to which they and their wealth ultimately returned. Political and economic nationalism in China, however, made this impossible so long as Hong Kong is a British possession, and the industries of Hong Kong have had to resign themselves to the loss of their natural market. Their prospects of finding a substitute are not very promising, since with the exception of a few articles like ginger they compete with similar factories abroad and are increasingly excluded by tariffs. Moreover, Hong Kong's ability to bargain is exceedingly limited owing to its small population and its inability to offer reciprocal tariff reductions because of its practical freedom from customs duties. The establishment of Imperial Preference has been of assistance to a few articles; but it seems clear that industry will always be of subsidiary importance in the Colony.[24]

As a result of the Ottawa Agreements, Hong Kong granted Imperial Preference to Empire-produced tobacco and brandy. Motor vehicles of Empire origin were admitted free of duty; while those of foreign manufacture paid a registration fee of 20 per cent. of the value. Further preferences were impossible since they would have interfered with free trade, which would have had a disastrous effect upon an entrepôt where 90 per cent. of the imports were re-exported. Other parts of the Empire granted preferences to certain Hong Kong manufactures, particularly textiles, rubber shoes, and electric torches. The existing preferences are far from covering the whole of the local production and are unlikely to be substantially extended. The capital and management of the Hong Kong factories as well as the labour employed are Chinese, and wages and hours, though better than in China, are inevitably closer to Asiatic than to Western standards. The Dominion Governments will therefore not allow Hong Kong manufactures to compete with their own industries. Rope-making for example, an old-established industry, is declining partly because of the refusal of Canada to lower her import duty. There

remain the dependencies, with some of which, particularly Malaya, Imperial Preference has enabled Hong Kong to expand her exports of textiles, rubber shoes and electric torches. Recently, however, serious complaints have been made against some of the practices in which Hong Kong manufacturers engage.

Owing to their operating on British soil, industries which are in reality Chinese are classified as British. This point is of prime importance because to obtain Imperial Preference 50 per cent. of the total value of metal or rubber goods and 25 per cent. of the value of textiles must represent "Empire content". The Empire content may consist either of materials grown or produced or of work done within the Empire. Since the Chinese labour employed and the overhead costs of the factory are regarded as British, most Hong Kong manufacturers have depended on these items to establish the required Empire content, and have used principally foreign raw materials, as these have frequently been cheaper than British. The manufacture of electric torches and batteries, for example, was a small but expanding industry; and as a result of Imperial Preference exports increased to British Malaya, India, South Africa and the United Kingdom. The raw material used was imported German brass, with the result that the Empire content was perilously near the minimum of 50 per cent. The Government of the United Kingdom therefore declined to regard the articles as Empire products unless Empire brass was substituted. Owing to its higher cost, most of the Hong Kong manufacturers refused to make the change, preferring to pay the full United Kingdom tariff on foreign torches and batteries rather than handicap their sales in foreign markets and in those British dependencies which still accept the articles as having a 50 per cent. Empire content.[25] Another small but expanding Chinese industry in Hong Kong was the manufacture of rubber-soled canvas shoes which, owing to the low cost of labour, were able successfully to compete with similar articles manufactured in Japan and the Straits Settlements. The rubber was imported from Malaya and most of the canvas from the United States. The establishment of Imperial Preference led to an increase of sales in Great Britain and the West Indies; and in this instance United Kingdom canvas was substituted to ensure the required Empire content.[26]

The textile industry about two years ago attracted to itself much more Empire publicity than it desired. It suffered heavily when tariffs closed the South China market, and Japanese competition ousted it from India. There remained British Malaya and the West

Indies, the Philippines, the Netherlands East Indies and Siam, the principal exports being cotton and artificial silk piece goods and garments.[27] Imperial Preference increased the sales in Empire markets; and a further advantage was that the quotas imposed by the Empire, the Philippines and the Dutch to restrict the entry of Japanese textiles did not apply to products of the British Empire. To secure entrance as Empire-produce textiles, the Ottawa Agreements required an Empire content of 25 per cent., the mere declaration of the manufacturer being accepted as proof of this. "It probably was not realized that in many cases the manufacturer would be an illiterate native in a small way of business, unable to read the forms which he signs and depending upon an export firm to fill them in for him. Such a manufacturer keeps no books of account and has not the faintest conception of the meaning of 'Empire content'. If he is told to cross out the 50 and 75 per cent. and leave the 25 per cent. standing, or to cross out the 25 and 75 per cent. and leave the 50 per cent. standing he will do either of these things, without realizing that in the latter case he may be putting his claim to Empire content higher than is justifiable."[28]

After the establishment of quotas to limit the quantity of Japanese textiles imported, the export of Hong Kong textiles notably increased, particularly to British Malaya. The conjunction of free trade, small Chinese factories and manufacturers' declarations of Empire content converted the Colony into a means for evading the quotas. Four methods were employed for transmuting Japanese cotton and artificial silk goods into products of the British Empire. (1) Japanese artificial silk piece goods have been imported, a pattern stencilled upon them by hand, and re-exported as British fabrics upon the manufacturer's declaration that the hand labour employed had added 25 per cent. to their value. (2) Cotton and artificial silk yarn from Japan or North China were imported and woven into piece goods which were then exported as British manufactures on the same ground. (3) Japanese piece goods were imported, made up into garments and exported as Empire products with a 25 per cent. Empire content. (4) Imported Japanese artificial silk yarn was knitted into cheap singlets which were then exported as British manufactures. Assuming the truth of the manufacturers' declarations that they had added 25 per cent. to the value of the goods the four practices were within the letter of the law. They were open however to two serious objections. In the first place the only evidence as to Empire content was the unsupported statement of a man who would

greatly increase his profits by making a declaration which would exempt his goods from the quota and would entitle them to the partial or total remission of duty provided by Imperial Preference. Furthermore, the practices were clearly contrary to the spirit of the Ottawa Agreements, which were intended to foster as wide a use as possible of Empire materials and labour, and not to provide an incentive for ingenious expedients designed to obtain the full benefits with a minimum of compliance with legal requirements. The remarkable increase in textile exports to British Malaya led to inquiries from the Government of the Straits Settlements in 1937. According to the statistics of the Department of Imports and Exports at Hong Kong the export of textiles from the Colony to Malaya had been 3,557,426 yards in 1935, 7,733,392 yards in 1936, and 996,797 yards in January and February, 1937.* Since the industry produced none of its materials in the Colony and depended almost entirely on imports from Japan and to some extent China, it was clear that manufacturing in Hong Kong had become a means whereby Japanese textiles could avoid the quota regulations. Complaints were also made in the Philippines and the Netherlands East Indies that Japanese textiles in excess of the quotas entered by means of the same metamorphosis at Hong Kong. No statistics were obtainable but Government officials and business men were unanimous in their conviction that evasion was practised.

In February, 1937, the Secretary of State for the Colonies informed the Government of Hong Kong that the non-self-governing colonies would be advised to make a rule that textile piece goods from Hong Kong would only be regarded as exempt from the Japanese or Chinese quota allowance if they could be proved to have been spun, woven and finished in Hong Kong. Since there were no spinning mills, the goods if woven and finished in the Colony must be made from yarn spun in some other part of the British Empire. Knitted goods and garments made up in the Colony were not affected, and continued to be Empire products providing they had a 25 per cent. Empire content. The new rule was brought into effect in the non-self-governing colonies on 26th June, 1937. The effect upon the four practices described above was that the first, the stencilling of designs upon Japanese artificial silk piece goods, had to stop except

* There is a remarkable discrepancy between the Hong Kong and the Malayan statistics, the latter giving the textile imports from Hong Kong as 930,805 yards in 1935, 3,516,562 yards in 1936, and 1,053,834 yards in January and February, 1937. Even allowing for the inaccuracy of Hong Kong's trade statistics the difference is extraordinarily great. Both sets of figures, however, show that the Hong Kong textile industry has become a means for evading the quota.

for foreign markets and for sale in the Colony. As regards the second, the weaving of cotton piece goods could continue providing Japanese or North China yarn was replaced by Indian, which sold at the nearest equivalent price. The factories weaving artificial silk piece goods were seriously affected, since they had been using Japanese yarn at HK$.85 (1*s.* 1*d.*) per lb., and the cheapest equivalent from the United Kingdom cost HK$2.60 (3*s.* 3*d.*). The third practice, the export of garments made in Hong Kong from Japanese piece goods was not affected by the new rule. The fourth practice, the export of singlets knitted from Japanese artificial silk yarn, was not affected, since the new regulation that fabrics must be woven and finished in Hong Kong from Empire yarn referred only to woven and not to knitted goods. The only requirement was the former one that they must have a 25 per cent. Empire content.

In the past the Hong Kong manufacturer's own statement had been accepted as proof that his article had the stipulated Empire content. This was obviously open to abuse, and the United Kingdom and some of the colonies now require accountants to verify manufacturers' statements of costs of production and to issue certificates that Empire content has been complied with. The colonial government is asked to certify that the accountants' certificates are genuine documents issued by firms of good standing.[29] As the result of a conference held at the Colonial Office in June, 1937, this rule was extended to Hong Kong. One probable result is that since many factories are very small they will close rather than incur the cost of accountants' certificates. Many Chinese manufacturers take one or two rooms in a tenement building, crowd in as many workmen as they will hold and work them for long hours at extremely low wages. Accountants' certificates may also end the practice of exporting singlets knitted from Japanese artificial silk yarn. Examination of the costs of production may quite probably disprove the manufacturer's statement that he had added 25 per cent. to the value of the goods. The new regulations placed upon Hong Kong the onus of proving that the textiles exported complied with Imperial Preference requirements and have been fairly successful in putting an end to the evasions of quota regulations hitherto practised.

Hong Kong and South China, 1918–38

The dependence of Hong Kong's prosperity upon the political and economic condition of China has been strikingly illustrated during

the almost chronic state of civil war which has prevailed in the country since the revolution of 1911. For a time effective control was exercised by Yuan Shih-K'ai; but after his death in 1916 conditions became steadily more chaotic until the middle 'thirties, when Chiang Kai-Shek was at last consolidating China under the control of the Kuomintang. In addition to constant wars and heavy taxes the banditry of disbanded and unpaid soldiery and the increase of piracy which accompanied the breakdown of governmental authority, caused a very serious decline in general prosperity and purchasing capacity and a growing insecurity of life and property. These had a very serious effect upon the prosperity of Hong Kong, particularly when the disturbances involved South China. The growth of anti-foreign and particularly anti-British feeling during the 'twenties inflicted still further damage upon trade.[30] Despite these handicaps British trade was recovering from the dislocation of the War, when it had lost ground heavily to the United States and Japan. In 1922 a serious relapse occurred owing to a strike which was to some extent a forerunner of the troubles of 1925. The Seamen's Union, which controlled most of the Chinese sailors, demanded a large increase in wages owing to the rise in the cost of living. The Union refused to compromise or to submit their demands to an impartial board of arbitration, and called a strike which paralyzed the trade of the port from January to March. As in 1925, intimidation was used in the attempt to bring about a general strike. The Kuomintang actively supported the Union, and it became increasingly evident that the cause of the strike was political rather than economic. The terms of settlement gave the seamen a considerable increase in wages, though far less than their original demands, and the prestige of the Union was proportionately increased. It entered into relations with Dr. Sun Yat-sen and the Kuomintang Party at Canton, where it acquired very great political influence, and was one of the causes of the strike and boycott of 1925.

This general strike and boycott completely paralyzed the trade of Hong Kong in that year and a great part of 1926, and was not entirely settled until 1927. Owing to the lack of trade statistics for the period 1925 to 1930 it is impossible to give exact figures; but it has been estimated that the loss was not less than £300,000 daily. The sale of piece goods fell to 40 per cent. of its normal value and in all other branches of trade the tale was the same.[31] The immediate cause was a strike at a Japanese cotton mill in Shanghai, in the course of which a detachment of police in the

International Settlement was compelled to fire upon a large mob of Chinese, of whom twenty-nine were killed or wounded. Two commissions of inquiry were held which justified the action of the police in firing, since the police station which they were guarding was in imminent danger of being captured. Some doubt was expressed, however, whether the firing might perhaps have been avoided if the disorders had been foreseen and additional police had been called up for duty. The incident aroused bitter hostility towards the British owing to the British nationality of the police officers concerned. This played into the hands of the Communists, whose policy from the beginning had been to make British interests the principal object of their attack in the Far East, and led to a boycott of British trade. The boycott in Central and North China gradually died down in the autumn of 1925, but continued in South China into the following year. Its continuance here after it had ended in other parts of the country was due to the situation which had arisen in Kwangtung. The province had been the scene of the usual civil wars between rival generals until it was conquered by a Cantonese army under the command of Chen Chiung-ming, the protégé of Sun Yat-sen, who was the leader of the Kuomintang or Nationalist Party. The relations of the two were not harmonious, and in 1922 Sun took refuge in Hong Kong, to which he was conveyed by a British gunboat. The British Government refused his request for assistance since its policy was to recognize the legal and ephemeral governments at Pekin.[32] Sun Yat-sen thereupon turned to Russia, whose object was to ruin foreign and particularly British interests in China as part of its campaign for a world revolution. The result of this alliance was the receipt of funds and of military and political advisers headed on the civilian side by Borodin and on the military by General Galen, who later as Marshal Blucher commanded the Soviet army in Eastern Siberia. After Sun Yat-sen's return to Canton in 1923 his Russian advisers trained an army and formed student and labour organizations, amongst which Bolshevist and anti-British doctrines were disseminated. Sun Yat-sen died in 1925, by which time his party had consolidated their hold upon Kwangtung after several campaigns which had caused heavy loss of life and property to the inhabitants. The Shanghai incident was taken as the pretext to declare a general strike and boycott of British trade on 21st June at Hong Kong, Canton and Swatow; and public demonstrations on a large scale were held in Canton on 23rd June. This led to the Shameen incident, when the Chinese demonstrators

on the border of Shameen Island (the Foreign Concession at Canton) opened fire, killed a French merchant and wounded several other Europeans and Japanese. The French and British marines guarding the Concession replied and thirty-seven Chinese were killed and others wounded. The subsequent inquiry proved that the Chinese had been the first to fire, on the evidence of the Danish and Swedish consuls and of various French and Americans, all of whom had been eye-witnesses of the affair. There was strong reason to believe that some of the extremists fired deliberately in the hope that the marines would reply and so assist the strike-organizers in arousing the Chinese against Hong Kong. The Kuomintang Government successfully persuaded the Chinese that the British were solely responsible. Judicious exploitation of this and the Shanghai incidents, with suitable exaggeration of Chinese casualties, ensured the success of the Hong Kong boycott which was backed by extensive intimidation.

The underlying causes of the trouble were much more fundamental than Russian intrigue and local incidents. The Chinese were going through a painful period of transition; the traditional political and economic structure was in process of modernization, to the great discomfort of the participants. This was inevitable; but undoubtedly the *fons et origo* of their troubles was the unavoidable impact of the West upon the East. To this were added memories of Western aggression in the nineteenth century, heightened by the resentment caused by foreign extra-territorial rights, which had become in some respects out of date however they might have been legalized by treaties. These circumstances acting upon the latent dislike of foreigners had given rise to a strong anti-foreign feeling which various reasons had concentrated against the British. During the nineteenth century the British had taken the lead in forcing China to admit Western trade, while other nations had profited by their acts without taking part in them. Furthermore, Great Britain's trade and investments had surpassed those of the other powers, so that she was regarded as the exemplar of Western aggression. The Chinese leaders felt that if she were forced to surrender, the weaker economic interests of Japan, the United States, France and other powers could easily be compelled to follow suit. The Russian advisers of the Kuomintang Party used every ounce of their influence to direct Chinese anti-foreign feeling into a boycott of British trade. According to their belief, Great Britain was the keystone of the capitalist system in Europe, and the destruction of her

interests in China, by weakening British capitalism, would appreciably forward the cause of world revolution. The business community of Hong Kong thus became the *corpus vile* of movements far wider than their own economic interests. It was their misfortune that their principal field of trade in Kwangtung had become the headquarters of Russian influence, so that the boycott was maintained there after it had ended in other parts of China.

The plan of operations was a general strike in Hong Kong supported by a boycott of British trade in Chinese ports. In Hong Kong itself, labour conditions had been quiet on the surface; but from April onwards sustained attempts were made to rouse the Chinese coolies. Violent and inflammatory speeches set forth the oppression of the labouring masses by foreign capitalist Imperialism and its "running dogs" the compradores. The phraseology bore the authentic Moscow imprint. The Seamen's Union and the Head Labour Union or Association of Labour Unions took a very prominent part in the agitation. Early in June, labour representatives from Canton and Shanghai came to the Colony to obtain the support of its unions in a general strike and boycott of British trade as a protest against the Shanghai incident of 30th May. Immediate action was delayed by the hostilities in Canton between the Kuomintang and the Kwangsi and Yunnan troops. The complete defeat of the latter in the middle of June restored Kuomintang control of the city and left the Party free to prosecute the anti-British movement. On 15th June delegates of the Seamen's and Head Labour Unions in Hong Kong went to Canton to make arrangements with Liao Chung-hoi, the Kuomintang Government's Commissar of Finance. He appears to have promised financial assistance and also food and shelter for all strikers coming to Canton. The following day many secret meetings were held in Hong Kong, and rumours were circulated that pitched battles would occur in the streets and the city be burnt to the ground. Chinese were advised to leave the colony at once or they would be shot by British Imperialists. On 19th June the seamen employed by the Hong Kong and Macao Steamboat Company struck, and during the following days the strike spread rapidly until by the end of June almost all varieties of Chinese workmen were involved. During the first ten days of July additional unions struck. The strike in Hong Kong was organized and directed by a secret committee called the Labour Commission, which met at the Seamen's Union. The Hong Kong unions obeyed its orders and ceased work on receipt of its written instructions.[33]

The motive of the strike was purely political and it was not intended to remedy any economic grievance, real or imaginary. Many of the Chinese were very unwilling to leave their work, and intimidation combined with lurid accounts of the crimes of the British Imperialists were used to make them do so. On the night of 20th June, placards of this type were posted all over the city and seditious pamphlets were distributed inciting the Chinese to rise and wipe out the British residents. The Shameen incident of 23rd June, suitably embellished, did yeoman service, and it is believed was far more effective in rousing the masses than the cry against Imperialism and the unequal treaties. Chinese who remained at work were threatened with personal violence or with assassination. Blood-curdling messages were sent over the telephone and, until effective censorship was established, hundreds of threatening letters were received. Prominent Chinese who supported the Government were warned that their sons would be kidnapped and murdered. The intimate connection maintained by most Chinese with their ancestral villages in China was a powerful weapon. Recalcitrants were forced to stop work by threats to desecrate their family graves, burn their homes or murder members of their family. I was informed by one who took a prominent part in suppressing the strike that the number of agitators never exceeded about 700, but that they succeeded in terrorizing about one-quarter of the inhabitants into leaving the Colony. The British and Sikh constables were frequently unable to detect intimidators owing to ignorance of the language, while the Chinese police were deterred from making arrests by their fear of reprisals. The same tactics were employed in Canton, Swatow and other South China ports controlled by the Kuomintang Government. While in Hong Kong the British authorities checked intimidation and brought about the collapse of the strike, in Kwantung the Government actively or tacitly supported it. Officials professed to be unable to control the strike committees and the police actually assisted them by imprisoning anyone sent to them by the strikers. Intimidation was therefore unchecked and strike breakers were unmercifully beaten or tied up by the thumbs to poles and exposed all day without water or shade to the heat of the sun.[34]

The Hong Kong Government rose to the emergency and was energetically supported not only by Europeans but also by leading Chinese. One of the most striking phenomena of the affair was the loyalty of the Chinese despite attacks made upon them as "running

dogs of British Imperialism" and threats of assassination. They used their influence to counteract the anti-British agitation, secure information and encourage the coolies to resist intimidators and return to work. The Hong Kong Volunteer Defence Corps was mobilized on 21st June, and calls for volunteers as special constables, tramway drivers, butchers, crews for the Kowloon ferries and other essential services met with a ready response. The strike had occurred in the hottest and most enervating season of the year and the leaders had expected that the cessation of all manual work would paralyse the foreign community. They had not counted upon their undertaking the hardest and most unpleasant forms of physical work and so keeping the essential services of the city in operation. A paramount necessity was to check intimidation and protect Chinese who wished to work. From the outset there was little difficulty in obtaining labour once the coolies were assured of their personal safety. The police were supplemented by the Labour Protection Bureau, a police department devised by a Chinese general of great experience who was living in exile in Hong Kong. He raised a small force of about seventy of his former soldiers and laboured earnestly with agents of the strike committee who were threatening those who remained at work with assassination or other penalties. Intimidation abruptly declined and the supply of Chinese labour steadily increased. A reward of HK$250 was also offered for information leading to the conviction of intimidators. A censorship of the mails was established to prevent the despatch of threatening letters; and rewards for the apprehension of those distributing seditious pamphlets led to the speedy disappearance of this form of propaganda. By invoking the Emergency Powers Ordinance which enabled the Governor-in-Council to make such regulations as were necessary in the public interest in a time of emergency or public danger, the Administration on 25th June established a censorship of the press to prevent the printing of incitements to sedition. Henceforth no one might print, distribute, or import from China any newspaper, placard or pamphlet in Chinese without the prior approval of the Secretary for Chinese Affairs.[35] Another Regulation authorized the deportation of any person who had no proper employment; and by 9th July about 100 had been deported under its authority. This compelled coolies to choose between earning a living in the Colony or testing the Cantonese promises of providing all strikers with food and shelter. It thus helped to rid Hong Kong of ruffians and to provide the timid with an excuse for returning to work. The punishment

inflicted on about a dozen agitators who had been arrested also contributed its mite to assuaging revolutionary ardour. On 9th July the Governor announced that they would "be given an opportunity of proving their value to humanity by undertaking useful though somewhat unattractive duties in connection with the sanitation of the City. It is possible that they may regret that their activities have caused a cessation of work on the part of certain sections of the community".[36] Considering that the normal sanitation of a large part of Hong Kong involves the daily removal of night soil by the Conservancy carts this was a perfect example of making the punishment fit the crime. It reminds one of Governor Cavenagh's method of ending the faction fights between Chinese Societies which were an intolerable nuisance in Singapore in the eighteen-sixties. He knew but could not prove that they had been engineered by certain very respectable and frequently wealthy headmen. These were immediately sworn in as special constables and sent out to patrol the streets under the chaperonage of the police. The headmen were not accustomed to physical exertion, and after a short period of energetic duty the riots miraculously ceased. In Hong Kong the situation was well in hand by August and the Volunteers and special constables were demobilized. The places of strikers were being filled, coolies began to return from China, and improvement steadily continued until by October the Colony was outwardly normal again. The return of coolies from Kwangtung would have been much more rapid had it not been for the vigilance of the armed strike pickets in Canton and other ports who forcibly prevented them from leaving.[37]

To prevent a repetition of the experience an Ordinance was passed in 1927 which made political but not economic strikes illegal. An illegal strike was defined as one "which has any object other than or in addition to the furtherance of a trade dispute . . . and is a strike designed or calculated to coerce the Government either directly or by inflicting hardship upon the community." Sympathetic strikes for industrial purposes remained legal unless they sought to win by coercing the Government. Lightning strikes were forbidden in all Government Departments and in the electric, water, sanitary, and other essential public services. An attempt was made to prevent the unions in Hong Kong from being controlled by those in China. Save with the consent of the Governor-in-Council no Hong Kong could be affiliated with any foreign union in such a way that the latter would exercise control. Sir Shou Son

Chow made an interesting speech in support of the Bill in the Legislative Council. After recalling that the general strike had been the work of a few agitators, he continued:—"It is this class of mischief makers . . . that this Bill is designed to deal with. Hong Kong is no place for them. We do not want Bolshevism or Communism. We cannot afford to have the economic and financial structure of the Colony periodically shaken or undermined. What we want are peace and good order, and the right to follow our callings without let or hindrance."[38] The Seamen's Union which had taken so prominent a part in the general strike was banned in 1927. It moved its headquarters to Shanghai, but lost some of its power.

The collapse of the strike had no effect, however, upon the continuance of the trouble in Kwangtung Province. The residents of Shameen, the Foreign Concession of Canton, Swatow and other treaty ports were deprived of all Chinese labour and lived almost in a state of siege, dependent for food upon the supplies sent from Hong Kong. The strike was far more complete than in Hong Kong, since the Kuomintang supported the strikers in their punishment of strike breakers. The boycott against British trade was enforced with equal rigidity, no ships under the British flag being allowed to load or discharge cargo. Their place was taken by vessels of other nationalities which had to agree not to call at Hong Kong and to pay the Strike Committee a "subscription" of $2,000 a trip. In the beginning the strike and boycott were directed against all "Imperialistic Powers". At an early date, however, the Labour Unions were instructed by the Political Commission of the Kuomintang to exclude France and America from the operations. To exclude the French was a trifle awkward, since their marines had fired upon the demonstrators on 23rd June; but this was satisfactorily arranged by asserting that they had taken no active part in the shooting. The Japanese were able to negotiate a compromise with the Strike Committee in September, and from that date the full force of the boycott was concentrated on Hong Kong. The Strike Committee established their own examination shed where cargo was taken after being passed by the Chinese Customs. Articles of British origin were confiscated, and by professing to regard all imports as British, heavy bribes were extracted from merchants to secure their release. Valuable export cargoes such as silk were required to pay fees of as much as $5,000. The Strike Committee established its own courts to punish those transgressing its rules or to decide upon the amount

of tribute to be paid upon goods seized from the merchants. From one point of view the boycott became a very lucrative source of income to its organizers, who freely accepted bribes to permit breaches of their own regulations. It also became very clear that the boycott was not voluntary and that the great majority of the Chinese would gladly have ended it. The Strike Committee, however, maintained it by force and the Kuomintang Government which derived much of its revenue from the Committee was unable to control its supporters. Moreover its Russian mentors and its own extremists strongly supported them.[39]

The Government of Hong Kong attempted to end the boycott by negotiating with the Canton Government in July, 1926. The British offered a loan for constructing public works, but refused to pay compensation to the strikers, and the conference was indefinitely adjourned.[40] On 10th October, 1926, the Kuomintang Government declared the boycott at an end and removed from the frontiers of the New Territories all the armed strike pickets which had been stationed there to prevent Chinese from returning overland to the Colony.[41] Intimidators managed to enforce it for some time longer; but relations between the two governments gradually improved, and the Strike Committee was formally dissolved in March, 1928. Meanwhile the trade of Hong Kong had been slowly recovering: that of 1926 was of course much below normal, and the volume of business in 1927 was still below that of 1925. Recovery of the ground lost was very seriously impeded by the periodical disturbances in Southern China. It is recorded, for example, that merchants of Canton showed a "lack of confidence" in placing orders after the Communist uprising of December, 1927. This led to the burning of a large part of the business quarter of the city, the temporary establishment of a Communist government in part of the province, and a general condition of brigandage. After some further fighting the Communists were driven into the mountains, and by the end of 1928 progress had been made in suppressing brigandage. It is not surprising that during 1928 "the volume of business was, as far as can be estimated in the absence of trade statistics, no more than maintained". However, merchants hoped that trade would be better in 1929, in view of the progress made in establishing settled conditions in Kwangtung during 1928. These expectations were nullified by the breach between the National Government at Nanking and the Kwangsi group, which led to new disturbances in Canton in 1929 and eventually to war between the Kwangtung and

Kwangsi armies. The Cantonese navy mutinied, but its attempt to seize Canton was frustrated by the use of aeroplanes. By December the Cantonese armies had succeeded in defeating their opponents and were preparing to invade Kwangsi. Desultory fighting continued throughout 1930 and the following years. Campaigns were carried on against the Communist armies in Kiangsi and the fighting spread into Kwangtung and Fukien. It is therefore no surprise periodically to come across such statements as "trade suffered from severe depression due to the continuance of civil war in China". The fighting in Northern China and the disturbed conditions produced by Japanese encroachments also affected the prosperity of Hong Kong, since part of its trade was with the North. "If one tried to look at China from the detached point of view of a person with no particular knowledge of the Far East, it would I think seem a strange and chaotic picture. An undeclared war with a neighbouring country [i.e., the conquest of Manchukuo], civil war in several provinces and a vigorous military campaign against a Communist rebellion; all going on at one time or another, or even at the same time—this is the picture in miniature. But those of us who have lived out here for some years regard such conditions as being almost endemic, and we are able to discount much of the disturbance since we know from experience that trade will go on." In 1934 the Communist armies were at last driven out of Kiangsi and Fukien, and in 1936 Chiang Kai-shek brought Kwangtung and the Canton Government under his control. The Central Government had finally established an authority over South China such as it had not enjoyed for many years. The gradual unification of China under the Nanking Government was welcomed in Hong Kong, since trade would benefit from the cessation of civil war and the return of prosperity which peace and stability would bring. Moreover, the Nanking Government regarded its relations with Hong Kong from the point of view of the interests of China as a whole and not with the parochial jealousy of Canton. The Colony and Kwangtung were mutually dependent upon one another for their prosperity; but all overtures from Hong Kong had been met by complete agreement in principle and non-cooperation in practice. Canton's ever-present fear was that it might lose some fragment of its commercial profits to its rival. The consolidation of China under the control of the Kuomintang Government was therefore very welcome to Hong Kong, and in 1936–7 the business community looked forward to the future with chastened optimism. Difficulties they could

foresee in plenty, but the chronic civil wars which for years had partially paralyzed trade seemed at last to be drawing to a close.[42]

Compared with the boycott and the civil wars in China, piracy was a minor affliction; but especially during the 'twenties it was a serious and exasperating nuisance and a minor cause of loss. The sea-faring population of South China had always been addicted to piracy and in the middle of the nineteenth century British warships had temporarily suppressed their proclivities. The growing disorder in South China encouraged them to resume operations, for the Chinese governments for many years either could not or would not interfere with their bases of operations on Chinese territory. Moreover, the Chinese authorities would not agree to the British navy's carrying out punitive expeditions as it had formerly done, since this would have been a derogation from the sovereign rights and the national prestige of China. The consequence was that the pirates' headquarters were free from molestation, although some of these, such as Bias Bay, were within a short distance of Hong Kong. The pirates' victims were British and Chinese small coastal and river steamers or junks carrying passengers and freight between Hong Kong and Canton, Macao or other Chinese ports. The steamships had Chinese crews and usually British navigating officers and engineers. What made the pirates so difficult to combat was that they did not attack from pirate vessels in the traditional manner but came aboard at a port disguised as passengers. An attack was made at a favourable moment and when the vessel was captured the officers were compelled to navigate her to Bias Bay or some other pirate village. After she had been looted and any wealthy passengers retained for ransom she was permitted to resume her journey. The pirates had their spies in the ports and seem to have been pretty well informed when a steamer was likely to be carrying a consignment of bullion. The extent of the nuisance may be gauged by the capture of five steamers in 1922, six in 1926 and eight in 1927. Thereafter the losses were less severe, but successful attacks still occurred periodically, until the fall of Canton in 1938 diverted the pirates to smuggling arms.

Two instances may be cited as examples of the pirates' methods of operation. On 19th November, 1922, the river steamer *Sui An* left Macao at 5 p.m. on the four hours' return trip to Hong Kong, carrying as usual a large number of Chinese deck-passengers. Iron grilles guarded by two armed Indian guards shut off the Chinese on the main deck from access to the boat deck and the bridge, and the

engine room was also protected by grilles. In addition to the Chinese crew, the *Sui An* carried four European officers and six armed Indian guards, of whom four were on duty. At 5.40 armed pirates, variously estimated at from thirty-five to seventy, who had come aboard disguised as deck-passengers suddenly captured the grilles on the main deck. One guard was shot and the other escaped to the boat deck followed by the pirates, who rushed the bridge and the engine room. Two Indian guards were killed, while the other four and the four officers were captured, the captain and three guards being wounded. As often, the attack developed so quickly that the officers and guards were taken completely by surprise and resisted at a hopeless disadvantage. As usual in these affairs, no injury was inflicted after the ship was taken, since there had been no serious resistance. The officers were compelled by threats to navigate the steamer to Bias Bay, where the pirates disembarked after looting the vessel and the passengers. The ship was then allowed to proceed to Hong Kong. The British promptly suggested to the Kwangtung Government a joint land and naval expedition, pointing out that two of the five piracies committed in 1922 were undoubtedly the work of the Bias Bay pirates and the other three pretty certainly so. The Kwangtung Government declined British naval assistance as an "infringement of our sovereign rights" and gave assurances that troops had already been sent to Bias Bay. Actually it did little or nothing. The investigation held at Hong Kong disclosed a number of breaches of the Anti-Piracy Regulations. The purpose of the grilles was to prevent access to the two essential points of the engine-room and the bridge. The grilles, however, were not kept locked, and those on the boat deck were so placed that they did not cut off all access to the bridge from the lower decks but could be circumvented by pirates coming up a companionway behind them. The European officers were not carrying their revolvers, and the two guards on the main deck were not at the grilles as they should have been, but aft among the Chinese deck-passengers. Finally, no proper search was made by the police at Macao of the Chinese passengers embarking or of their baggage, so that it was easy to smuggle arms on board.[43] Failure to keep the grilles locked often occurred, since their position unavoidably made it necessary frequently to open them so that the crew could carry out their duties. When weeks went by without any attack a false sense of security would be created and insensibly precautions would be relaxed. The same cause would explain the failure of the officers to carry arms and the

lax control exercised over the guards, of whom those on the main deck aft were completely out of sight of the officer on the bridge. The failure of the police in Macao, as in almost all China ports save Hong Kong, to make any real search enabled the pirates to embark with virtual impunity; and the security of their headquarters at Bias Bay added the final element needed to ensure their success.

The *Sunning* was a steamer of 2,555 tons which carried cargo and passengers between Hong Kong and coast ports. On 15th November, 1926, she left Amoy for Hong Kong with several European and several hundred Chinese deck-passengers who included a number of pirates from Bias Bay. The *Sunning* was protected by grilles and armed Indian guards in the usual manner. Owing to a false sense of security the European officers went unarmed, control of the guards was lax, and several of the grilles were left open. At about 3.40 p.m. the pirates made a surprise attack, shot several guards and captured the ship, which the officers were compelled to navigate towards Bias Bay. The pirates closely guarded the European passengers and the officers who were not on duty; but despite their suspicions the Chief and Second Officers arranged a daring plan for recapturing the ship. They managed to obtain a revolver which the pirates had overlooked when they confiscated the other firearms and rushed the bridge, shooting the pirates on guard and taking their rifles. The other Europeans escaped to the bridge save for an elderly man who was murdered. They successfully held it against every attack even when the pirates set fire to the ship to drive out the defenders. The result of this was that the Chinese deck-passengers fell into a panic and a considerable number jumped overboard and were drowned. The majority of the pirates finally abandoned the *Sunning* and took to the lifeboats, but some were left behind with the passengers. Eight who were recognized were convicted and hanged at Hong Kong. The passengers were taken off by H.M.S. *Bluebell*, which came up attracted by the blaze; but the officers of the *Sunning* brought the fire under control and navigated the ship safely to Hong Kong.

The Commission of Inquiry which investigated the incident revealed a thoroughly unsatisfactory state of affairs.[44] The refusal of the Chinese Governments to take any effective measures themselves or to permit such an infringement of China's sovereign rights as British naval co-operation gave the pirates a secure base of operations within convenient distance from Hong Kong. The Bias Bay pirates had committed seventeen piracies in five years, nine having

occurred since 1924. There was reason to suspect that Chinese generals commanding troops in pirate districts had pecuniary reasons for not interfering with them. Inquiries also showed that, apart from Hong Kong and one or two other ports between Shanghai and Singapore, a very lax search was made of passengers and baggage. Pirates rarely boarded a ship at Hong Kong because of the strictness of the police; but it was easy for them to do so at another port. The pirates from Bias Bay who captured the *Hong Wha* in 1925, for example, went to Singapore and took passage on her there. Thorough search was in practice impossible, since it would have required twenty-four hours instead of the few hours a ship was normally in port and would have immensely retarded all schedules of sailings. While in port the ship was over-run with passengers, stevedores, agents and messengers, the decks were littered with cargo, while cargo-lighters and sampans clustered alongside. To make sure that no arms were smuggled aboard was almost impossible in the confusion, and the ship's crew had no time to do so, since they were more than fully occupied with the cargo. The work therefore devolved upon the police, and here a brief account of the methods employed at Hong Kong may be of interest. A detachment of fifteen police, sent two hours before the ship sailed, searched all passengers before they were permitted on board. Firearms, however, were frequently smuggled aboard by a confederate, sometimes a member of the crew. On one occasion a coolie who had been searched was about to board the ship when a detective noticed that he was carrying a basket of eggs. Now eggs are imported into Hong Kong from China and not exported from it, so such original economics seemed to require investigation. Under the eggs were found half-a-dozen revolvers. After finishing with the passengers the police made as thorough a search of the ship as their inadequate allowance of time permitted—a thorough search would have required twenty-four hours and fifty police—with special attention to those hiding-places which experience had shown to be favourites. One of these was under the mattress in the chief officer's bunk. For a long time no one dreamed of investigating so sacrosanct and yet perfectly secure a place, for the chief officer of a cargo and passenger boat about to sail was perfectly certain not to have the time for a siesta which would disclose any unusual lumpiness of his mattress. The Commission of Inquiry in the *Sunning* case agreed that thorough search was in practice impossible, and that since most China ports made little or no search

there was always a good chance that pirates would slip on board.

Once at sea the safety of the ship would depend upon the adequacy of her precautions, and here the evidence showed that, as in many other cases, the regulations were faulty and unpopular and observance of them equally so. The Commission agreed that widely-scattered grilles gave too extended and therefore weak a line of defence, and were moreover a nuisance, since they had to be continually opened and shut for the passage of the crew. In this connection it may be noted that a device employed in the past had been for the disguised pirates on the main deck aft to stage a pretended quarrel which grew more and more acrimonious until an officer opened the grille to stop it. The officer and the guard at the grille were shot before they had time to close it and the pirates rushed up to the boat deck. The Commission therefore advised that the bridge be fortified by grilles, pointing out that the unfortified bridge of the *Sunning* was successfully defended and defeated the attempt to capture the ship. Opinions differed widely as to the value of the armed guards. Although paid by the ship's owners they had been recruited and controlled by the shore police and not by the captain. The Commission advised that, henceforth, guards, if employed, should be engaged and controlled by the owners, the men being taken from a list approved by the police from their knowledge of their records. Subsequently the Government altered the regulations in accordance with these recommendations.[45] The Commissioners observed and condemned a tendency to consider that the whole burden of suppressing piracy rested upon the navy. They pointed out that since the reign of Charles II the master and officers of a ship were required to defend it to the best of their ability. Furthermore, the navy had not enough ships adequately to patrol the whole of the danger zone; and its correct rôle was to supplement what patrols it could carry out by attacking the pirate haunts if the Chinese Government refused to do so. A warship would also find it rather difficult to assist a captured vessel since the pirates regarded their European prisoners as hostages and would certainly murder them if their safety were endangered.

The *Sunning* case, coming as it did soon after many other piracies, led to renewed representations from the British Consul-General at Canton. This time the usual evasions brought the warning that a refusal to act might force the navy to do so. As a result of this threat the Chinese in December announced the despatch of 2,000 troops and a gunboat to Bias Bay. By February the Consul-General

discovered that no effective steps had been taken and that the pirate villages at Bias Bay had not been molested. Meanwhile, the indefatigable Bias Bay pirates had captured three more ships, one of them on her way from Singapore. Chinese promises and procrastinations continued into March, and on 22nd March the British steamer *Hop Sang* was captured. On 23rd March the British navy raided Bias Bay and burnt two villages. This caused the pirates temporarily to divert their attention to Chinese shipping, but in July they took in rapid succession one Norwegian and two British ships. This led to naval visitations of Bias Bay and Tai Ping Hui and a diminution in attacks on British vessels. An unusual incident occurred in November when the British submarine L4 intercepted at Bias Bay the captured Chinese steamer *Irene*. The ship surrendered after a shell had been fired into her engine room, and seven captured pirates were convicted and hanged. This naval activity led the Canton Government to take more active measures, and in 1928 the number of ships captured fell to six. There were further decreases in subsequent years, and in 1930 the Canton Government established a naval station with a permanent piracy patrol in Bias Bay. An occasional vessel is still captured; but lessened impunity has very considerably circumscribed the pirates' activity.[46]

Infinitely more important than piracy in its effect upon trade was the grant of tariff autonomy to China by the foreign powers. Strongly influenced by economic nationalism, the Chinese Government used its control of the tariffs to foster the development of native industry and agriculture, and so render the country less dependent upon foreign imports, particularly of textiles and foodstuffs. Imports of textiles rapidly decreased as a result of the successive tariff increases and of the stimulus thereby given to the establishment of factories in China. This seriously affected one of the principal commodities of Hong Kong's trade, and the sale of rice, sugar and wheat also declined. The adverse effect of the Chinese tariff practically coincided with the arrival of the depression, which reached China somewhat later than the rest of the world. From 1932 onwards it affected trade with increasing severity. The declining demand of the West for the exports of the Chinese diminished their purchasing capacity and compelled them in turn to curtail their imports. Hong Kong as a trade entrepôt was dependent for its prosperity upon that of its markets in China and in the Western world; and their simultaneous impoverishment led to the drastic decline of both its imports and exports. The fluctuations in the

exchange value of the silver dollar also seriously hampered trade. The silver policy adopted by the United States in 1934 aggravated the effects of the depression upon the trade of China and therefore of Hong Kong. By doubling the price of silver the silver purchase policy greatly increased the cost of buying Chinese products for the rest of the world. This curtailment of foreign purchases reacted upon the Chinese, still further diminishing their power to import, because of their inability to sell their exports. The export trade of China in 1934 fell about 13 per cent. as compared with 1933 and 72 per cent. compared with 1931. Prices continued to fall, though in the rest of the world they were rising. The effect upon the purchasing power of the Chinese was shown by the imports for 1934, which decreased about 23 per cent. compared with those of 1933 and about 54 per cent. compared with those of 1931. In addition, the high price of silver led to a heavy drain of the metal from China despite the Government's efforts to check it. Eventually in 1935 China abandoned the silver standard and substituted a managed currency. The effect of the silver policy accentuated that of the depression, with disastrous effects upon a country whose prosperity had already been so seriously injured by years of civil war and lawlessness.[47]

The result of these various influences upon the Colony was shown by the fall in the sterling value of its trade from £72,514,000 in 1932 to £62,291,000 in 1935 and £50,852,000 in 1936. In 1934 the value of Hong Kong's trade was 56.4 per cent. of what it had been in 1931. Owing to the vagaries of the exchange a different picture is given if the value of the total annual trade is expressed in Hong Kong dollars. In this case the trade fell steadily from HK$1,280,000,000 in 1931 to HK$1,096,000,000 in 1932 and thereafter with increasing rapidity to HK$636,000,000 in 1935. In 1936 it increased to HK$803,000,000. The reason for the discrepancy is the fluctuation in the exchange value of the Hong Kong dollar during the period. Prosperity began to return to Hong Kong in 1936 and the improvement continued through 1938. The lifting of the depression in the world at large led to a greater demand for China's products, her exports in 1936 being 22 per cent. greater than in 1935. The increased purchasing power of the Chinese caused an increase of imports. The successful management of the new currency assisted the trade recovery both through the lowered rate of exchange and the narrow range within which fluctuations in its value were restrained. The evil effects of the silver purchase policy

were thus removed. The growing unification of China under the control of Chiang Kai-shek and the increasing stability and authority of his government gave a feeling of greater confidence and security than had been known for many years. The programme of road and railway construction upon which his government had been engaged for some years began to show its effect in the opening up of China to trade. Exceptionally good crops of rice and cotton increased the income of the cultivators. Hong Kong, as always, was affected by the situation in China; and the feeling was general in 1937 that the Colony was emerging from its long depression and that more prosperous times were in store.[48]

Hong Kong and the Sino-Japanese War

The initial effect of the Sino-Japanese War was a remarkable expansion in the trade of Hong Kong to £69,894,000 in 1938, the last year for which figures are available. In addition to the shipment of munitions a large part of the import and export trade of China was diverted to the Colony owing to the closing of Shanghai and the Northern ports. The proportion of her imports which entered by way of Kowloon increased from 3 per cent. in July, 1937, to 45 per cent. in January, 1938, and during the same period exports rose from 12 per cent. to 41.3 per cent.[49] The Kowloon-Canton Railway proved invaluable to the Chinese and the connecting link with the Canton-Hankow Railway was built in August, 1937. The Japanese made strenuous efforts to destroy the Chinese section of the line by incessant bombing raids, but constant repairs kept it open until a few days before the capture of Canton on 21st October, 1938. Hong Kong's main artery was severed and trade fell off sharply. It survived, however, to an extent not generally realized, for a large part of the trade which had passed through Canton was diverted to the South China ports of Swatow, Wenchow and Ningpo. By feverish efforts the Chinese linked them by road and railways with the lines still in their hands. It has been estimated that 80 per cent. of the munitions which passed through Hong Kong on their way to China were German, while the other sources of supply were Italy, Belgium, the United States and the United Kingdom,—a topsy-turvy situation, when Japan's associates armed her enemy and Chiang Kai-shek's well-wishers, the United States and Great Britain, provided Japan with the bulk of her military raw materials.

In the summer of 1939 the Japanese occupied or mined the principal ports of South China and very greatly cut down the trade of

Hóng Kong. The merchants of the Colony promptly opened up alternative routes and still contrived to retain an important though unknown percentage of their trade. A large part of the munitions landed at Hong Kong were transhipped to Haiphong in French Indo-China and thence by railway to Yunnan; and shipments were increased to Portuguese Macao and the French leased port of Kwong Chow Wan. A flourishing smuggling trade was also built up, the junks being manned by the former pirates. Cargoes of arms, kerosene, etc., were landed at fishing villages or empty beaches and vanished into the interior, while the junks brought back tea and other products of China. Japan could not stop the traffic by imposing a blockade since she had not declared war and, more important, Great Britain and the United States refused to agree to it. The alternative was to blockade Macao and the other ports by land and to place detachments at every fishing village and stretch of unoccupied beach in South China. This meant a large number of small and isolated garrisons, a risky move when the Japanese controlled only as much of Kwangtung Province as came within the range of their guns. Owing to the Chinese scorched-earth policy the troops could not live off the country and would have to receive all supplies from the Japanese bases. This meant a very large number of convoys and small detachments on lines of communication which in the aggregate would lock up far more troops than they could spare. The shipment of arms through Hong Kong finally ceased in January, 1940.

The present situation is that the Japanese have ruined the South China trade for everyone, including themselves. The capture of Canton and the closing of the river, cut Hong Kong's principal means of communication with the interior. Only Japanese goods are sold in the ruined city which, however, has a population of about 25,000 in place of its former 1,500,000. Most of them are coolies with very little to spend, since all the well-to-do Chinese fled. Up-river from Canton are Chiang Kai-shek's troops, who do not allow Japanese goods to pass inland. The Japanese have done a little dredging at Whampoa, but the old plan to build a harbour which shall replace Hong Kong remains largely a paper scheme. The Hong Kong dollar is no longer widely used in Kwangtung Province: in the unoccupied areas the currency is the Kwangtung dollar, and in Canton and the towns where there is a Japanese garrison the Chinese are forced to accept military yen, an inconvertible, fiat currency. Hong Kong is no longer the banking centre

for South China; it has become the foreign exchange banking centre for the whole country. The Chinese Exchange Equalization Fund was transferred there from Shanghai, and the directors keep in touch with their Government in Chungking by aeroplane. The merchants of Hong Kong have lost a large part of their trade; but they are doggedly hanging on and believe that they will weather the storm. A victory which gave the Japanese what they have not yet secured—effective control of the whole of South China—would mean ruin. There is no doubt as to what Japan will do to British and Western interests generally if she wins the war. But the game is not yet played out, and it is by no means certain that Japan will have things all her own way in spite of her policy of taking advantage of the war in Europe.

CHAPTER XIV

THE SOCIAL SERVICES OF HONG KONG

The Problem of Water

The particular manifestations of the Public Works Department's activities which most impress the average visitor to Hong Kong are probably the excellence of the roads and the spectacular size of the rain-water drains. Altogether there are 377 miles of roads in the Colony, swinging in voluptuous curves up and down the steep-sided hills and narrow valleys. One is even more appreciative of their quality if one has experienced or rather endured motoring in certain other adjacent countries. The gargantuan proportions of the storm-water drains are reminiscent of British Malaya; and one experience of the rapidity with which they fill in the rainy season is enough to prove their absolute necessity. The especial achievement and abiding goal of the Hong Kong Public Works Department, however, is waterworks and yet more waterworks.

Climate, geography and the history of China have combined to create this problem. Hong Kong has a dry season from October to March, followed by a wet season when much rain falls in intermittent downpours. In normal years the rainfall is sufficient to provide for the needs of the population during the following year; but it is uncertain and variable in quantity so that periodical and serious shortages occur. In 1928–9, for example, the year's rainfall was only 38.65 inches as against the previous minimum of 45.83 inches in 1895, and an average of 85.16 inches. The result was that the population had to be rationed and when the rains came in July, 1929, the reservoirs of the Colony held only 229,000,000 gallons of their storage capacity of approximately 2,620,164,000 gallons.[1] In addition to the uncertain rainfall the mountainous topography means that the streams have small catchment areas or drainage basins and short and often steep beds, so that the rain water rapidly runs off into the sea. The general absence of forests in the drainage basins further promotes rapid run-off, though reafforestation is gradually remedying this. The presence of large areas of granite and similar igneous rocks which are highly impervious to water

prevents the natural storage of underground water. For this reason the boring of artesian wells is impossible on Hong Kong Island and is feasible only to a very minor extent in the New Territories. The only solution to the problem is to dam the streams and small rivers and so conserve the water in reservoirs.[2] As a general rule, the prevailing topography—narrow valleys and small catchment areas—ensures that the building of a reservoir will entail the maximum of expenditure and the minimum of water stored. The Shing Mun Dam, for example, is the highest in the British Empire, 287 feet in height, but it stores only 3,000,000,000 gallons.

The very security which has so largely contributed to the prosperity of Hong Kong has intensified the difficulty of solving the water problem, owing to the heavy immigration which it has brought about. The completion of each large reservoir has evoked the prediction that at last the Colony had ample water for years to come. Within a short time the increase of population has necessitated the building of yet another reservoir. From one point of view the history of Hong Kong is a race between population and waterworks, in which the population has always won. Two factors which seem small but which considerably increase the difficulty are wasteful use and rising standards of hygiene. The poorer Chinese live in tenement houses and thoroughly appreciate the convenience of water laid on so that they no longer have to carry it from the free public fountains in the streets as was once the case. Their appreciation, however, does not extend to the necessity of turning off the taps when not in use, though the Waterworks Department of the Public Works Department and the Chinese landlords (who must pay for all excess water used under the new meterage system) do not share their point of view. The cumulative waste of water is serious, and neither the former system of rider mains nor the universal installation of water meters, which has succeeded it, has altered this idiosyncrasy. Under the rider main system from 1903 to 1932 the tenement quarters of the city of Victoria were divided into zones, the water supply in each of which could be turned off independently and in rotation. A water rate of 2 per cent. of the annual rateable value was imposed, no charge was made for excess consumption, and the supply of water was unlimited so long as the amount stored in the reservoirs permitted. In practice this usually meant for about six months; and if a water shortage occurred during the rest of the year houses in the rider main districts had to be restricted to two hours' water a day. In addition the inhabitants could

always obtain an unlimited amount of free water by carrying it from the street fountains. Opinions in the Legislative Council were sharply divided as to the efficacy of the rider main system as a means of conserving water; but ultimately it was abolished and water meters which already existed in some parts of Victoria were installed in all houses. Each house was given a free allowance, the amount of which depended upon its assessed rate, and an additional rate was charged for all excess consumption. The practical result has been that the tenants waste the water, the landlord pays for it, and the problem of conservation remains in *statu quo ante.*[3] The final and most recent complication is the rising standard of personal hygiene among the Chinese. There is a growing demand for the installation of baths and "water-flushed sanitary appliances" which is more gratifying to the medical than to the waterworks authorities. Still grappling with their usual problem of building bigger and better reservoirs, before the growth of population makes the existing situation still more serious, they view the new development with mingled approbation and alarm, and their approval is required before these signs of progress can be installed.

The history of Hong Kong's waterworks began in 1851 when five wells were dug. During the preceding decade the inhabitants had obtained their water from a perennial mountain stream in the Wongnaich'ung Valley. The Pokfulam Reservoir was built in 1863 and enlarged in 1871. Other reservoirs were built or enlarged in 1889, 1890 and 1899, but owing to the combined effect of growing population and periodical droughts the supply of water had to be curtailed in every year save four between 1889 and 1902. In 1903 the rider main system was introduced in the attempt to conserve water and prevent waste; and additional reservoirs were built in 1904, 1907, 1910, 1914 and 1917. In opening the Tytam Tuk Reservoir with a storage capacity of 1,419,000,000 gallons in 1917 the Governor declared that Hong Kong had ample water for years to come. The growth of population again defeated the prediction, and from 1922 to 1936 restrictions upon the use of water had to be imposed upon the population of Hong Kong Island for a varying number of days each year. The best year was 1932 when a full supply was available for 273 days, and the worst 1929 when restrictions remained in force throughout the whole year. The population of Kowloon, though rapidly expanding, had not yet seriously outstripped its supply and its use of water was restricted during only eight years of this period. Additional waterworks were built in

1920, 1922, 1925 and 1931, and in 1930 a cross-harbour pipe-line was laid to convey water from the New Territories to the Island. The completion of the Aberdeen Reservoir in 1931 marked the end of building storage works on the Island, since all available space for catchment areas had been pressed into service. The water supply was still insufficient, and while Kowloon was for the time being in better condition, the rapid growth of the town made it evident that the same situation would soon arise there. In 1929 the cost of waterworks built and building was $18,214,168 (£1,745,525); but it was clear that work on a far more ambitious scale was imperative despite the heavy cost, and that the new reservoirs must be built upon the mainland. Despite construction during the 'twenties the population had so far outstripped the supply that the total storage capacity of the Colony's reservoirs was only 3,973 gallons per head of population whereas in 1921 it had been 4,559 gallons.[4]

The necessity had been foreseen and investigation of new sources of supply begun in 1921. The result was the Shing Mun Valley Scheme which, when completed, was expected to store 4,500,000,000 gallons of water and cost $17,000,000 (£2,018,749). The scheme was divided into five sections, the construction of which could be undertaken gradually as the need arose. In 1923 work began upon the first section of the plan, which was finally completed in 1932 at a cost of $4,136,765 (£273,629).[5] Delay in commencing the second section brought sharp criticism from the unofficial members of the Legislative Council particularly at the time of the serious water shortage in 1929. The Governor pleaded the need for economy as a result of the decrease in revenue caused by the Chinese boycott; but he promised that concrete plans for the second section of the Scheme should be prepared immediately, the existing ones being "still in a somewhat hazy condition".[6] Investigation showed that important modifications must be made in the original proposals; and the specifications finally drawn up in 1931 provided for a dam across the Shing Mun River giving a depth of about 200 feet of water and a storage capacity of about 3,000,000,000 gallons, or rather more than the total storage capacity of all the existing reservoirs. The estimated cost was $9,200,000 (£481,562) to be raised by a loan. The Secretary of State was at first dubious whether the Colony could afford so expensive an undertaking; but his sanction was eventually obtained and construction began in 1932. The three years' additional delay provoked periodical protests from the unofficial members of the Legislative Council. The dam was com-

pleted in 1935; and though the adjacent country was very malarial the hundreds of men employed were almost free from the disease owing to the efficiency of the preventive measures adopted.[7] The completion of the Shing Mun Dam and of some subsidiary works, such as a second cross-harbour pipe-line, more than doubled the Colony's water supplies, increasing the storage capacity of the reservoirs from about 3,000,000,000 to 6,049,800,000 gallons to supply an urban population of about 860,000. After making allowance for the uncertainties of the rainfall, the storage capacity would provide for a daily supply of 23,250,000 gallons. With normal rainfall a larger quantity could be supplied, but owing to its uncertainty a margin of safety was essential. The total cost of the new waterworks built between 1920 and 1935 was approximately $20,000,000 (£1,958,334), and once again the Colony believed that the spectre of water shortage had been laid for at least some years.[8]

In 1936 the Public Works Department prepared plans which included doubling the catchment area of the Shing Mun Reservoir, laying another cross-harbour pipe-line and increasing the capacity of the filter beds, which had become too small for the volume of raw water sent through them. The reason for the proposals was that "as regards storage the present position is relatively similar to that in 1920, when two years previously the island storage had been trebled by the completion of the Tytam Tuk Reservoir". The sudden and very marked increase of consumption in 1936 had "entirely upset all previous estimates", so that restricted use of water had had to be enforced for 214 days on the Island and 140 days in Kowloon. The reasons for the increase were believed to be the early termination of the rainy season and the subsequent long dry hot period, coupled with a considerable reduction in the rate charged for the use of excess water. Waste had thereby increased since "the consumers have 'let themselves go' in the matter of consumption". Finally, the increasing adoption by the Chinese of Western standards of hygiene had led to a decided increase in the use of bath tubs and "water-flushed sanitary conveniences". As regards the future the recovery of trade would, as formerly, lead to a growth of population. For all these reasons the Public Works Department foresaw a steady increase in the use of water. The consumption in 1936 had come dangerously near the existing storage capacity, and unless the proposed extensions were immediately undertaken "restriction of supply would again become an annual occurrence in the Colony". The sting of these pro-

posals was in the tail: the urgently required extensions costing $3,185,000 (£201,550) were little more than a stopgap. They would give a few years' respite while surveys were made in the New Territories for a suitable site for "a very large storage reservoir".[9] Since the date of the report the Sino-Japanese War has brought an influx of refugees from China.* The old race between population and water continues, with population again in the lead; and Hong Kong faces the necessity of further heavy expenditure.

Public Health

The health situation in Hong Kong cannot be understood without some reference to its history and topography. Its notoriously bad reputation in the early days of British occupation was due to the very high death rate from malaria among the garrison and the urban population. Long before the outbreak of the Great War malaria had disappeared owing to the destruction of the breeding places of the mosquito by an elaborate system of drainage, though sparsely populated parts of the rural areas were decidedly malarial, particularly near the hills. The types of mosquito which acted as carriers for the bacillus in the Colony, *Anopheles Jeyporiensis*, *Minimum* and *Maculatus*, preferred to breed in spring water near the foot of the hills and did not approve of swamps and ponds in the open plains. Moreover, *Maculatus*, which in Malaya is a very potent agent in the spread of malaria to human beings, in Hong Kong prefers the blood of pigs and cattle and is therefore a carrier of minor importance despite its prevalence.[10] Since only a small fraction of the population lived in the districts favoured by the mosquito carriers, the towns had long ceased to trouble themselves about malaria. Moreover, there was a tradition that malaria was natural in the tropics, and beyond a certain amount of oiling of breeding places little was done until after 1929. One cause of the changed attitude was the post-war development of residential suburbs at Repulse Bay and other rural areas near Chinese villages. Serious outbreaks of malaria followed, and the urban population began to take an increasing interest in the problem of malaria.

Apart from malaria, Hong Kong was naturally fairly healthy, and elaborate health measures were not essential if trade were to prosper as in British Malaya. The health problems were merely those which occurred in every tropical city, complicated by certain local geographic and racial factors. The overwhelming majority of

*In 1938 the permanent population was estimated to be 1,028,619, in addition to refugees whose number was believed to be 600,000.

the population were Chinese of the coolie class, whose ideas on medicine and hygiene had many resemblances to those of mediæval Europe. Moreover, their obstinate adherence to traditional social customs and curative methods, coupled with a good deal of suspicion of Western medicine, set up very serious obstacles to progress. To cite one example, they had been traditionally accustomed to serious overcrowding—instances have occurred in Hong Kong where lodging house keepers have rented the floor of a latrine as a bedroom[11]—inadequate ventilation and a whole-hearted indulgence in spitting. All of which were highly conducive to the spread of tuberculosis which with pneumonia and bronchitis account for about two-fifths of the deaths.[12] The proximity of China, the constant intercourse and the migratory character of the population made it harder to overcome their prejudices. The result was that there has been little voluntary co-operation as in the West between the labouring classes and the authorities in the prevention and control of disease. Public health regulations have been obeyed not from appreciation of their advantages, but because of the legal consequences of disregarding them. Much time, energy and money have had to be wasted in propaganda and in enforcement of the Health Ordinances. Once the Chinese have been persuaded by personal experience of the superiority of Western medicine they have been quick to appreciate its advantages. Ignorance and conservatism, however, have made the process of conversion slow, and much propaganda has had to be carried on through district visitors, infant welfare centres and the schools. The leading Chinese of Hong Kong have for long taken a very important part in this work through such means as the Tung Wah and other hospitals and the Chinese public dispensaries.[13]

The topography of the Island exaggerated the racial trait of overcrowding. The city of Victoria, the principal and in the nineteenth century practically the sole centre of trade, was built upon a narrow strip of land four miles in length by one-fifth to two-fifths of a mile in width lying at the northern foot of the Peak and separating it from the sea. The total area is about one square mile and is the only level land of any size on the Island. The working-class quarter is on the plain near the harbour and has gradually extended a little way up the lower slopes of the Peak. Expansion in that direction, however, was limited by the expense of building, by the inability of the labouring classes to pay anything save a low rent, and by the fact that their demands were not exacting since they had always been

accustomed to poverty, overcrowding and insanitary conditions. Moreover the city grew up in the nineteenth century when town-planning even in the West was little thought of, and when health regulations covering the construction of houses were much less exacting than at present. Most of the lodging and tenement houses where the poorer classes live were built by Chinese landlords. Originally they were one or two storeys high and were usually separated by narrow lanes and alleys; but as population grew they were heightened to four or five storeys without any widening of the streets to increase light and ventilation. Generally the houses were built back to back in rows separated by a scavenging lane six feet in width, and with each floor subdivided into cubicles, often about eight eet square, each of which might house a family. About 200 acres in the Western part of the city are seriously overcrowded and have a population of over 1,000 to the acre. The principal defect of the older houses which cover the greater part of this quarter is an insufficiency of open space and latrines. Construction of the more recent houses is better, and new buildings are frequently provided with flush sanitation on each floor, as far as the perennial shortage of water permits, while the remainder have the pail system. Owing to the efforts of the Sanitary Department and the Building Authority, conditions have been slowly but in the long run considerably improved by such measures as the rebuilding of houses which were condemned for structural defects. Chinese landlords for long were the chief obstacle to introducing more stringent legislation which would reduce the rental value of the property. Other difficulties were the shortage of water and the opposition of the tenants, who were quite content with their living conditions and also were so poor that they could not afford to pay much in rent. "A cubicle rents for ten dollars (12*s.* 8*d.*) a month, a bed in the passage costs three to four dollars (3*s.* 9*d.* to 5*s.*), food costs at least six dollars (7*s.* 6*d.*), and the average earnings of a coolie are about eighteen dollars (£1 2*s.* 9*d.*)." The Buildings Ordinance of 1935, which replaced that of 1903, introduced much more stringent regulations and required the installation of improved light and ventilation in the older houses. The existing defects in housing are a heritage from the past, the rapid elimination of which would involve immense sums of money for slum clearance, which the Government could not afford with its existing revenue. Kowloon is to a large extent of post-war growth and the greater part has been planned on modern principles with straight broad streets and back lanes.[14]

The proximity of the Colony to China introduced further difficulties. The greater part of the population is migratory in its habits and constantly changing in its composition, only 38.5 per cent. remaining over ten years. The Colony is also the principal port of departure and return for Chinese immigrants to Malaya, the Dutch East Indies and other parts of the world. Hong Kong, Canton and Macao might be described as geographically separate portions of what is economically a single unit, a fact which is impressed upon anyone who has watched the arrival and departure of the daily trains and river steamers. In addition, many more come and go on the thousands of junks and other small craft which ply between the Colony and the adjacent ports. In 1935, for example, the daily average was 9,171 arrivals and 9,348 departures.[15] This immensely complicates the health problem in several ways. What might be described as the psychological effect is that the constant entry of newcomers and departure of the existing inhabitants makes the work of enforcing health regulations and of propaganda much more difficult, since the more or less trained and converted are replaced by ignorant and conservative newcomers with whom the authorities must begin their labours afresh. The practical consequence is that plague, cholera and other diseases are periodically introduced, a number of outbreaks having been traced to recent immigrants. Moreover a very high percentage of the Chinese in the general hospitals, the leper hospital, the venereal diseases clinics, etc., are very recent arrivals who are frequently indigent and have often come to the Colony to obtain free medical treatment. In other words Hong Kong is furnishing medical services to a goodly percentage of the population of Kwangtung Province. It has little prospect of seeing any particular improvement in the health of the Colony as a result of this heavy expenditure, owing to the transient nature of the bulk of the population and the entry of further sick from China. Theoretically the solution would be to establish an Ellis Island where all immigrants would be compelled to go for examination, so that the diseased, the aged and the indigent could be deported to China. In practice this is impossible owing to the cost of the large staff of inspectors which would be required to deal with normal entrants, and of the additional police and launches necessary to prevent smuggling. Furthermore, any form of effective examination would entail regulations and delays. The business community have successfully opposed the idea because of the expense and the danger that trade would be injured. They fear

that the imposition of irksome restrictions would deter the Chinese from coming to Hong Kong; and also it has been found impossible to devise any comprehensive and efficient system of quarantine which would preserve that freedom of commercial movement between Hong Kong and the adjacent cities of China upon which the Colony depends for its prosperity. The propinquity and economic interdependence of Hong Kong and China present problems in the medical as in the political field from which more distant countries such as the Philippines are exempt. The Medical Department has therefore striven for a working agreement between the health organizations of the Colony and the neighbouring Chinese cities to prevent the spread of infection by co-operation rather than by imposing restrictions. Port Health work is limited to ocean-going steamships and to immigrants who enter the Colony en route to Malaya and countries overseas; and it does not include entrants by local river steamers, junks and other small craft.[16]

The general attitude of the Legislative Council was that since Hong Kong was naturally far more healthy than many parts of the tropics, medical requirements would be met by curative medicine and such preventive measures as street scavenging, yearly disinfection of tenement houses, and adequate sewage and waterworks systems. The mass of the Chinese did not understand and tended to resent health regulations; and, if practicable, no restrictions irksome to them must be imposed lest they cease coming to Hong Kong. Furthermore, taxes must be kept low and regulations impeding commerce avoided as far as possible lest they injure the trade on which the prosperity of the Colony was based. In health as in administration the attitude and prejudices of the Chinese were a principal factor in shaping policy. Summarizing the medical situation, none of the peculiarly tropical diseases such as malaria or cholera were endemic and widespread. The principal causes of death were pneumonia, tuberculosis and bronchitis, the prevalence of which was fostered by bad housing and insanitary personal habits. Diarrhoea and dysentery accounted for about 12 per cent. and beri-beri (due to eating polished rice) and malaria for about 4 per cent. of the deaths. A small annual outbreak of smallpox and the occasional appearance of bubonic plague and cholera could usually be traced to recent immigrants from China. Vaccination was pretty general owing to the combination of facilities and propaganda provided by the Government, the St. John Ambulance Brigade, and the Chinese Public Dispensaries. The mortality rate

for infants under one year was apparently high, but the statistics are not quoted because they are admittedly unreliable. While the record of deaths is fairly accurate, a large number of births, especially female, are not registered, although the Chinese are improving in this respect, so that the ratio of deaths to births is misleadingly high. The task of the medical authorities was to cure the sick: to improve public health conditions so far as they could in the face of Chinese lack of co-operation, limited funds and unsatisfactory departmental organization; and finally to prevent the entry of disease from China and eradicate it if it eluded the partial quarantine service.[17]

The organization of the health services was old-fashioned. The Director of Medical and Sanitary Services (before 1928 his title was Principal Civil Medical Officer) was the official adviser to Government on all medical and sanitary matters and was responsible for the public health of the Colony. In practice the control of health was divided between six Departments, viz.: Medical, Sanitary, Secretariat for Chinese Affairs, Police, Education and Public Works. The Director had practically no authority outside the Medical Department, which was in charge of hospitals, laboratories, sea quarantine and port health work, vaccination and the medical inspection of schools. He was not a member of the Legislative Council until 1929, and was thus unable to put his views directly before the body which controlled finance and legislation. Public health was largely controlled by the Sanitary Department, which was distinct from and independent of the Medical Department. The head had been a member of the Administrative Service since 1908; and the staff consisted of three Medical Officers of Health, seconded from the Medical, but under the control of the head of the Sanitary Department, two Veterinary Surgeons and fifty-three European Sanitary Inspectors.* The head of the Sanitary Department was also chairman of the Sanitary Board, which was composed of the Secretary for Chinese Affairs, the Director of Public Works, the Director of Medical and Sanitary Services (who replaced the Medical Officer of Health in 1929) and six European and Chinese unofficial members. The principal rôle of the Board was to voice public opinion, to act as an advisory committee to the head of the Sanitary Department, and to pass health bye-laws which had to be approved by the Governor. The Sanitary Department was respon-

* Sanitary Inspectors attended classes in elementary bacteriology, mosquitology, sanitary engineering, chemistry and physics, and passed the examinations for the Royal Sanitary Institute's Sanitary Inspector's certificate (*Report of the Director of Medical and Sanitary Services, 1935*, p. M 50).

sible for the prevention of infectious diseases, epidemics and malaria, the purity of food and the supervision of markets and slaughter-houses, house and street sanitation, scavenging and night soil removal and the registration of births and deaths. The Public Works Department was concerned with health through its control of waterworks, sewerage and drainage and the plans for new or reconstructed buildings. The Chinese Secretariat licensed restaurants, boarding and lodging houses, factories and workshops, after inspection by the Sanitary Department, and supervised the finances of Chinese hospitals and dispensaries. The Education Department dealt with school hygiene, the Police with hawkers of foodstuffs, and the District Officers with sanitation in the New Territories. In addition there were voluntary health organizations such as the Chinese and missionary hospitals and dispensaries and the St. John Ambulance Association and Brigade. Each unit concerned with the health of the Colony worked largely in isolation with little knowledge of what the others were doing. The fundamental defects were that responsibility and control were divided among a number of independent authorities, co-ordination and co-operation were to a great extent lacking, and the Director of Medical and Sanitary Services, while responsible to Government for the health of the Colony, had very limited powers of control. There was "far too much division of authority with its consequent overlapping and confusion as to where the responsibility of one begins and the other ends . . . our system is one impossible for efficiency. It is in many respects that of England in the early Victorian era".[18]

The situation at the end of the Great War was that curative medicine—hospitals and dispensaries—was fairly good but inadequate. The five Government hospitals in 1918 were rather small and old-fashioned and had between them 257 beds. The Tung Wah and other Chinese hospitals had 451 beds, and patients could choose either Western or Chinese methods of treatment. They were inspected by the Medical Department, but their condition left a good deal to be desired. Finally, there were several missionary hospitals and eight Chinese public dispensaries which gave Western treatment only.[19] Medical appropriations increased slowly owing to the priority given to public works, and by 1929 the five Government hospitals had 422 beds and the four Chinese hospitals had 935 beds.[20] The Bacteriological Institute then as now did little research and was occupied principally with the examination of specimens and the preparation of serums for smallpox, rabies, cholera, etc. Systematic

infant welfare work did not begin until 1931. The Sanitary Department did very good work in street scavenging and the removal of night soil. As regards the control of infectious disease each Sanitary Inspector was in charge of a district containing on the average 25,000 persons. Every floor in every house in the poorer urban areas was disinfected and limewashed and the rats caught at least once and sometimes as many as four times a year. The magnitude of this task can be appreciated when one reflects that in 1935 there were in Victoria and Kowloon 24,303 Chinese houses with 78,621 floors. In that year 250,773 floors were cleansed. Other measures for the control of infectious disease were greatly handicapped since the Chinese concealed its existence, if possible, by such measures as dumping the dead in the streets after dark. Houses where a case had occurred often could not be identified and were not disinfected until the next regular visit of the Sanitary Inspector. Sewage disposal was partly by the bucket system and partly by water carriage as far as the limited supply of water allowed. The Sanitary Inspectors inspected the houses for the breeding places of mosquitoes and oiled them. Destruction of breeding places by drainage works was very efficiently carried out by the Public Works Department.[21]

The reorganization of the medical and health services had been under discussion for some years, and in 1929 Dr. A. R. Wellington was appointed Director of Medical and Sanitary Services to carry out this work and establish an anti-malaria bureau. He was a graduate of a Canadian medical college and had previously been Chief Health Officer in the Federated Malay States. He urged that the Medical and Sanitary Departments should be placed under the control of a single Director who should be a trained medical man and not, as in the case of the Sanitary Department, an administrative officer. As on the previous occasions when the suggestion had been made, unofficial public opinion strongly objected, since it considered that the existing department performed all that was required in the field of preventive medicine. It believed that "sanitary science though allied to medicine is a thing apart and that a medical qualification is not necessary for its proper administration and . . . is in fact a disqualification for an administrator". The fear was general that the trade of the Colony might be injured if public health measures were introduced which alienated the Chinese. It was therefore safer to have at the head of the Sanitary Department an administrative officer who understood Chinese mentality and customs, rather than an expert in public health who might lack this knowledge and sub-

stitute for it an intemperate zeal for his own speciality. Doctor Wellington admitted that there was a "considerable possibility" that injury to trade might occur, and that there must be "tact, discretion and caution in dealing with subjects which interfere with the customs or comfort of the masses or which affect the pockets of the moneyed classes".[22]

The plan of reorganization as finally adopted came into force in 1936. The authority of the Director of Medical and Sanitary Services over public health has been extended; but from fear of antagonizing the Chinese the Sanitary Department continues to be separate and its head an administrative officer. The Medical Department now controls Government hospitals and dispensaries, the malaria bureau, the Bacteriological Institute, the inspection of Chinese hospitals and dispensaries, registration of births and deaths, quarantine and the prevention of infectious diseases, vaccination, venereal diseases clinics, maternity and child welfare, school clinics in co-operation with the Education Department, and anti-gas and first-aid centres. The Sanitary Department is responsible for nuisances, house and street sanitation, the prevention of infectious disease, scavenging and night soil removal, the sanitary condition of eating houses, factories and schools, mosquito breeding, and the conditions under which food is manufactured, stored and sold in factories, slaughter houses, markets, etc. The Public Works Department is responsible for town-planning, streets, buildings and building construction, drainage, sewerage and waterworks. The Sanitary Board has been replaced by an Urban Council composed of five official and not more than eight unofficial European and Chinese members, of whom two are elected and the rest appointed by the Governor for three years. The official members are the head of the Sanitary Department as Chairman, the Director of Medical and Sanitary Services, the Director of Public Works, the Secretary for Chinese Affairs and the Inspector General of Police. The Council makes bye-laws regarding those phases of the health problem under its control and lays down the broad lines of policy upon which the Sanitary Department acts. The Director of Medical and Sanitary Services is the Council's official adviser on all health matters; but the Council can disregard his advice or that of its Chairman.

The new arrangements were a compromise whereby the Sanitary Department remained independent under the control of an administrative officer and the Urban Council continued to be an advisory body with somewhat increased powers. The presence upon it of

European and Chinese unofficials and of the departmental heads particularly concerned with Chinese affairs, ensured that full consideration would be given to the Chinese point of view before any policy was adopted. At the same time the position of the Director of Medical and Sanitary Services was strengthened so that he could better discharge his responsibility to Government for the health of the Colony. His appointment to the Legislative Council and his position as Vice-Chairman and official adviser to the Urban Council increased his influence and his power to put forward his views. While the head of the Sanitary Department was to be responsible for the general administration of his department, the Director was to superintend and be responsible for the enforcement of public health measures. The staff was to be reorganized so as to give him general direction over their activities. The Sanitary Inspectors were to be placed under the control of the Medical Officers of Health, who in turn were to be under the general direction of the Director of Medical and Sanitary Services. To enable him to carry out this duty a new post was to be created in the Sanitary Department by appointing a Senior Health Officer who would be his deputy and liaison officer. In this way it was hoped to retain the advantages of having two independent departments and at the same time secure a general co-ordination of health and medical services under the Director. Owing to the depression, however, the Senior Health Officer was not appointed until 1939; and meanwhile the Director found that he had no time properly to supervize the work of the Health Officers in addition to his other duties. Moreover, the Sanitary Inspectors were not placed under the Health Officers until 1939, but continued, as formerly, to be responsible to the head of the Sanitary Department direct through his Chief Sanitary Inspector.[23] The changes made in 1939 have at last given the Director a degree of effective control over the health service which he had never before possessed.

Other important changes have also been introduced since 1929. The Ordinances affecting public health were modernized and extended, e.g. those relating to the construction of buildings and their sanitation, the control of infectious diseases, the licensing and sanitation of lodging-houses, and the enforcement of standards of purity in the preparation, storage and sale of foods. Although the depression did not permit the establishment of all the positions intended, the medical staff was somewhat increased and in 1937 was as follows. The Administrative staff consisted of the Director and Deputy

Director of Medical and Sanitary Services. The Investigative Division was composed of the Bacteriological Institute with a Bacteriologist and Assistant Bacteriologist: the Malaria Bureau with the Malariologist, his Assistant and six Malaria Inspectors: and the Chemical Division with the Government Analyst and five Assistant Analysts. The Health Division was composed of the Sanitary Department with four Health Officers, two Veterinary Surgeons and sixty-five Sanitary Inspectors: the Port Health Branch with four Health Officers, two Health Inspectors, twelve Public Vaccinators and one Fumigator: the Venereal Diseases Branch with two Venereal Diseases Officers and a staff of six: the Maternity and Child Welfare Branch with two Lady Medical Officers and seven nurses: the School Hygiene Branch with three Health and Medical Officers and five nurses: and the Chinese Hospitals and Dispensaries Branch with two Visiting Health and Medical Officers and six Chinese Resident Medical Officers. The Medical Division was composed of the Clinical Branch with twenty-six Medical Officers and Consultants: the Radiological Branch with the Radiologist and a staff of radiographers and masseuses: and the New Territories Branch with three Medical Officers, ten midwives and a dresser. About 43 per cent. of the Medical Officers were Chinese.[24] In addition to extensions to existing hospitals, the new Queen Mary Hospital with 546 beds was built, and the total number of beds in Government hospitals in 1937 was about 829, or nearly double what it had been eight years earlier. Other new buildings included three health centres for which the funds were provided by Chinese philanthropists, several dispensaries and a venereal diseases clinic. The Chinese themselves maintained one infectious diseases and three general hospitals with 1,026 beds and nine dispensaries. The efficiency and cleanliness of the Chinese general hospitals very considerably improved owing to the more effective powers of control given to the Medical Department. The number of Chinese in-patients who chose Western methods of treatment continued to increase, and exceeded those who demanded Chinese methods, though with out-patients the preference was reversed.[25] The Port Health Branch has been expanded and improved and deals very efficiently with sea and air quarantine. The work includes the health inspection of all vessels (except river steamers, junks and small craft), quarantine, and disinfection and fumigation of ships. This last was formerly performed by a private medical firm employed by Government, but is now carried out by the Disinfection Bureau of the Port Health Office. An important

duty of the Port Health Officers is the medical inspection of emigrants and emigrant ships. The Asiatic Emigration Ordinance No. 30 of 1915 requires the ships to have adequate living, sanitary and hospital accommodation and a proper diet scale. The Port Health Officers also vaccinate all emigrants and reject those who are medically unfit or who suffer from infectious diseases.[26]

The most important extension of medical work was the establishment of the Malaria Bureau in 1930. Two officers were transferred from the Federated Malay States, and for the first time careful studies were made of the local mosquitoes, their breeding places and preferences in diet, and which of them were carriers of malaria. Measures taken in the light of this knowledge have done much to reduce the risk of infection in some rural areas, and are progressively extended as funds permit. The outstanding success was the construction of the Shing Mun Dam in one of the most malarial districts of the Colony. The labour force averaged 2,000; but the number absent from sickness never exceeded 3 per cent. Very successful anti-malarial work was done in connection with the building of the Royal Air Force aerodrome in the New Territories. The Bureau has also given classes in anti-malarial measures to sanitary inspectors, dressers and to detachments of the Royal Army Medical Corps and the Royal Air Force. Of the other investigative agencies the Bacteriological Institute has continued to be concerned principally with the examination of specimens and the preparation of vaccines. Research has also been carried on there and at the Pathological Laboratory of Hong Kong University; but both agencies have lacked funds and staff for extensive investigation.[27] Another important new development was the creation of a maternity and infant welfare branch of the medical service with a staff of two lady medical officers. Two centres have been built in Victoria and Kowloon, with ten others in various hospitals and in Government Dispensaries in the New Territories. In addition to medical work they carry on health propaganda. The number of trained and registered midwives was increased from 135 to 404 and training schools were established at seven hospitals. No midwife is allowed to practise who has not passed the Government examination and been registered; and the "wan p'o" or untrained Chinese midwives who worked in accordance with traditional methods have been compelled to suspend operations. Much of the medical expenditure of Hong Kong is of no permanent value to the health of the Colony, since there is a continual outflow of the cured and inflow of sick new-

comers from China. The maternity and child welfare work is an exception and is more likely permanently to improve the health of Hong Kong. The reason is that to an increasing extent the Chinese have been bringing their wives to live in the Colony and have been educating their children there instead of sending them at an early age to the home of the family in China. The School Medical Branch has also been increased since 1929 from one to three medical officers, but is insufficient to deal with 75,000 school children. The school clinics are used as a medium of health propaganda as well as of medical treatment; and a number of the schools also teach elementary hygiene. The work of the Venereal Diseases Branch has been considerably expanded since 1928. Furthermore the registration of births and deaths, while still incomplete, is decidedly less so than formerly, and the Chinese have become much more willing to register births. The medical service in the New Territories has been greatly extended since 1929. In addition to the dispensaries and hospitals maintained by Government and various charitable organizations a motor dispensary visits the villages once a week.[28]

Education

The history of Hong Kong education began shortly after the occupation with the establishment of both Government and missionary schools. The primary object in both types was to Christianize the population by means of education. A change of policy was introduced in 1872: after that date the Government confined itself to secular instruction. In the same year grants-in-aid were for the first time offered to missionary schools, but the condition was attached that the money must not be used for proselytizing. Dr. Eitel, who was head of the Education Department from 1879 to 1897, was a strong believer in the *laissez-faire* doctrine that Government interference was an evil which should be restricted to the minimum, and that state schools should be avoided where possible. In 1893, for example, he closed eleven Government schools on the ground that they had been rendered unnecessary by new grant schools. Until 1913 the policy continued to be to assist private schools by grants rather than to open more Government schools; but since that date additional Government schools have been established and the standard of education has been raised. In 1907 the Evening (formerly the Technical) Institute was founded, evening classes being given in vocational subjects including the training of teachers. In 1911 the University of Hong

Kong was established, with the three faculties of medicine, engineering and arts. In 1913 an important Education Ordinance was passed which required the compulsory registration and inspection of all schools in the Colony. Three normal schools were established during the 'twenties and the University created a Department of Education. The Junior Technical School was opened in 1933 and the Trade School in 1937.

One of the salient characteristics of educational development has been the combination of Government and grant-in-aid schools. This has been typical of British educational policy in India and the tropical colonies. It is based on the principle that since the total available revenue is insufficient for educational purposes it can be made to go further if used to supplement private funds than if it is restricted to the maintenance of a limited number of Government schools. Another important characteristic has been that the medium of instruction in most of the Government and grant-in-aid schools has been English and not Chinese. The pupils have usually attended a Chinese vernacular school for four years and entered an "English" school at the age of nine to twelve with little or no knowledge of the English language. In other words the Government and grant-in-aid "English" schools are really secondary and not primary, since instruction conveyed in a language foreign to the vast majority of the pupils cannot be classified as elementary. Although small Government subsidies have been paid to some of the private vernacular schools the Government has devoted most of its expenditure to the development of English education. The result is that secondary and university education is better developed and of higher quality than the primary education which is all that the majority of the population can afford. Finally the curriculum has been predominantly of the Western literary type and not vocational, except for a limited number who attended the Evening Institute and the engineering and medical faculties of the University. The establishment of the Junior Technical School showed that serious attention was at last being given to technical education.

There are certain factors which help to explain this concentration on English literary, rather than on vernacular or vocational, education. Apart from the influence of the contemporary educational system in Great Britain upon development in Hong Kong there was a strong belief that a knowledge of the English language would provide the key to a great literature and the passport to a great trade. It would be of great and genuine benefit to the individual and to

China in altering and adapting traditional ideas and institutions to the changing conditions in the Far East. From the time when the Colony was first established an English literary education has been really a practical and vocational training. Business firms and Government departments provided numerous openings for English-educated clerks, teachers, etc., and a well-educated graduate had no difficulty in securing employment of this nature. Recently, however, there have been signs of over-production of clerks principally in the form of students from some of the private English schools whose knowledge of English is too poor to enable them to obtain the clerical positions to which they aspire. China herself had also great need of Western-educated men, and it was hoped that many graduates, particularly of the University, would find a career there. The Chinese in the Colony were insistent that English education be provided, and schools with a purely Chinese course of studies found it necessary to add courses in English to retain their students. The reasons which influenced the parents were twofold: the material advantages of an English literary education and the old Chinese tradition which invested sedentary occupations with greater social prestige.[29] The limited amount of revenue available for education also influenced the Government in its decision to concentrate upon English education. To have provided a vernacular education for the whole population of school age would have cost far more than could be afforded.

The total number of pupils in 1920 was 28,707, of whom 18,915 were in vernacular and 9,792 in English schools. Of these last, 3,517 were in Government, 2,330 in aided and the remainder in unaided private schools whose standard was too poor to receive financial assistance.[30] Over a third of the total were in English schools. By 1925 the total number of pupils had increased to 41,259, of whom 12,293 were in English and 28,966 in vernacular schools; and by 1930 the total was 62,193, of whom 16,825 were in English and 45,368 in vernacular schools.[31] The statistics for 1931 are of particular interest since the census was taken in the same year. The total number of children in school was 68,593, and the number of children of school age (five to fourteen years) was 119,008. This included 12,587 who lived afloat in junks or sampans and for whom it would be exceedingly difficult to provide an education. Making allowance for this factor, about three-fifths of the children of school age were actually attending school. Of these, 51,435 were receiving a vernacular education, most of them at private schools of a more or

less unsatisfactory character. The remaining 17,158 were in English schools, 7,401 of them at unaided private and the remainder at Government or aided schools. About a quarter of the children actually at school were receiving an English secondary education. The census also showed that of the Chinese over five years of age 47.94 per cent. could read and write Chinese and 5.69 per cent. could read and write English. The percentage for each language would have been very much higher if it had not been for the widespread female illiteracy which seriously reduced the general average.[32] The following table gives the enrolment in 1937.

Class of School	*Government Schools*		*Grant-in-Aid and Subsidized Schools*		*Unaided Schools*	
	No.	*enrolment*	*No.*	*enrolment*	*No.*	*enrolment*
English	17	5,084	16	7,596	129	6,325
Vernacular	4	559	287	21,290	724	46,139

Altogether there were 1,177 schools, of which twenty-one were Government, 303 aided and 853 unaided schools. Of the 86,993 pupils 19,005, or less than a quarter, were in English and 67,988 in vernacular schools. Since the unaided schools were on the whole of indifferent quality it is important to notice that they accounted for three-fifths of the total number of students. Of the total number of pupils, 28,560 or about a third were girls, of whom the majority were in vernacular schools.[33]

All the schools in Hong Kong are controlled, in that they must be registered and inspected by the Department of Education. Before a private school can open it must be approved by the Fire Brigade and the School Medical Officer, and the Director of Education must approve the teachers and the curriculum. He can refuse to allow it to open or can close it if unsatisfactory. The twenty-one "provided" schools are built and maintained by Government, and are made up of four vernacular and seventeen English schools, of which three are vocational. The English vocational schools are the Trade School, the Junior Technical School and the Evening Institute. Of the four vernacular, two are normal schools, one a primary, and the fourth has primary, secondary and normal departments. The fourteen Government English schools provide an education of the normal literary type. Four are reserved for children of European British parentage since it is not practicable to give satis-

factory instruction in English to British and Chinese children simultaneously when the latter are only learning the language. The nineteen schools which receive a grant-in-aid are almost entirely missionary institutions, fifteen being English and four vernacular schools. They derive their support from the funds of their societies, the Government grants and from the pupils' fees which are charged in practically all schools, Government or private. To obtain the grant a school must comply with the requirements of the Education Department. This prescribes the curriculum, the qualifications and number of the teachers, the type of premises and equipment, the standard of instruction and the general character of the school. A school which ceases to comply with the requirements may be struck off the annual grant list, in which event an appeal is allowed to the Governor-in-Council. The grant amounts to $40 (£2 10*s.* 7*d.*) for each boy and $35 (£2 4*s.* 4*d.*) for each girl in an English school and $14 (17*s.* 9*d.*) for each pupil in a vernacular school. Furthermore, a grant not exceeding half the cost may be made for building or enlarging a school or equipping a laboratory. In 1937 an additional 283 vernacular schools which complied with the Department's requirements received a subsidy. This was not a *per capita* allowance but a lump sum which was determined by the Department's opinion of the value of the school combined with the total amount of funds available, and varied from $4 to $6 (5*s.* to 7*s.* 6*d.*) for each pupil. The total subsidy of $118,375 (£7,491) represented the bulk of the government expenditure upon primary vernacular education. Neither grant nor subsidy was made if a school could defray its own expenses, and some of the non-aided schools were as good as the aided. At the present time the whole system of Government aid to English and vernacular schools is under revision, and it is hoped considerably to increase the amount given to the latter. The remaining schools in the Colony numbered 853, viz. 129 English and 724 vernacular and were unaided by either grant or subsidy. With the exception of some good schools which required no assistance, these were private schools conducted for profit and receiving no financial aid because they failed to comply with the standards of efficiency laid down in the Department's Grant Code. They included the great majority of the Chinese vernacular schools.[34]

With the exception of a few vernacular schools controlled by missionary or by Chinese charitable organizations, the vernacular schools are small private schools conducted as a means of livelihood, usually by a single teacher. The financial returns are poor, since the

fees are often only 10*d.* a month, and the average salary for a vernacular teacher is $40 (£2 10*s.* 7*d.*) a month. Practically all the urban schools are housed in tenement buildings and the conditions under which the pupils work are very far from satisfactory. The difficulty has been that the proprietors could not afford better quarters; and the Education Department's dilemma has been either to make the best of an unsatisfactory situation or to curtail seriously the only means by which the majority could obtain a vernacular education. It would appear, however, that, in the past, leniency in enforcing hygienic requirements was carried much too far, and during the past few years a higher standard has been exacted. A generation ago the teachers were usually Chinese scholars of the old type who had been uprooted by the revolution in China and had established schools as their only means of livelihood. The course of studies which they offered was largely confined to Chinese classics and literature, with sometimes a little arithmetic and geography; and their knowledge of teaching methods was very poor, with, for example, far too much stress upon memorizing. A few of the old scholars still survive, but on the whole the quality of the teachers has improved, although it is still true that their methods of instruction are mediocre. Some of the teachers are the product of schools in China and have been trained in modern teaching methods, others are graduates of the Colony's normal schools, and some of the rest have taken the three-years' course of training for vernacular or English teachers which was begun in 1915 at the Evening Institute. The Government urges them to do this, but the majority of those who comply are half-hearted and often abandon the course. Owing to the poor financial return, the bulk of the teachers in vernacular schools are there because they can find no other employment and have no great incentive to improve themselves. The course of studies has been improved and all vernacular schools follow the model syllabus which was adopted by the Board of Education in 1929. In no school is the teaching any longer confined to memorizing the Chinese classics. Schools are required to teach Chinese reading, writing, composition, history, geography and civics, other subjects being optional. In some schools, especially those for girls, English is taught in the higher grades. The complete course of instruction comprises twelve grades, the lower primary with four, the higher primary with two, the junior middle with three and the senior middle school with three grades. Only about fifty vernacular schools have grades above those of the higher primary school, because a very

limited number of pupils continue beyond this point and obtain the whole of their education in the Chinese vernacular schools. Pupils who intend to have an English education very often transfer to class 8, the lowest grade of the English school, corresponding to grade 5, the lowest of the vernacular higher primary school. They will thus have had four years of vernacular education, and since the age of entrance is normally five to seven, the transfer to an English school is usually made between nine and eleven or twelve. Candidates for admission to an English school are required to pass an entrance examination in Chinese.[35]

The English schools are of three types, Government, grant-in-aid (usually missionary), and unaided private schools. This last group includes several Roman Catholic Theological Colleges, business colleges and girls' schools; but the great majority are ordinary day schools for Chinese boys or night schools which teach the rudiments of English and arithmetic. As a whole they are very inferior to the Government and grant schools. The Government and the grant English schools have the same curriculum, and although the latter are somewhat less generously staffed there is no marked difference between them. Apart from the children of European British descent for whom there are separate primary schools, the entrants have had their previous education in a lower primary vernacular school and are from nine to twelve years of age. Although English is the medium of instruction in most of the lessons the pupils are required to be bilingual, and the yearly promotion depends on the passing of an examination both in English and Chinese. The syllabus is laid down by the Department of Education and the course covers eight years from class 8 (which corresponds to grade 5 of the higher primary vernacular school), to class 1, which prepares for the matriculation examination into the University of Hong Kong. In the past, English education in Hong Kong has been severely criticized as being moulded far too much by the matriculation requirements, so that the courses of study were "determined by speculation about questions likely to be set and the curriculum . . . very rigidly limited in many instances to examination requirements". Instances were cited where Chinese boys were taught in some detail about the religious wars in sixteenth and seventeenth century Europe because "there will probably be a question on it". In a missionary school history was often not taught at all, because the only way in which this could have been done would have been to sacrifice the classes on Biblical knowledge. The kernel of the

criticism was that the course of studies, while well taught within its limits, was designed for the small minority who completed their eight years and entered the University, and for the much larger number who became clerks. It was not of much benefit to those who left the schools before the course was completed, a criticism which might be levelled at a good many educational systems in other countries. The parents themselves were to blame as well as the schools: their motive in giving their children an English education was strictly utilitarian, and they were strongly opposed to wasting time on any subject like physical training which had no obvious bearing on obtaining school certificates to which a recognized employment value was attached. As English education has been voluntary and not compulsory and school fees have been charged, the wishes of the parents regarding the curriculum have necessarily carried much weight.[36] A further criticism was that since an English education was largely vocational, it was a serious defect that many of the pupils spoke English badly, though they read and wrote it well. As in the Philippines, the cause was in part at least that the first lessons in English were given by Chinese teachers who themselves pronounced it very imperfectly. Migration from one school to another has been easy and widespread, despite the regulations which required that a pupil be dismissed and not permitted to enter another school if he was unable to profit from the instruction, or if his age made it impossible for him to complete the eight-years' course by the age of twenty. One method of evasion was to attend a school in Canton for a few months and then enter a school in Hong Kong, where he was unknown, by producing a certificate from the Cantonese school that he had studied there. In practice the Hong Kong school admitted him on the strength of the certificate without making any inquiry as to how long he had studied in Canton, owing to the length of time and difficulty involved in obtaining the information. The result has been a very considerable amount of stagnation, i.e. of boys repeating the year's work. Furthermore the rate of wastage is 42 per cent., although this is not so high as in some other dependencies. Four years of school work are necessary before a pupil becomes permanently literate: if he leaves before the expiration of this time the probability is that he will forget what he has learned, and the time and money spent in teaching him to read and write English will have been wasted. In 1932 and 1933 a total number of 1,232 Chinese boys entered class 8 of the Government English schools, and of these only 719 survived to enter class 4, the

remainder having left the schools. These statistics are apparently typical and mean that only fifty-eight per cent. derived permanent benefit from their English education.

The examinations which to a large extent moulded the curriculum until 1932 were the Cambridge Junior Local in class 2 and Hong Kong University's matriculation in class 1. In that year it was decided to abolish both examinations and to replace them by a School Certificate Examination to be held for the first time in 1935, which under certain conditions would admit to the University. The change was criticized because the new examination was not entirely divorced from matriculation, so that university entrance requirements would continue unduly to mould the curriculum.[37] In 1936 new regulations were made whereby the School Certificate Examination was held after seven-years' work when pupils had completed class 2. The final year, class 1, was spent in preparing students who wished to take the matriculation examination and enter the University of Hong Kong. Government schools must take and grant-in-aid and other English schools might take the School Certificate Examination. It was to be controlled and the papers set and marked by a Syndicate composed of the Department of Education and the staffs of the Government and grant schools participating. The course of studies was laid down by the Director of Education; but the Syndicate was invited to recommend to him such modifications as experience might suggest.[38] To some extent the curriculum continued to be moulded by university requirements; but the plan was an attempt to divorce the two as far as possible and to meet the needs of pupils, most of whom would not go to the University. The obligatory subjects for the School Certificate Examination were English (composition, grammar, literature and writing from dictation); a second language (Chinese, Portuguese, Urdu, Latin, French or an approved modern language); Science and Mathematics; History (either General European, World, or English History); and Geography. Questions were included on the history and geography of China and the Far East; and candidates were required to pass in all four groups at the same examination. An optional group of subjects (Biblical Knowledge, Kuo Yu, Drawing, Painting, or Needlework) might be offered; and while success would not count towards a certificate it would be recorded on it.[39] The new regulations are an improvement upon the old; but it is impossible as yet to estimate how far they will attain their object of separating school and university needs. That both history and geography are required is

an improvement. One is inclined to wonder, however, why the six alternative papers in history, only one of which may be offered, should include, for students who are mainly Chinese, one on European history from 410 to 1789 A.D. and another on world history to 1492. As regards text books, the work of adapting them to local needs has been in progress for some years.

The teachers in Government schools are on the permanent establishment of the civil service. The Europeans are graduates of universities in the United Kingdom and belong to the Colonial Educational Service. The majority of the Chinese are graduates of Hong Kong University who have taken the teacher's training course in addition to their B.A. degree. The Government provides six to eight scholarships a year to maintain intending teachers at the University; and all vacancies for Asiatic teachers are reserved for them. Some of the older teachers whose service began before the existence of the University's education department, obtained their training in the night classes at the Evening Institute. The Europeans in the grant-in-aid schools are frequently missionaries and are Certificated Teachers, i.e. their qualifications are recognized by the English Board of Education. Most of the Chinese teachers are Passed Student Teachers, i.e. graduates of the night classes at the Evening Institute. They are almost invariably former pupils of Government or grant schools, who have not studied at any university. Finally, about 5 per cent. to 10 per cent. of the teachers in the grant schools are Student Teachers, i.e. they are attending the teachers training classes at the Evening Institute. A minority of the teachers in the vernacular schools have been trained at one of the three Government Vernacular Normal Schools. Two of these were established in Hong Kong in 1920, one for girls and the other, which since 1925 has been the Normal Division of the Vernacular Middle School, for boys. A third was opened in the New Territories in 1925. Night classes for vernacular teachers are also held in the Evening Institute; but as already mentioned only a minority of the teachers in the private vernacular schools take the course. The greatest weakness of Hong Kong in its teachers, as in its educational system generally, lies in its vernacular education.[40]

Technical education was practically limited until a few years ago to the Evening Institute. The purpose was to provide technical training for teachers, clerks and apprentices in the engineering, shipbuilding and building industries. Night classes were held for the most part in the premises of Government schools and were taught

mainly by members of the staff under the supervision of the Director of the Institute. Small fees were charged and the age of the students was fifteen and upwards. In addition to the training of English and vernacular school teachers, classes were held in electrical engineering, mechanics, field surveying, building construction, carpentry, hygiene, such commercial subjects as book-keeping and shorthand, French, cookery, etc.[41] Since the opening of the Trade School the technical classes have been transferred to it. The curriculum now consists of evening classes in English, in commercial subjects and for the training of teachers. The work of the Evening Institute was supplemented by that of St. Louis Industrial School, conducted by Italian missionaries. In addition to elementary education, classes were held in shoemaking, tailoring, carpentry and printing. Two of the large shipbuilding companies with several hundred apprentices supplemented their training in the workshops by evening classes in English, arithmetic, geometry and other subjects germane to their work.[42] The extension of technical education was due to the unsatisfactory nature of the work done by Chinese artisans, and the low standard of apprentices in the engineering firms. Foremen, carpenters and others employed in the building trades and motor mechanics, for example, did very poor work owing to their short apprenticeship and consequent inadequate training. Apprentices were usually illiterate: some of them had attended a lower primary vernacular school, but in the interval between leaving school and becoming apprenticed had forgotten whatever they might have learned. They were greatly handicapped by their illiterate and untrained minds, and those of them who attended the evening classes given by the shipbuilding companies gained little profit from their instruction. A Committee appointed by the Government in 1931 urged the establishment of a Junior Technical School to bridge the gap between the primary vernacular school and apprenticeship. The education should be of such a sort as "to feed the apprentice system of the Colony with adequately educated and promising youths" and not to turn out boys with a craving for clerical posts.[43]

The Junior Technical School was established in 1933 and provides a four-year course which gives a pre-apprenticeship training to about forty boys. The age of admission is about thirteen, preference being given to those whose fathers are employed in the docks or in a Chinese trade guild. This preference is in the applicant's own interests since a graduate who was not connected with a guild would find it very hard to secure employment with a Chinese employer.

The course consists of a preliminary year which is devoted mainly to English and arithmetic followed by a technical course of three years. The subjects taught are English, arithmetic, algebra and trigonometry, engineering drawing, elementary mensuration, mechanics and other science subjects, and wood and metal working. The school has a drawing office, carpenter's shop and engineering science laboratory, and is fully equipped to give a thorough pre-apprenticeship training for the engineering and building trades. The course is not a substitute for apprenticeship, but is intended to give a practical preliminary training. After serving their apprenticeship they should be qualified to hold such posts as engineering foremen or draughtsmen, foremen builders or clerks of works in building and engineering.[44] Many are taken as apprentices by European shipbuilding or engineering firms. The school has appealed to the Chinese: they would greatly prefer clerical work, but realize that this is impossible, and that graduation from the school will enable them eventually to become foremen or owners of small workshops instead of being merely mechanics. In 1937 a Trade School was opened which gave a three-years' practical course in marine engineering, metal working, motor-car engineering and building. Some of the pupils were graduates of the Junior Technical School, and those who completed their course were given partial remission of the time otherwise required for their apprenticeship. Evening classes were also held for boys who were already apprenticed and who wished to improve their knowledge of their trade by practical training.[45]

The first beginnings of the University of Hong Kong date from 1887, when Sir Patrick Manson established a College of Medicine for training Chinese doctors at the London Missionary Society's hospital. Sun Yat-sen was one of the first students. The idea of founding a University was first mooted about 1905 and some years later was warmly supported by the Governor, Sir Frederick (later Lord) Lugard. The final result was that the College of Medicine agreed to become part of the University which was established in 1911 on a site donated by Government. Funds for the buildings and for a small endowment were subscribed by local firms, the Viceroy of Canton and the Chinese, and the Government promised an annual subsidy. The Faculties of Medicine and Engineering were opened in 1912 and the Faculty of Arts was added in 1913. The University was to be open to all races and creeds and its standards were to be equal to those of the universities in Great Britain. English was to be the medium of instruction; but the Chinese language and literature

were also to be taught. The sponsors of the plan, both British and Chinese, believed that it would promote a good understanding and friendship between the two races and would advance the interests of China. She had urgent need of doctors, engineers and administrators with a Western education; and the claims of Hong Kong to be the natural centre for Western education in the Far East seemed and still seem overwhelming. Its dockyards, engineering works and hospitals would afford ample opportunities for the practical instruction needed to complete the students' university work. At the same time its proximity to China and its overwhelmingly Chinese population meant that the education could be obtained at much less expense and without exile to the West for a long period with separation from parents and people and risk of denationalization. The founders of the University hoped that the majority of the graduates would find their careers in China.

From one point of view the history of Hong Kong University is the record of the frustration of the wider ambitions of its founders. Its three faculties have given an excellent education so far as their resources in staff and equipment allowed; but certain initial mistakes and miscalculations have always prevented it from becoming the centre for Western education in China. It began with its main building, the school of anatomy, the Vice-Chancellor's House, and an annual income of £9,000. This amount was utterly inadequate to erect the additional buildings which were periodically required and to pay the salaries of the necessary staff. The Government of Hong Kong paid the University's debts and saved it from insolvency in 1920, and for the last few years has increased its annual subsidy from $50,000 to $350,000. The Government, however, had many more urgent demands upon its limited revenue. Furthermore, the University was founded for the Chinese generally and not merely for the Colony; and it was unreasonable to expect that the whole burden of its maintenance and development should fall upon Hong Kong. A few generous donations have been made, principally by wealthy Chinese in the Colony and in British Malaya; but the majority of the gifts were to erect necessary buildings and included no funds to maintain them or the staff who lectured in them. The Rockefeller Foundation endowed three chairs in the medical school. In 1925 the Imperial Government passed an Act empowering it to spend for the benefit of China the indemnity paid for the Boxer Rising. Part of the total of £11,186,547 was to be spent in assisting Western education in China. The University applied for a share of

the fund, but was opposed by political leaders in China and by the Foreign Office. The latter considered that a grant would displease China and that in any event Chinese would never come to study in Hong Kong; but eventually in 1931 the University received £265,000. The total income in 1938 was $1,050,800 (£65,127), of which $350,000 (£21,692) was derived from Government, about $400,000 (£24,791) from interest on endowments and the remainder from fees and miscellaneous sources. Part of the endowment was invested in first-class mortgages in Shanghai. With its existing income the University is able to carry on, but very desirable expansion, e.g. in the medical school, would necessitate an additional annual income of about $200,000 (£12,395).[46]

There is the further handicap that students from China have never attended the University to the extent that was anticipated in 1911. The great majority of the students have always come from China; but much larger numbers have been sent to Western countries, though the expense is more than twice as large as at Hong Kong. Perhaps the principal reason is that for many years the United States has used its share of the Boxer Indemnity to subsidize universities in China and to provide scholarships for Chinese students in America. The returned students occupy positions of importance in education, government and business, and their natural predilection is for American and not British education. This adversely affects the sending of students to Hong Kong and also their chances of obtaining work in China after they graduate. This drawback is aggravated by the fact that Hong Kong University's curriculum and requirements are based on those of Great Britain, while Chinese secondary schools and universities are modelled upon those of the United States. The consequence is that a student hesitates to enter Hong Kong from a Chinese secondary school because he would lose time by taking subjects required for matriculation into the University which are not included in the curriculum in China. Moreover, appointments to the Chinese Government services are made through influence as well as merit, and a graduate of Hong Kong is handicapped through inability to command the same influence as his Chinese competitor. Yet another reason for unwillingness to attend the University is the latent Chinese dislike of the existence of British rule in Hong Kong, a feeling which has been intensified by the growth of Chinese nationalism. Students also naturally regard residence in Europe or America as far more interesting than life in a city which is in so many respects like those of China. If one may

judge from past experience, the hope that Hong Kong would become a principal centre for the spread of Western education in China will not be fulfilled. There is no indication that the attitude towards it in China will alter; and even if it should, the equipment and staff are too limited in many subjects to compete against the attraction of wealthier universities. Expansion would require a considerable increase in the annual income, and there seems little chance of obtaining this from local sources. The University might fulfil a more limited but at the same time valuable rôle as the centre for the higher education of the Chinese in the Colony and in the British dependencies in Malaysia. There are many wealthy Chinese in British Malaya, for example, some of whom already send their sons to Hong Kong University; but the tendency will diminish with the continued expansion of Raffles College at Singapore.

The University in 1938 had 536 students, 211 in Medicine, 132 in Engineering and 193 in Arts, with a staff of sixty-six. The medical course extends over six years, the degrees being recognized by the General Medical Council in Great Britain. The Faculty of Engineering provides a four-years' course in civil, mechanical and electrical engineering. In addition to the course in the University's workshop, dockyard and engineering firms in Hong Kong allow students to work in their shops during the summer vacation to gain additional practical experience. Since 1932 a number of British manufacturers have taken engineering graduates as student-apprentices. Others have obtained employment in the Colony and in British Malaya; but the problem of finding enough openings for them, particularly in China, has not been solved. The Faculty of Arts has included since 1920 a Department of Education for training teachers in English schools and since 1929 a Department of Chinese Studies.[47]

Agriculture and Forestry

The population and interests of Hong Kong are so overwhelmingly urban that its agricultural problems have been largely overlooked. The bulk of the rural population live in the villages of the New Territories, and according to the census of 1931 numbered 97,781 out of a total of 840,473. Of the total male population engaged in some form of occupation only forty-six per 1,000 were in agriculture.[48] Most of them were very poor, the principal crops being rice of, on the whole, good quality and decidedly inferior pigs and vegetables. Ironically enough Hong Kong would provide the farmers with a lucrative market for far more than their present

production if the quality were improved. In 1934, for example, the Colony imported about 350,000 pigs valued at $10,000,000 (£752,604), or about seven times the number and value of the local pigs. The annual importation of poultry was $3,000,000 (£225,781) or about nine times the local production; and the value of the eggs imported was $2,000,000 (£150,521), while the number supplied locally was 1,000.[49] Practically all the vegetables used by the European community had to be imported. An additional market would have been the provisioning of liners returning to Europe. Under existing conditions these have to bring with them from home the vegetables for the return voyage. Several causes explain the failure to take advantage of the opportunities presented by the local market. The pigs were of poor quality because of inbreeding from bad stock, wrong feeding and disease. The hens suffered from similar causes, and the lack of eggs was due to the local custom of selling the young chickens and not rearing them for laying. The cultivation of vegetables increased as a result of the advent of the motor lorry and the greater ease with which they could be taken to market. The farmers, however, continued to grow them by their traditional methods which satisfied their Chinese customers, rather than adopt Western methods of cultivation which would bring them an increased price.[50]

The use of antiquated methods of farming which gave a poor return for the labour expended has been one reason for the backwardness of the rural population. A Committee appointed by Government in 1934 advised the importation of boars and cockerels for breeding and the appointment of an Agricultural Officer to give the cultivators expert advice in animal husbandry.[51] Ignorance, however, is not the whole story: the efforts of the existing Botanical and Forestry Department to help have been largely defeated by the cultivators' obstinate and suspicious conservatism. Exhortations and demonstrations failed to persuade them that digging the ground is performed better with a spade than with a hoe, or that their pigs would be improved by breeding from the boars which were imported. The extreme poverty of most of the cultivators has been a further and very serious handicap. To some extent this has been the result of the shortcomings already enumerated; but addiction to gambling and excessive spending upon weddings have often left the cultivator hopelessly in debt. Marriage is an imperative duty in order to carry on the family, even if the son cannot afford it and must be supported, and custom decrees a lavish expendi-

ture. The consequence has been that to meet the expense the father has often had to incur a debt which could not be paid off for one or two generations. Debts have also been incurred for such purposes as buying grain for seed. The legal rate of interest has frequently been exceeded, compound interest being charged on the principal and unpaid interest so that the debt has rapidly increased. Generally, the farmers of the New Territories are heavily in debt and do not own their land, which either belongs or is heavily mortgaged to a few wealthy cultivators. The combined result of these various causes is that the farmers lead a hand-to-mouth existence, working very hard for an inadequate return, heavily in debt and very poor. In many of its features the problem of rural debt is very similar to that which exists in other parts of Asia; and the formation of co-operative societies under Government supervision has proved to be the most encouraging method of attack upon the moneylender. The Committees of investigation appointed by the Government in 1934 advised the provision of rural credit and the appointment of a Government officer to establish co-operative societies.[52] The recommendations, however, coincided with the deepening of the depression and the decline of revenue, when retrenchment and not expansion of expenditure was demanded. They were therefore not carried out and the Agricultural Officer was not appointed.[53]

The Botanical and Forestry Department has done what it could to improve agricultural conditions; but it has been hampered by the obstinate conservatism of the cultivators and by its own limited funds. The annual expenditure during the past decade has averaged about $112,000 (£7,087) for reafforestation, botany and agricultural improvement. To increase any appropriation has been impossible, from lack of revenue, and any attempt to do so would excite strong opposition from the urban business community. The staff consists of only four Europeans and about 300 Chinese clerks, forest guards and other subordinates. An experimental and demonstration farm at Sheung Shui in the New Territories combines agriculture and forestry. It is the tree nursery for the Colony, distributes improved seed for crops and pine trees, and demonstrates new crops and improved methods of farming. Very few cultivators attend its demonstrations and the lack of any Agricultural Field Officers precludes systematic agricultural propaganda among the villages. The small staff of the Department have many other calls upon their time, and it is not surprising that they have not been able to effect much improvement.

Forestry rather than agriculture is the real work of the Department. One of the most abiding impressions of Hong Kong is the contrast between the reddish hue of the mountains and the soft green of the Japanese pines. The visitor of a century ago saw bare hills: the existing plantations are the result of systematic reafforestation. The primary purpose has been to conserve the water supply and check the soil erosion caused by the rapid run-off of torrential rains. A secondary object has been to provide fuel from the sale of the timber obtained by selective fellings and thinnings, since wood is so scarce that the villagers to a considerable extent use dried grass for their cooking fires, a situation not without its redeeming features, for rice, their staple food, is at its best when cooked over a short, fierce fire. The extension and preservation of the pine plantations on the mountains take up much of the time of the small staff of the Department. Apart from tree diseases the principal enemies are the felling of trees for fuel, and fires which are often caused by the carelessness of the public. In addition to such preventive measures as forest guards and prosecutions in court the Department has tried without much success to convince the cultivators that it is in their own interests to co-operate in preventing the fires which do great damage to the plantations. It also encourages them to grow pines for fuel near their villages by such measures as offering annual prizes for the best seed. The cultivators, however, refuse to be convinced of the benefits of seed selection: to them one pine is as good as another whether the seed comes from a young and vigorous tree or an old and decrepit. Experimental work, particularly in seed improvement and in the cultivation of foreign vegetables and plants, is carried on at the farm in the New Territories and the Botanic Gardens in Hong Kong Island. The flora of the Colony is studied and specimens are exchanged with Gardens elsewhere. The Department also has charge of the parks and gardens attached to various public buildings and playgrounds.[54]

NOTES

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Note 3 (page 31). *Proceedings of the Legislative Council of the S.S.* 1921, pp. C28–C38.

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Note 8 (page 44). *Op. cit.* 1932, pp. B–77–B80, B141–B154.

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Note 10 (page 47). Sir Frank Swettenham, *British Malaya*, pp. 225–227.

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Note 11 (page 48). Sir Frank Swettenham, *British Malaya*, pp. 272–275.

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Note 18 (page 55). *Op. cit.* 1926, pp. C451–C454, C633–C636.
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Note 25 (page 59). Conference of Delegates from Malayan Public Bodies, *The Memorial of the Conference, passim.*

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Note 8 (page 84). *Op. cit.* 1932, pp. C346–347, C421–472.
Note 9 (page 86). *Op. cit.* 1933, pp. C55–C78.
Note 10 (page 86). *C. Reps. No.* 1863. *Annual Report on the S.S.* 1937, pp. 75–82.
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The returns of imports and exports for 1924 to 1937 were taken from the following sources: For 1924 to 1928 inclusive from *Parl. Pap. Cmd.* 3919 *of* 1931, *Statistical Abstract for the British Empire for each of the years* 1913 *and* 1924 *to* 1929, pp. 257–258; for 1929 to 1937 from *Parl. Pap. Cmd.* 5872 *of* 1938, *Statistical Abstract for the British Empire for* 1928 *to* 1937, pp. 256–258: and for 1938 from *Malayan Statistics December* 1938, *I & E*3, pp. lv, lxxxviii. All figures are for merchandise only, omitting bullion, coin and parcel post. There are two other sources of trade statistics, namely, the reports on economic conditions in British Malaya issued periodically by the British Trade Commissioner at Singapore and the *Annual Summary of Monthly Returns of Foreign Imports, Exports and Shipping of British Malaya* published by the Registrar General of Statistics at Singapore. The Reports of the

Trade Commissioner agree approximately with the figures given in the *Statistical Abstracts*, the greatest divergence being in the exports for 1927 when the figure given by the former was less by $197,395 than the *Abstract's* total of $1,061,926,217 (L. B. Beale, *A Review of the Trade of British Malaya in* 1928, *Department of Overseas Trade No.* 54–74–0–28, p. 14). The returns given in the *Annual Summaries* are usually lower than those in the other two publications. The figures differ from a few thousand dollars up to $3,648,000 in the exports for 1929 (*Annual Summary* . . . 1929, p. ix); but even this amount of divergence was not more than .005 per cent. of the return given in the *Statistical Abstract*. The *Annual Summaries* are issued at the end of each year, apparently before complete figures can be compiled. The reports of the Trade Commissioner and the *Statistical Abstracts* are published after greater delay, enabling corrections to be made in the light of more complete information. For this reason among others the figures given in the *Statistical Abstracts* appear to be the most reliable.

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Note 26 (page 284). L. D. Gammans, *Co-operative Societies Amongst Indian Labourers in Malaya*, in *The Planter*, May, 1933, pp. 384–385.

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Note 27 (page 285). *Op. cit.*, *passim*.

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Note 28 (page 286). *Proceedings of the Fed. Council of the F.M.S.* 1928, pp. C147–C152.

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Op. cit. 1928, p. 5.

Note 29 (page 289). *Verslag van de Algemeene Volkscredietbank over het Tweede Boekjaar* 1935, p. 38.

Note 30 (page 291). J. P. Mead, *Forestry in the Malay Peninsula,* a paper read at the Fourth British Empire Forestry Conference, pp. 22–24.

G. E. S. Cubitt, *Wood in the F.M.S., Its Use, Misuse and Future Provision,* pp. 1–13.

Note 31 (page 292). G. E. S. Cubitt, *Forestry in the Malay Peninsula: A Statement prepared for the British Empire Forestry Conference at London in* 1920, pp. 11–12.

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J. P. Mead, *Forestry in the Malay Peninsula,* pp. 15–16.

Note 32 (page 293). Statistics Dept. S.S. and F.M.S. *Malayan Year Book* 1938, p. 100.

F.M.S. Reports on Forest Administration for the Years 1922–37, *passim.*

Note 33 (page 294). *Op. cit.* 1921–37, *passim.*

J. P. Mead, *Forestry in the Malay Peninsula,* pp. 17–20.

Third Malayan Forest Conference at Kepong 1937, pp. 2–9.

Note 34 (page 296). *Op. cit.,* pp. 60–103.

J. P. Mead, *Forestry in the Malay Peninsula,* pp. 12–18.

CHAPTER VIII. THE MEDICAL AND HEALTH SERVICE OF MALAYA.

Note 1 (page 297). A. L. Hoops, *The History of Malaria,* in *The Malayan Medical Journal,* Vol. IX, No. 3.

Note 2 (page 298). *Annual Departmental Reports of the S.S.* 1919, pp. 512–513.

Op. cit. 1927, pp. 722–723.

Note 3 (page 301). Malcolm Watson, *The Prevention of Malaria in the Federated Malay States, A Record of Twenty Years Progress, passim.*

Note 4 (page 302). *F.M.S. Annual Reports of the Medical Department for* 1919, 1920 *and* 1921, *passim.*

Annual Report of the Labour Department, S.S. and F.M.S., 1920, pp. 6–9.
Detailed accounts of the anti-malarial work were given in the annual reports of the Malaria Bureau and of the Executive Engineer, Malaria Advisory Board, which were published as Appendices to the *Annual Report of the Medical Department.*

Note 5 (page 302). *Annual Departmental Reports of the S.S.* 1919, pp. 144, 432.
Op. cit. 1925, p. 570.

Note 6 (page 303). *Proceedings of Leg. Council of the S.S.* 1918, pp. B151–B161: C64–C66.
Op. cit. 1919, pp. B145–B147, B159–B160.
Op. cit. 1920, pp. B174: C149–C151.
Op. cit. 1921, p. B225.

Note 7 (page 305). *F.M.S. Annual Reports of the Medical Dept.* 1921–6, *passim.*
Op. cit. 1925, pp. 1, 12, 24–25, 56.
S.S. Annual Reports of the Medical Dept. 1919–26, *passim.*
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Note 8 (page 306). *Annual Medical Reports of the S.S. and F.M.S.* 1926–30, *passim.*
F.M.S. Annual Report of the Medical Dept., 1930, pp. 74–75.
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Proceedings of the Fed. Council of the F.M.S. 1927, p. B71.
Op. cit. 1928, p. B37.
Dr. A. R. Wellington, *Public Health in Hong Kong*, pp. 62, 67.

Note 9 (page 307). *Annual Medical Reports of the S.S. and F.M.S.* 1931–4, *passim.*
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Note 10 (page 307). *Annual Reports of the Medical Depts. S.S. and F.M.S.* 1937, pp. 15–19.

Note 11 (page 309). *Op. cit., passim.*
Annual Report of the Labour Department Malaya 1937, pp. 60–61.

Note 12 (page 311). *Annual Reports of the Institute for Medical Research, passim.*
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Note 13 (page 311). *Annual Reports of the Medical Departments of the S.S. and F.M.S., passim.*
Annual Reports of the Malaria Advisory Board, passim.
Annual Reports of the Institute for Medical Research, passim.
Dr. A. R. Wellington, *The Ways and Means Adopted by Government for the Control of Malaria in the F.M.S., passim.*

Note 14 (page 311). *Annual Reports of the Medical Departments S.S. and F.M.S.* 1937, p. 73.

Dr. A. R. Wellington, *The Ways and Means Adopted by Government for the Control of Malaria in the F.M.S., passim.*

Note 15 (page 314). *C.Reps. No.* 1783. *Annual Report on the Straits Settlements* 1935, p. 17.

Note 16 (page 318). *Annual Departmental Reports of the S.S.* 1926, pp. 467–480, 494.
Op. cit. 1927, pp. 725–752, 848–859.
Op. cit. 1928, pp. 648, 766, 783–792.

Note 17 (page 319). *F.M.S. Annual Reports of the Medical Department.*
Op. cit. 1937, pp. 28–30, 75–78.
Annual Reports of the Labour Department Malaya.

Note 18 (page 321). *Annual Reports of the Medical Departments, S.S. and F.M.S., passim.*

Note 19 (page 323). *Proceedings of the Leg. Council of the S.S.* 1919, pp. B184–B185.
Op. cit. 1927, pp. B13–B18, B46–B47.
Op. cit. 1931, pp. C247–C248, C399–C408.

Note 20 (page 324). *Proceedings of the Leg. Council of the S.S.* 1923, pp. C287–C291.
Op. cit. 1925, pp. C102–C116.
Op. cit. 1926, pp. B68–B69.
Annual Reports of the Medical Departments S.S. and F.M.S.

Note 21 (page 326). *Op. cit.* 1918–36, *passim.*
Op. cit. 1937, pp. 11, 41–45, 81–82.

Note 22 (page 327). *C.Reps. No.* 1344. *F.M.S. Report for* 1926, p.38.

Note 23 (page 329). *Annual Reports of the Medical Departments S.S. and F.M.S.* 1916–36, *passim.*
Op. cit. 1937, pp. 11–12, 23, 72–73.

Note 24 (page 330). *Annual Report of the Governor General of the Philippine Islands* 1935, p. 11. *75th Congress, 1st Session. House Document No.* 100.

Note 25 (page 331). *Op. cit.*, p. 15.

Note 26 (page 332). Dr. Heiser, *An American Doctor's Odyssey.*

CHAPTER IX. EDUCATION IN MALAYA.

Note 1 (page 335). H. A. Wyndham, *Native Education*, pp. 99–204.
F.M.S. Annual Report of the Education Department for the Year 1930, pp. 1–6.

Note 2 (page 337). *Op. cit.* 1930, pp. 5, 27.
Annual Departmental Reports of the S.S. 1919, pp. 14, 260.
Op. cit. 1929, pp. 898–899.

Rules for Normal Classes S.S. and F.M.S. 1929, pp. 1–2.

Note 3 (page 338). *Proceedings of the Federal Council of the F.M.S.* 1920, p. C23.
Op. cit. 1922, pp. C178–C184.
F.M.S. Annual Report of the Education Department 1930, p. 3.
Annual Departmental Reports of the S.S. 1923, p. 115.

Note 4 (page 338). *Proceedings of the Legislative Council of the S.S.* 1918, pp. B174–B175 and *passim*.
Op. cit. 1919, pp. B12–B14.
Op. cit. 1921, p. B62.
Op. cit. 1923, pp. B54, B104–B107, B199.
Op. cit. 1934, pp. C14–C15.
F.M.S. Annual Report of the Education Department 1921, pp. 3, 10.
Op. cit. 1922, p. 16.

Note 5 (page 339). *Op. cit.* 1919, pp. 2–12.
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I. L. Kandel, ed., *Educational Year Book of the International Institute of Teachers' College, Columbia University*, 1931, p. 99.

Note 6 (page 339). *Proceedings of the Legislative Council of the S.S.* 1932, pp. C552–C553.

Note 7 (page 340). *Annual Reports of the Education Department S.S. and F.M.S.* 1930, *passim*.
C. A. Vlieland, *British Malaya, A Report on the* 1931 *Census and on Certain Problems of Vital Statistics, passim*.

Note 8 (page 341). *Parl. Pap. Cmd.* 3235 *of* 1928, *Report by the Right Honourable W. G. A. Ormsby Gore . . . on his Visit to Malaya, Ceylon and Java during the year* 1928, pp. 44–56.

Note 9 (page 344). *F.M.S. Annual Report of the Education Department* 1919, p. 10.
Op. cit. 1920, pp. 4–7
Op. cit. 1921, pp. 8, 12.
Op. cit. 1922, p. 13.
Op. cit. 1923, pp. 12–13.
Op. cit. 1930, pp. 7–16.

Note 10 (page 345). *Op. cit.* 1930, pp. 25–27.

Note 11 (page 345). *Op. cit.* 1919, p. 11.
Op. cit. 1924, p. 2.
Op. cit. 1930, p. 7.
Report for 1920 *on the F.M.S.*, p. 13.
Proceedings of the Legislative Council of the S.S. 1924, p. B68.
Op. cit. 1929, pp. B73, B85.

Note 12 (page 347). *Op. cit.* 1920, pp. B78, B88, B95–B99.
Op. cit. 1921, pp. B152–B153.
Op. cit. 1925, pp. B30–B31.
Op. cit. 1926, pp. B45–B47, B78–B79.

Note 13 (page 348). *Annual Reports of the Education Department S.S. and F.M.S.* 1923–32, *passim.*

Note 14 (page 349). *General Regulations for Government and Aided Schools in the S.S. and F.M.S.* 1936, pp. 1–3.

Note 15 (page 350). *Proceedings of the Legislative Council of the S.S.* 1926, pp. B62, B84–B88.

Annual Departmental Reports of the S.S. 1926, pp. 281, 305.

Note 16 (page 350). *Op. cit.* 1920, p. 261.

Note 17 (page 351). *Annual Reports of the Education Department S.S. and F.M.S.* 1919–37, *passim.*

Note 18 (page 352). *Op. cit.* 1930, pp. 4–5.

Proceedings of the Federal Council of the F.M.S. 1919, pp. C37–C42.

Note 19 (page 353). *Op. cit.* 1928, p. B148.

Proceedings of the Legislative Council of the S.S. 1926, pp. B85, B152.

F.M.S. Annual Report of the Education Department 1930, pp. 4, 10.

Note 20 (page 354). *Proceedings of the Legislative Council of the S.S.* 1926, pp. C12–C19.

Note 21 (page 354). *Hong Kong Sessional Papers No. 3 of* 1934, pp. 69–87.

Annual Reports of the Education Department S.S. and F.M.S. 1930–7, *passim.*

Note 22 (page 356). *Proceedings of the Federal Council of the F.M.S.* 1927, pp. C161–C165.

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Note 23 (page 358). *Op. cit.* 1932, pp. 97–99.

Proceedings of the Legislative Council of the S.S. 1931, pp. B150–B159.

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Straits Times, 11th April, 1933. Speech by Colonel Roosevelt.

Note 24 (page 359). *Proceedings of the Legislative Council of the S.S.* 1930, pp. B173–B177.

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Note 25 (page 361). *Proceedings of the Federal Council of the F.M.S.* 1935, p. B45.

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Note 26 (page 363). *Commonwealth of the Philippines. Thirty-Sixth Annual Report of the Director of Education for* 1935, pp. 58, 122.

Note 27 (page 365). *Education Code Part I. S.S. and F.M.S. General Regulations for Government and Aided English Schools* 1936, p. 4.

Note 28 (page 365). Board of Education. *Educational Pamphlets. No. 83. Memorandum on the Place of the Junior Technical School in the Educational System.* London, 1930, *passim.*

Note 29 (page 366). *Commonwealth of the Philippines. Thirty-Sixth Annual Report of the Director of Education for* 1935, p. 122.

Note 30 (page 366). A. Vandenbosch, *The Dutch East Indies*, pp. 201–202.

Note 31 (page 366). *Annual Reports on Education in the S.S. and the F.M.S. for the Year* 1937, *passim.*

Note 32 (page 366). *Col. No.* 173. *Higher Education in Malaya: Report of the Commission Appointed by the Secretary of State for the Colonies, June,* 1939, *passim.*

Note 33 (page 369). A. Vandenbosch. *The Dutch East Indies*, pp. 186–208.
H. A. Wyndham, *Native Education*, pp. 77–96.
E. R. Embree, M. S. Simon and W. B. Mumford, *Island India Goes to School, passim.*

Note 34 (page 370). A. Vandenbosch, *The Dutch East Indies*, pp. 201–202, 204.

Note 35 (page 372). E. R. Embree, etc. *Island India Goes to School*, pp. 71–77.

CHAPTER XI. THE GOVERNMENT OF HONG KONG AND THE CHINESE.

Note 1 (page 388). *HK Sess. Papers No. 5 of* 1931. *Report on the Census of the Colony of Hong Kong,* 1931, pp. 111–112.

Note 2 (page 389). *Op. cit.*, 101–136.
HK Sess. Papers No. 15 of 1921. *Report on the Census of the Colony for* 1921, pp. 163–164 and 174.
C.Reps. No. 1775. *Annual Report of Hong Kong for* 1935, p. 5.

Note 3 (page 391). *HK Hansard,* 23rd January, 1930, p. 15.

Note 4 (page 399). *HK Sess. Papers, No. 15 of* 1921, p. 156.

Note 5 (page 400). G. R. Sayer, *Hong Kong, Birth, Adolescence and Coming of Age*, p. 103.

Note 6 (page 406). *C.Reps. No.* 1472. *Hong Kong Report for* 1928, pp. 30–32. One temple at Shaukiwan was built on land which had been leased for 999 years to a certain Lam Ah Neung. After an unsuccessful attempt to find the person in question it was found that the lessee was the goddess of the temple.

CHAPTER XII. ADMINISTRATION AND FINANCE.

Note 1 (page 415). Sir John Harding and G. E. J. Gent. *The Dominions Office and Colonial List for* 1937, pp. 323–326.

Note 2 (page 417). *Op. cit.*, pp. 324–325.
The Colonial Legal Service, Colonial Service Recruitment No. 6, p. 15.
Note 3 (page 418). *HK Hansard*, 16th January, 1936, p. 5.
Note 4 (page 418). *Op. cit.*, p. 6.
Note 5 (page 419). *Op. cit.*, 19th March, 1936, p. 72.
Note 6 (page 419). *Op. cit.*, 30th October, 1919, pp. 101–103.
Op. cit., 19th June, 1930, p. 59.
HK Sess. Paper No. 7 *of* 1929, pp. 71–112.
Note 7 (page 420). *HK Hansard*, 19th June and 20th October, 1930, pp. 59–102 and 224–225.
Note 8 (page 420). In 1936 the technical services employed eighty-six Chinese graduates of Hong Kong University, viz.:—Public Works and Railway Departments, two Assistant and 2 Apprentice Engineers: Medical Department, one Health and eighteen Medical Officers and six House Surgeons, or 43 per cent. of the staff: Education Department, one Headmaster, fifty-two masters and four Mistresses. (*HK Hansard*, 22nd April, 1936, p. 82.)
Note 9 (page 421). *HK Hansard*, 22nd September, 1932, pp. 149–151.
HK Sess. Papers No. 2 *of* 1932, pp. 35–87.
Note 10 (page 421). *HK Hansard*, 19th March, 1936, pp. 47–75.
Note 11 (page 423). *Historical and Statistical Abstract of the Colony of Hong Kong* 1841–1930, pp. 8–9.
Note 12 (page 424). *C.Reps. No.* 1775. *Annual Report on Hong Kong for* 1935, p. 47.
Note 13 (page 424). *C.Reps. No.* 1914. *Annual Report on Hong Kong for* 1938, p. 165.
Note 14 (page 424). *HK Hansard*, 1st September, 1927, p. 60.
Note 15 (page 424). *C.Reps. No.* 1585. *Annual Report on Hong Kong* 1931, p. 38.
Note 16 (page 424). *Op. cit.*, p. 36.
Note 17 (page 424). *C. Reps. No.* 1775. *Annual Report on Hong Kong* 1935, p. 50.
Note 18 (page 424). *Trade Depression Report*, pp. 28–29.
Note 19 (page 424). *HK Sess. Papers No.* 4 *of* 1927, p. 118.
C.Reps. No. 1775. *Annual Report on Hong Kong* 1935, p. 48.
Note 20 (page 425). *HK Adm. Reports* 1938, *Appendix A*, pp. A16, A30.
Trade Depression Report, pp. 33–38.
Note 21 (page 426). *HK Hansard*, 12th September, 1935, p. 155.
Note 22 (page 426). *Op. cit.*, 1920–4, *passim*.
Colony of Hong Kong. Estimates of Revenue and Expenditure for the Year 1932, p. 11.
Op. cit., 1937, p. 11.
Note 23 (page 427). *HK Hansard*, 1st September, 1927, p. 66.
Op. cit., 5th and 19th September, 1929, pp. 161–164, 175–179.

Colony of Hong Kong. Estimates of Revenue and Expenditure for the year 1932, p. 11.

HK Adm. Reports 1928. *Appendix A*, p. A23.

Note 24 (page 427). *C.Reps. No.* 1472. *Hong Kong Report for* 1928, p. 5.

Op. cit. No. 1712. *Annual Report on Hong Kong* 1934, p. 45.

Note 25 (page 428). *Ibid.*

HK Hansard, 31st May, 1934, pp. 45–47.

Note 26 (page 428). *C.Reps. No.* 1914. *Annual Report on Hong Kong* 1938, p. 165.

Note 27 (page 430). *HK Adm. Reports* 1938. *Appendix A*, p. A22.

CHAPTER XIII. A TRADE ENTREPÔT IN TRANSITION.

Note 1 (page 432). *Hong Kong Sessional Papers No. 3 of* 1935. *Report of the Commission appointed by His Excellency the Governor to enquire into the Causes and Effects of the Present Trade Depression in Hong Kong and make Recommendations for the Amelioration of the Existing Position and for the Improvement of the Trade of the Colony*, p. 20. This Report is hereafter cited as the *Trade Depression Report.*

Note 2 (page 433). *Colonial No.* 126. *An Economic Survey of the Colonial Empire* (1935), p. 184.

Note 3 (page 437). *Hong Kong Blue Book for* 1919, pp. 846, 848.

Op. cit. 1920, pp. 281, 290, 301–302.

Note 4 (page 437). The returns for 1921 to 1924 and for 1931 to 1937 were furnished by the Imports and Exports Department at Hong Kong as the authentic figures for the years in question. Since part of the imports from South and Middle China were not included until 1930 the Department considered that "as near as can be estimated it would be fair to add £6 million per annum for each of those four years [i.e., 1921 to 1924] on the import side leaving the export figures as given in the attached list".

A recurrent problem in dealing with the trade of Hong Kong is the discrepancy between the various official tables of imports and exports of merchandise excluding treasure. The variation is anywhere from a few thousand to a few hundred thousand pounds a year; but all attempts to discover the explanation have failed. The figures quoted in the text are the same as those given in the annual Hong Kong Blue Books: while the conflicting statistics from the other publications are given in the notes for purposes of comparison. The returns in the *Trade Depression Report*, p. 57, are:—

	Imports	*Exports*
1921 . .	£68,105,545	£67,691,877
1922 . .	61,196,970	60,978,464
1923 . .	61,941,405	61,372,331
1924 . . .	72,155,478	63,674,794

The figures are identical with those in the text for 1924 and for the exports for 1921 to 1923, while differing slightly as regards the imports for these years. No explanation could be discovered beyond the statement that the committee which drew up the report had exercised great care in securing information. *Parl. Pap.* [*Cmd.* 2738] *of* 1926. *Statistical Abstract for the Several British Overseas Dominions and Protectorates in each year from* 1909 *to* 1923, p. 435, has the returns for 1919 to 1923. They are not quoted because they give the imports and exports of merchandise and bullion combined; but for this period the returns are the same as those in the Hong Kong Blue Books for merchandise and bullion together. There is, however, a marked discrepancy for 1924, the figures for which, as given in *Parl. Pap. Cmd.* 4819 *of* 1935, *Stat. Abstract for the British Empire for* 1924 *to* 1933, pp. 246 and 248, are:—Imports £72,156,000, and exports £65,028,000 for merchandise only. While the return for imports is identical since the Statistical Abstracts give figures to the nearest thousand pounds, that for exports differs by over £1,350,000. A final divergence of authorities appears in one of the annual Hong Kong Reports, the figures in which are carried to the nearest hundred thousand pounds and normally correspond with those in the Hong Kong Blue Books. For 1924, however, the imports are given as £88,862,000, and the exports as £63,348,000 (*Colonial Reports No.* 1414, *Hong Kong Report for* 1927, p. 8).

Note 5 (page 437). *C.Reps. No.* 1585. *Annual Report on Hong Kong*, 1931, p. 16.

Note 6 (page 437). *C.Reps. No.* 1558. *Hong Kong Report for* 1930, p. 8.

Note 7 (page 437). Statement furnished by the Hong Kong Imports and Exports Department. The same discrepancy continues between the various official statements. The following figures, which agree with those in the Hong Kong Blue Books, are given in *C.Reps. No.* 1775, *Annual Report on Hong Kong*, 1935, p. 19.

	Import	*Exports*
1931 . .	£38,500,000	£28,900,000
1932 . .	41,000,000	31,000,000
1933 . .	33,900,000	27,400,000
1934 . .	31,700,000	24,800,000
1935 . .	35,300,000	26,100,000

It will be noticed that the figures correspond for 1932, but for other years the difference may amount to as much as about £700,000. The *Trade Depression Report*, p. 57, differs very widely in its figures for imports but tallies exactly for exports; but as only annual totals are given no explanation of the divergence can be found.

	Imports	*Exports*
1931 . .	£34,665,069	£28,796,398
1932 . .	36,250,499	30,965,793
1933 . .	29,276,847	27,292,699

Yet another conflicting set of returns is given in *Parl. Pap. Cmd.* 5582 *of* 1937, *Stat. Abstract for the British Empire* 1927 *to* 1936, pp. 170 and 172:—

	Imports	*Exports*
1931 . .	£38,652,000	£28,441,000
1932 . .	41,284,000	31,230,000
1933 . .	33,789,000	27,204,000
1934 . .	31,303,000	24,486,000
1935 . .	35,739,000	26,552,000
1936 . .	28,626,000	22,226,000

The vagaries of the exchange introduce a further complication into the trade returns. When expressed in terms of sterling the total trade in merchandise shows a decline in 1933 and 1934, an increase in 1935 and a decrease in 1936; but when the value is given in Hong Kong dollars the total trade in 1936 appears to be markedly greater than in 1935. The statistics in Hong Kong dollars as given in the annual Blue Books for 1931 to 1936 are as follows:—

1931 . .	$1,279,790,497
1932 . .	1,095,907,306
1933 . .	904,030,964
1934 . .	741,023,175
1935 . .	636,022,882
1936 . .	803,214,980

The explanation is to be found in the fluctuating exchange value of the Hong Kong dollar. For this reason it has seemed advisable to give all trade statistics in sterling since its much greater

stability will enable the reader to apprehend the situation more readily.

Note 8 (page 440). *Parl. Pap. Cmd.* 4819 *of* 1935. *Statistical Abstract for the British Empire for* 1924 *to* 1933, p. 248.
C.Reps. No. 1914. *Annual Report on Hong Kong* 1938, p. 73.

Note 9 (page 441). The percentages for China are complete save for 1924 when part of both imports and exports was omitted from the trade returns.
Parl. Pap. Cmd. 4819 *of* 1935. *Statistical Abstract for the British Empire for* 1924 *to* 1933, p. 246.
C.Reps. No. 1673. *Annual Report on Hong Kong* 1933, p. 15.
No. 678. Sir Louis Beale, *Report on Econ. and Comm'l. Conditions in China* 1935–7, p. 63.
C.Reps. No. 1914. *Annual Report on Hong Kong* 1938, p. 72.

Note 10 (page 442). *Parl. Pap. Cmd.* 4819 *of* 1935, *Statistical Abstract for the British Empire* 1924 *to* 1933, p. 246.
No. 678 Sir Louis Beale, *Report on Econ. and Comm'l Conditions in China* 1935–7, *passim.*

Note 11 (page 443). *Op. cit.*, pp. 68, 69, and 71.
Parl. Pap. Cmd. 4819 *of* 1935, p. 246.

Note 12 (page 445). *Op. cit.*, p. 68.
No. 623 *Dept. of Overseas Trade.* A. H. George, *Trade and Economic Conditions in China* 1833–5, pp. 88–89.

Note 13 (page 445). *United Empire*, XXVIII, I, 23: Sir F. Leith-Ross, *The Economic Outlook in the Far East.*

Note 14 (page 445). *Parl. Pap. Cmd.* 4819 *of* 1935, p. 246.
C.Reps. No. 1585, *Annual Report on Hong Kong* 1931, p. 15, and *No.* 1637, *Annual Report on Hong Kong* 1932, p. 16.
No. 678, Sir Louis Beale, *Report on Economic and Comm'l. Conditions in China* 1935–7, p. 63.

Note 15 (page 446). *Op. cit.*, pp. 65–67.

Note 16 (page 447). *International Affairs*, XVI, 2, 250–258: B. Ellinger, *British Foreign Policy in Relation to the Lancashire Cotton Industry.*
No. 623. A. H. George, *Trade and Economic Conditions in China* 1933–5, p. 88.

Note 17 (page 447). *Parl. Pap. Cmd.* 4819 *of* 1935, p. 246.
No. 678. Sir Louis Beale, *Report on Econ. and Comm'l. Conditions in China* 1935–7, pp. 62–64.

Note 18 (page 449). *Historical and Statistical Abstract of the Colony of Hong Kong* 1841–1930, Appendix pp. 8–9.
Hong Kong Administration Reports for the Years 1931 *to* 1937.
Reports of the Harbour Master and Director of Air Services for the Years 1931 *to* 1937, *passim.*
Op. cit. 1938, p. D9.

The total tonnage engaged in both local and foreign trade in 1938 was as follows:—

	Number	*Tonnage*
British Ocean Going Steamships .	3,996	11,397,133
Foreign „ „ „ .	3,132	10,787,599
British River Steamships . .	6,238	6,510,967
Foreign „ „ . .	542	119,109
Steamships under Sixty Tons in Foreign Trade	1,585	48,924
Junks in Foreign Trade . .	9,177	666,652
Total Foreign Trade . . .	24,670	29,530,384
Steam Launches in Local Trade .	19,072	653,625
Junks in Local Trade . . .	23,265	778,747
Grand Total . . .	67,007	30,962,756

Note 19 (page 449). C. F. Remer, *Foreign Investments in China*, pp. 87 and 373.

Note 20 (page 450). C. F. Remer, *Foreign Investments in China*, p 342. F. E. Lee, *Currency, Banking & Finance in China*, pp. 91–92. *Dept. of Commerce, Bureau of Foreign & Domestic Commerce: Trade Promotion Series No.* 27, Washington, 1926.

Note 21 (page 451). C. F. Remer, *Foreign Investments in China*, pp. 177–189. Mr. Remer estimated that the remittances for 1930 were derived as follows:—

Canada	Hong Kong	$17,500,000
South America . . .	„ „	4,200,000
United States	„ „	119,300,000
Straits Settlements . . .	„ „	42,000,000
Netherlands East Indies . .	„ „	29,400,000
Siam	„ „	20,000,000
Philippines	„ „	12,500,000
Australia	„ „	8,500,000
French Indo-China . . .	„ „	5,000,000
India	„ „	4,300,000
Other Sources . . .	„ „	10,000,000
Total . .	„ „	$272,700,000

Note 22 (page 452). *C.Reps. No.* 1775. *Annual Report on Hong Kong* 1935, pp. 35–36.
United Empire, XXVIII, I, 22: Sir Fred. Leith-Ross, *The Economic Outlook in the Far East.*
Trade Depression Report, pp. 41–42.

Hong Kong & Shanghai Banking Corporation. Minutes of the Ordinary Yearly Meeting held on 23rd February, 1935, pp. 2–4.
Op. cit., 27*th* February, 1937, p. 4.
No. 678, Sir Louis Beale, *Report on Econ. & Comm'l. Conditions in China* 1935–7, pp. 60–61.

Note 23 (page 453). C. F. Remer. *Foreign Investments in China*, pp. 392–395.

Note 24 (page 454). *Trade Depression Report*, pp. 10, 14–28 and 52–53.

Note 25 (page 455). *C.Reps. No.* 1775. *Annual Report on Hong Kong*, 1935, p. 16.

Note 26 (page 455). *Ibid.*, p. 16.

Note 27 (page 456). *Ibid.*, p. 16.
C.Reps. No. 1712. *Annual Report on Hong Kong*, 1934, p. 15.

Note 28 (page 456). *Crown Colonist*, June, 1937, p. 253.

Note 29 (page 458). *Ibid.*, p. 253.

Note 30 (page 459). *Hong Kong Annual Reports, passim.*

Note 31 (page 459). *Round Table*, June, 1926, p. 551.
Historical and Statistical Abstract of the Colony of Hong Kong 1841–1930, p. 90.

Note 32 (page 460). *Crown Colonist*, February, 1936, p. 62; Sir Cecil Clementi: *The Future of Hong Kong.*

Note 33 (page 462). *Hong Kong Administration Reports* 1925. *Appendix C. Report of the Secretary for Chinese Affairs*, pp. C16–C18.

Note 34 (page 463). *Round Table*, June, 1926, pp. 547–548.
Hong Kong Hansard, 23rd June and 9th July, 1925, pp. 41, 42 and 45.
H. G. W. Woodhead, *The China Year Book* 1926–7, pp. 968–979.

Note 35 (page 464). *Hong Kong Hansard*, 26th August, 1936, pp. 179–188.
The Governor-in-Council was also empowered to suppress for as long as he considered it necessary the publication of any newspaper. A move to repeal the Regulations in 1936 was successfully opposed by the Government supported by the majority of the Chinese members of the Legislative Council. They concurred that until a stable government existed in China "it is very easy and quite natural for the Chinese papers to overstep their bounds . . . [which] might create misunderstanding outside and stir up trouble inside the Colony. . . . If bad feeling or bad blood is stirred among the mass, especially among the less intelligent section of the Chinese community, it is most difficult to restrain or pacify". Hong Kong's prosperity depended upon good relations with China and these would be injured immediately if the Colony could be used with impunity as a base from which to foment disorder.

Note 36 (page 465). *Op. cit.*, 9th July, 1925, pp. 45–47.

Hong Kong Administration Reports 1925, Appendix C, p. 18.

Note 37 (page 465). *Hong Kong Hansard*, 4th February, 1926, p. 1.

Note 38 (page 466). *Op. cit.*, 30th June and 7th July, 1927, pp. 36–39 and 44–45.

Note 39 (page 467). *Round Table*, June, 1926, pp. 545–553.
Hong Kong Sessional Papers No. 13 *of* 1926, pp. 109–114.

Note 40 (page 467). *Op. cit.*, Nos. 8 and 9 of 1926, pp. 79–93.
HK Hansard, 4th February, 1926, pp. 1–2.

Note 41 (page 467). *Op. cit.*, 15th October, 1926, p. 58.

Note 42 (page 469). *Annual Reports of Hong Kong* 1926–35, *passim.*
Hist. and Stat. Abstract of Hong Kong 1841–1930, pp. 92–104.
The Hong Kong & Shanghai Banking Corporation, Minutes of the Ordinary Yearly Meeting of the Shareholders, 1926–37, *passim.*

Note 43 (page 470). *HK Sessional Papers No.* 2 *of* 1923: *Report of the "Sui An" Piracy Commission: passim.*
HK Sess. Papers No. 7 *of* 1927, *Bias Bay Piracies. Endeavours to Obtain Co-operation of Canton Government in its suppression*, pp. 151–153.

Note 44 (page 471). *Op. cit.*, pp. 161–167.
HK Sess. Papers No. 3 *of* 1927, *passim.*

Note 45 (page 473). *HK Hansard*, 15th September and 27th October, 1927, pp. 86 and 124.
HK Admn. Repts. 1930, *Appendix K*, pp. K13 and K14.

Note 46 (page 474). *HK Sess. Papers No.* 7 *of* 1927, pp. 160–179.
C.Reps. No. 1414. *Hong Kong Report for* 1927, p. 3.
C.Reps. No 1472. *Hong Kong Report for* 1928, pp. 3–4.
C. Reps. No. 1558. *Hong Kong Report for* 1930, p. 3.

Note 47 (page 475). *Hong Kong & Shanghai Banking Corporation. Minutes of Ordinary Yearly Meeting on 23rd February*, 1935, pp. 2–6.
Hong Kong Annual Reports 1931–5, *passim.*
Trade Depression Report, pp. 13–15 and 41–42.

Note 48 (page 476). *Parl. Pap. Cmd* 4819 *of* 1935. *Statistical Abstract for the British Empire for* 1924 *to* 1933, pp. 246 and 248.
No. 678. Sir Louis Beale, *Report on Econ. and Comm'l. Conditions in China* 1935–7, pp. 60–61.
Hong Kong & Shanghai Bank. Corp. Yearly Meeting, 27th February, 1937, pp. 2–8.

Note 49 (page 476). *C.Reps. No.* 1914. *Annual Report of Hong Kong for* 1938, p. 65.

CHAPTER XIV. THE SOCIAL SERVICES OF HONG KONG.

Note 1 (page 479). *HK Hansard*, 5th September, 1929, pp. 134–145.

Note 2 (page 480). *HK Sess. Papers No.* 7 *of* 1926, pp. 76–77.

Note 3 (page 481). *HK Hansard*, 5th September, 1929, pp. 138–142. *Trade Depression Report*, pp. 33–38.
Note 4 (page 482). *HK Hansard, 5th September*, 1929, pp. 134–149. *HK Sess. Papers No. 4 of* 1932, pp. 91–97.
Note 5 (page 482). *HK Hansard, 30th June*, 1932, p. 94. *HK Sess. Papers No. 4 of* 1929, pp. 43–50. *Op. cit.; No. 6 of* 1935, p. 163.
Note 6 (page 482). *HK Hansard*, 24th January, 2nd May, 20th June, 18th July, 19th September, and 23rd September, 1929.
Note 7 (page 483). *Op. cit.*, 19th May, 23rd June, and 4th August, 1932, pp. 33–42: 78–79: 104. *Op. cit.*, 13th September, 1934, p. 125.
Note 8 (page 483). *HK Sess. Papers No. 3 of* 1937, pp. 2, 14, 18.
Note 9 (page 484). *Op. cit.*, pp. 2–5, 14, 18 and 23.
Note 10 (page 484). *Report of the Director of Medical and Sanitary Services for the Year* 1935, pp. M33–35.
Note 11 (page 485). *Report of the Sanitary Department for the Year* 1935, p.M.(1)23.
Note 12 (page 485). e.g., *C.Reps. No.* 1775. *Report on Hong Kong for* 1935, p. 6.
Note 13 (page 485). *Report of the Director of Medical and Sanitary Services for* 1935, pp. M10–11.
Note 14 (page 486). *Op. cit.*, pp. M9–10 and 45–47. *C.Reps. No.* 1775. *Report on Hong Kong for* 1935, pp. 12–14.
Note 15 (page 487). *Op. cit.*, p. 5.
Note 16 (page 488). *Report of the Director of Medical and Sanitary Services* 1935, pp. M11, 57–64.
Note 17 (page 489). *Annual Reports of the Director of Medical and Sanitary Services, passim.*
Note 18 (page 490). A. R. Wellington, *Public Health in Hong Kong. The need for reorganization of the Medical and Sanitary Services and for the Establishment of an up-to-date System*, pp. 24, 27–28, and 37–40. *HK Admn. Reports*, 1934, *Medical and Sanitary Rept.*, pp. M12–15 and 39–43. *HK Sess. Papers No. 4 of* 1937, pp. 1–2.
Note 19 (page 490). *C.Reps. No.* 1001. *Hong Kong Report for* 1918, pp. 14–17.
Note 20 (page 490). *Op. cit. No.* 1494. *Hong Kong Report for* 1929, pp. 24–25.
Note 21 (page 491). *HK Admn. Repts.* 1934, *Med. and Sanitary Rept.*, pp. M40–M42. The night soil was removed by night to special junks which conveyed it to China where it was sold as manure for the mulberry trees on which the silkworms fed. A. R. Wellington. *Public Health in Hong Kong*, p. 39. *HK Hansard*, 1st October, 1931, p. 118.

Report of Director of Medical and Sanitary Services 1935, p. M42.

Note 22 (page 492). A. R. Wellington. *Public Health in Hong Kong*, pp. 1, 2, 13–21.

Note 23 (page 493). *Hong Kong Ordinance No. 7 of* 1935.
HK Sess. Papers No. 4 of 1937, pp. 3–5.

Note 24 (page 494). *Report of the Sanitary Department* 1937, p.M(1)1.
HK Hansard, 19th March, 1936, p. 63.
Report of the Director of Medical and Sanitary Service 1937, pp. M109–M112.

Note 25 (page 494). *Op. cit.*, pp. M74–90.
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Note 26 (page 495). *Report of the Director of Medical and Sanitary Services* 1935, pp. M57–60.

Note 27 (page 495). *Op. cit.*, pp. M33–35, 42, 97 and 122–152.
HK Hansard, 18th July, 1929, p. 95.
HK Sess. Papers No. 4 of 1937, pp. 7–8.

Note 28 (page 496). *Report of the Director of Medical and Sanitary Services* 1935, pp. M29, *D*49–56, M65–70 and M100–109.
HK Sess. Papers No. 4 of 1937, pp. 6–10.
HK Hansard, 22nd April, 1936, oo. 92–93.

Note 29 (page 498). Lord Eustace Percy, ed. *Year Book of Education*, 1933, p. 692.
E. Burney, *Report on Education in Hong Kong*, pp. 5–12.

Note 30 (page 498). *C.Reps. No.* 1108. *Hong Kong Report for* 1920, p. 12.

Note 31 (page 498). *C.Reps. No.* 1324. *Hong Kong Report for* 1925, p. 19.
C.Reps. No. 1558. *Hong Kong Report for* 1930, p. 21.

Note 32 (page 499). *C.Reps. No.* 1585. *Annual Report on Hong Kong* 1931, p. 22.
HK Sess. Papers No. 5 of 1931. *Report on the* 1931 *Census*, pp. 124, and 137–139.

Note 33 (page 499). *C.Reps. No.* 1867. *Annual Report on Hong Kong for* 1937, p. 29.

Note 34 (page 500). *Hong Kong Report of the Education Department for* 1937, *passim.*
Government of Hong Kong. The Grant Code 1924, *passim.*
HK Sess. Papers No. 2 of 1932, p. 62–63.
HK Hansard, 18th November, 1920, pp. 65 and 74.
Op. cit., 22nd October, 1925, p. 105.

Note 35 (page 502). *Hong Kong Report of the Education Department for* 1930, p. 023.
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E. Burney, *Report on Education in Hong Kong*, pp. 8, 9, and 19–23.

Note 36 (page 503). *Op. cit.*, pp. 9–13.

Note 37 (page 504). *Op. cit.*, pp. 13–14.
Note 38 (page 504). *Education Department Hong Kong. Local Examination Syndicate Constitution, passim.*
Note 39 (page 504). *Education Department Hong Kong. Regulations for the School Certificate Examination* 1937, *passim.*
Note 40 (page 505). Burney, *Report on Education in Hong Kong*, pp. 21–23.
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Note 41 (page 506). *Annual Reports of the Hong Kong Education Department, passim.*
Note 42 (page 506). *HK Sess. Papers No.* 6 *of* 1931, pp. 199–205.
Note 43 (page 506). *Op. cit.*, pp. 216–224.
Note 44 (page 507). *Junior Technical School Hong Kong Prospectus* 1937, *passim.*
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Note 45 (page 507). *Op. cit.*, pp. 136–139.
Note 46 (page 509). *C.Reps. No.* 1914. *Annual Report on Hong Kong* 1938, pp. 114–116.
Sir Wm. Hornell, *Hong Kong University and the Boxer Indemnity*, in *The National Review*, July, 1929, pp. 765–774.
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Note 47 (page 510). *Op. cit., passim.*
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Note 48 (page 510). *HK Sess. Papers No.* 5 *of* 1931, p. 152.
Note 49 (page 511). *HK Sess. Papers No.* 5 *of* 1934, pp. 127–128.
Note 50 (page 511). *HK Sess. Papers No.* 1 *of* 1934, pp. 1–5.
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Note 51 (page 511). *Op. cit.*, pp. 127–128.
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Note 52 (page 512). *Op. cit.*, pp. 139–145.
Note 53 (page 512). *HK Hansard*, 13th May, 1936, p. 107.
Note 54 (page 513). *Annual Reports of the Botanical and Forestry Department, passim.*

APPENDIX

The Malayan statistical tables are compiled from the *Statistical Abstract for the British Empire for* 1928 *to* 1937, the *Annual Summaries of Monthly Returns of Foreign Imports, Exports and Shipping, Malayan Statistics, December*, 1938, *I and E3*, *Malayan Agricultural Statistics*, and the annual *Reports* of the Malay States and of the Departments of Mines and Forests. The imports and exports of Hong Kong are taken from the *Statistical Abstract* and *Colonial Reports No.* 1914 *Annual Report on Hong Kong*, 1938. In Table III on Malayan production the statistics for copra, coconut oil and tinned pineapples give the net export and not the total production. No figures exist for the quantity of fresh pineapples, coconuts and coconut oil consumed locally. It has been estimated that the number of coconuts eaten annually is equivalent to 57,000 tons of copra. The metal content of the tin ore is calculated at 72 per cent. up to 1932 and 75.5 per cent. since that date. The figures for smelted tin are the exports plus the difference between the "carry-over" at the end and the beginning of the year. The area under minor crops such as areca nuts and tea which are omitted from Table IV on utilization of land is 257,791 acres. Tables V to XII on rubber, tin, petroleum oils and rice illustrate the importance of the entrepôt trade of the Straits Settlements. The exports of rubber and tin are made up of the re-export of imports together with Malayan production; and the export of petroleum and rice is entirely a re-export trade. An interesting point in Table X is that the Netherlands East Indies receive part of their supplies of Dutch oil by trans-shipment from Singapore. Cotton piece goods, the statistics for which are given in Tables I and II, form another example of a commodity where exports are really re-exports. Iron ore and tinned pineapples (Table II) are two of the few instances where export represents Malayan production alone. Tables XIII to XV illustrate the effect of the textile quota of 1934 upon the import of cotton and artificial silk piece goods. The decline of imports from Japan in 1937 and especially 1938 shows the additional effect of the Chinese boycott. Tables XXVIII to XXX on the trade of Hong Kong show the influence of the entrepôt trade even more clearly than those in Malaya, since apart from a few items like wearing apparel there is no local production. The list of commodities exported is almost identical with those imported, and the difference in volume represents roughly the quantity retained for use in Hong Kong.

TABLE I

Malaya. Principal Imports

	1929.	*1930.*	*1931.*	*1932.*	*1933.*
Rubber (million lb.)	363	248	229	163	286
$000	81,617	42,171	18,994	9,788	21,053
Petroleum Oils (million gall.)	269·9	373·2	266·2	222·3	200·4
$000	98,734	149,537	102,608	83,322	63,314
Rice (Th. cwt.)	15,711	16,009	13,822	11,844	11,858
$000	95,460	87,668	48,454	39,634	33,846
Tin Ore and Concentrates (Tons)	48,785	46,680	43,568	28,455	23,142
$000	62,811	40,345	30,154	22,740	25,982
Cotton Piece Goods (million yd.)	166·5	118·0	99·9	150·0	145·9
$000	38,562	20,708	13,688	17,622	16,377
Tobacco Manufactured (Th. lb.)	19,779	16,743	11,497	8,022	8,765
$000	33,917	27,617	16,080	12,248	11,854
Copra (Th. tons)	86	90	87	100	100
$000	13,260	10,080	6,745	8,391	5,890
Iron and Steel ($000)	29,803	21,325	11,828	9,840	9,428
Machinery and Electrical Apparatus ($000)	28,585	18,762	11,768	7,508	7,340

	1934.	*1935.*	*1936.*	*1937.*	*1938.*
Rubber (million lb.)	474	391	376	478	350
$000	71,770	67,966	94,834	143,479	74,330
Petroleum Oils (million gall.)	239·6	258·2	269·5	346·4	319·7
$000	69,621	73,436	69,829	87,788	83,650
Rice (Th. cwt.)	12,384	13,117	14,313	14,232	16,401
$000	32,813	40,115	43,054	47,800	53,822
Tin Ore and Concentrates (tons)	21,970	22,032	26,938	31,169	27,765
$000	28,617	27,685	30,668	42,632	30,058
Cotton Piece Goods (million yd.)	144·5	103·6	114·4	141·8	115·0
$000	16,895	13,483	14,300	22,062	18,416
Tobacco Manufactured (Th. lb.)	11,115	11,814	13,135	15,533	14,428
$000	14,468	15,522	15,634	18,325	17,358
Copra (Th. tons)	95	106	120	125	118
$000	4,115	7,336	10,802	13,587	6,825
Iron and Steel ($000)	13,714	14,305	18,960	29,151	22,672
Machinery and Electrical Apparatus ($000)	8,974	12,437	15,334	24,000	27,388

TABLE II

Malaya. Principal Exports

	1929.	*1930.*	*1931.*	*1932.*	*1933.*
Rubber (million lb.)	5,130	1,224	1,164	1,071	1,284
$000	435,300	241,782	118,337	77,802	122,439
Smelted Tin (tons)	102,026	97,004	83,704	47,908	53,931
$000	182,125	123,771	83,477	55,688	88,716
Petroleum Oils (million gall.)	110·4	195·4	133·2	126·5	119·6
$000	51,908	100,860	66,728	59,460	43,830
Copra (Th. tons)	199	192	188	197	211
$000	32,922	26,245	16,405	19,148	14,880
Coconut Oil (tons)	8,731	9,503	10,178	12,404	18,654
$000	2,511	2,365	1,680	2,065	2,520
Rice (Th. cwt.)	4,678	4,174	3,508	3,664	3,195
$000	28,028	23,365	13,457	12,660	9,493
Tinned Pineapples (Th. cwt.)	1,174	1,159	1,189	1,326	1,192
$000	9,231	7,860	7,080	7,911	6,285
Iron Ore (Th. tons)	810	778	692	688	764
$000	4,054	3,900	3,317	3,300	3,548
Cotton Piece Goods (million yd.)	40·5	33·2	30·8	51·4	49·0
$000	9,437	6,394	4,628	5,760	4,982

	1934.	*1935.*	*1936.*	*1937.*	*1938.*
Rubber (million lb.)	1,514	1,322	1,165	1,527	1,180
$000	279,640	259,094	303,317	484,662	272,981
Smelted Tin (tons)	50,186	62,248	83,492	93,106	61,187
$000	96,724	117,291	141,353	189,769	96,339
Petroleum Oils (million gall.)	138·4	154·9	141·0	184·0	153·8
$000	46,243	52,287	43,934	55,906	56,656
Copra (Th. tons)	190	217	196	201	186
$000	9,980	16,856	19,037	22,794	12,494
Coconut Oil (Tons)	25,798	36,386	47,256	40,508	49,502
$000	2,357	4,920	7,825	7,791	5,647
Rice (Th. cwt.)	3,319	3,689	3,637	2,770	4,057
$000	8,610	11,061	10,846	9,589	13,389
Tinned Pineapples (Th. cwt.)	1,333	1,478	1,528	1,610	1,463
$000	7,027	8,331	8,687	8,826	7,263
Iron Ore (Th. tons)	1,090	1,407	1,612	1,539	1,532
$000	4,765	5,940	6,308	7,122	7,357
Cotton Piece Goods (million yd.)	50·4	43·2	37·0	34·0	26·4
$000	5,167	4,331	3,630	4,220	3,385

TABLE III

MALAYA. ANNUAL PRODUCTION OF PRINCIPAL COMMODITIES

	1929.	*1930.*	*1931.*	*1932.*	*1933.*	*1934.*	*1935.*	*1936.*	*1937.*	*1938.*
Rice (Th. tons) . . .	189·5	160·3	264·2	295·9	299·9	337·1	331·2	342·1	319·2	299·2
Rubber (million lb.) . .	959·0	974·5	974·1	934·4	1,030·0	1,073·8	844·5	814·7	1,123·8	808·4
Copra (Th. tons) . . .	112·4	102·0	100·6	97·3	110·3	95·6	111·8	76·7	75·6	68·8
Coconut Oil (Th. tons) . .	8·7	9·5	9·9	11·9	17·6	25·5	35·9	46·5	39·8	49·1
Tinned Pineapples (Th. tons) .	58·7	58·0	59·5	66·3	59·6	66·6	73·9	76·4	80·5	73·2
Palm Oil (Th. tons) . .	1·8	3·3	5·1	8·4	13·0	17·5	23·1	31·9	45·7	51·1
Tin Ore (Metal Content) (Th. tons)	69·4	64·0	54·9	29·7	24·9	37·7	42·3	66·8	77·5	43·2
Smelted Tin (Th. tons) . .	105·5	97·0	87·5	49·9	46·9	49·6	60·5	84·6	95·4	63·7
Iron Ore (Th. tons) . .	810·0	790·2	692·0	688·2	766·5	1,135·6	1,411·6	1,654·6	1,660·3	1,580·9

TABLE IV

Malaya. Utilization of Land

	1929.	*1930.*	*1931.*	*1932.*	*1933.*	*1934.*	*1935.*	*1936.*	*1937.*	*1938.*
Rubber (1,000 acres) . .	2,896·0	3,010·0	3,073·6	3,132·7	3,145·7	3,284·2	3,181·0	3,222·6	3,287·2	3,302·2
Rice (1,000 acres) . . .	687·1	657·2	707·7	725·0	766·9	765·2	734·7	725·0	740·0	726·2
Coconuts (1,000 acres) . .	530·0	599·7	600·0	600·7	636·9	610·7	601·0	608·8	609·4	612·2
Oil Palms (1,000 acres) . .	31·6	50·7	57·2	61·1	63·6	64·6	64·5	65·2	68·9	72·7
Pineapples (1,000 acres) . .	50·0	54·3	51·3	60·8	64·6	54·6	58·9	75·2	75·3	67·0
Mines (1,000 acres) . .	226·2	227·8	222·5	219·0	221·6	225·0	230·1	231·6	235·8	245·3
Forest Reserves (sq. miles) .	7,483	8,156	8,205	9,550	9,881	10,064	10,030	9,750	9,930	9,826

The total area of Malaya is 51,070 square miles, and at the end of 1936 9,750·1 square miles were reserved forest land, 259,766 acres had been alienated for mining, and 5,952,021 acres for buildings and agriculture. The acreages of the major crops are given in the table. An additional 257,791 acres were under cultivation for a wide variety of minor crops of which the principal were areca nuts and other spices, coffee, tapioca, and various fruits and vegetables

TABLE V

MALAYA. IMPORTS OF RUBBER

Origin.	*1933.*		*1934.*		*1935.*	
	Tons	$000	Tons	$000	Tons	$000
Netherlands East Indies	100,663	15,623	164,083	53,295	115,913	44,618
Sarawak & British North Borneo	14,,122	2,968	22,769	9,182	24,703	10,154
Siam	6,972	1,269	17,714	6,562	28,051	10,669
Indo-China	2,608	502	1,844	663	1,753	685
Burma	2,653	509	3,741	1,537	2,936	1,293
Other Countries	696	182	1,292	531	1,296	547
Total	127,714	21,053	211,443	71,770	174,652	67,966

Origin.	*1936.*		*1937.*		*1938.*	
	Tons	$000	Tons	$000	Tons	$000
Netherlands East Indies	101,787	58,724	138,983	93,035	80,248	38,412
Sarawak & British North Borneo	25,033	14,323	31,364	21,815	21,902	10,537
Siam	32,941	17,199	32,856	21,782	40,017	18,386
Indo-China	2,948	1,633	4,379	2,750	8,875	4,522
Burma	3,850	2,231	4,350	3,083	3,786	1,836
Other Countries	1,240	724	1,514	1,014	1,273	638
Total	167,799	94,834	213,446	143,479	156,101	74,330

TABLE VI

MALAYA. EXPORTS OF RUBBER

Destination.	*1933.*		*1934.*		*1935*	
	Tons	$000	Tons	$000	Tons	$000
United Kingdom	74,717	15,630	137,752	62,057	114,838	1,935
United States	316,693	67,817	338,750	132,975	308,383	133,476
Continent of Europe	115,394	25,001	120,970	50,763	91,455	40,815
British Empire	9,813	2,002	19,027	8,546	25,825	11,232
Japan	49,990	10,511	52,044	21,591	42,920	18,609
Other Countries	6,805	1,478	8,665	3,708	6,898	3,027
Total	573,412	122,439	677,208	279,640	590,319	259,094

Destination.	*1936.*		*1937.*		*1938.*	
	Tons	$000	Tons	$000	Tons	$000
United Kingdom.	44,625	25,701	81,552	57,828	99,219	50,736
United States .	328,123	192,198	369,902	258,874	214,651	111,477
Continent of Europe . .	68,066	39,964	143,079	103,939	133,233	69,039
British Empire .	32,396	18,870	42,953	30,679	36,708	19,113
Japan . .	39,107	23,989	34,303	26,173	33,764	17,640
Other Countries .	7,825	2,595	9,849	7,169	9,336	4,975
Total . .	520,142	303,317	681,638	484,662	526,911	272,980

TABLE VII

MALAYA. IMPORTS OF TIN ORE

Origin.	*1933.*		*1934.*		*1935.*	
	Tons	$000	Tons	$000	Tons	$000
Burma . . .	2,845	3,408	3,415	4,516	4,121	5,252
Netherlands East Indies . . .	2,112	2,153	32	42	51	69
Indo-China . .	1,811	1,635	1,951	1,858	2,433	2,414
Japan . . .	790	903	881	1,179	280	361
Siam . . .	14,306	16,598	14,454	19,496	13,595	17,655
Union of South Africa	1,148	1,134	993	1,207	997	1,237
China . . .	—	—	—	—	48	50
Other Countries .	130	151	244	319	507	647
Total . .	23,142	25,982	21,970	28,617	22,032	27,685

Origin.	*1936.*		*1937.*		*1938.*	
	Tons	$000	Tons	$000	Tons	$000
Burma . . .	4,213	4,899	4,304	5,972	4,444	5,008
Netherlands East Indies . . .	58	69	28	36	28	29
Indo-China . .	2,373	2,098	2,443	2,861	2,592	2,379
Japan . . .	692	691	940	1,074	836	760
Siam . . .	17,627	20,720	22,295	31,137	18,930	20,870
Union of South Africa	1,228	1,319	653	833	277	306
China . . .	210	239	267	373	607	650
Other Countries .	537	633	239	346	51	56
Total . .	26,938	30,668	31,169	42,632	27,765	30,058

TABLE VIII

MALAYA. EXPORTS OF TIN

Destination.	*1933.*		*1934.*		*1935.*	
	Tons	$000	Tons	$000	Tons	$000
United Kingdom	2,655	4,162	4,703	9,034	4,080	7,641
United States	31,132	51,403	26,683	51,410	40,408	76,128
Continent of Europe	15,371	25,291	12,646	24,380	10,191	19,292
British Empire	2,557	4,258	3,036	5,884	4,759	8,954
Japan	1,868	3,019	2,780	5,368	2,500	4,692
Other Countries	348	583	338	648	310	587
Total	53,931	88,716	50,186	96,724	62,248	117,291

Destination.	*1936.*		*1937.*		*1938.*	
	Tons	$000	Tons	$000	Tons	$000
United Kingdom	5,589	9,583	7,319	14,912	4,230	6,462
United States	59,106	99,922	64,462	131,760	33,652	52,599
Continent of Europe	10,703	18,165	10,475	21,227	9,412	14,777
British Empire	4,524	7,688	5,254	10,571	4,696	7,415
Japan	3,179	5,325	5,192	10,490	8,543	14,031
Other Countries	391	670	404	809	654	1,055
Total	83,492	141,353	93,106	189,769	61,187	96,339

TABLE IX

MALAYA. IMPORTS OF PETROLEUM OILS (FUELS AND LUBRICATING OILS, KEROSENE AND MOTOR SPIRIT)

Origin.	*1933.* Tons	*1934.* Tons	*1935.* Tons	*1936.* Tons	*1937.* Tons	*1938.* Tons
Netherlands East Indies	625,833	780,046	786,714	818,032	1,030,479	1,012,619
Sarawak	77,720	43,386	73,979	99,322	173,161	165,064
Iran	11,073	26,020	58,426	70,412	51,996	24,053
United States	4,569	5,032	4,419	4,431	18,802	25,791
Other Countries	2,526	1,242	2,299	2,165	2,961	28,303
Total	721,721	855,726	925,837	994,362	1,277,397	1,255,832

TABLE X

MALAYA. EXPORTS OF PETROLEUM OILS

Destination	*1933.* Tons	*1934.* Tons	*1935.* Tons	*1936.* Tons	*1937.* Tons	*1938.* Tons
Australia	110,849	134,317	153,725	149,721	191,637	220,991
Japan	130,126	137,415	158,834	60,545	92,830	119,840
Siam	53,365	51,167	50,222	56,469	54,535	53,379
Netherlands East Indies	36,091	46,687	58,171	48,179	39,291	52,823
Union of South Africa	175	4,881	32,672	12,787	42,916	30,415
China	24,423	21,180	2,351	5,970	15,929	7,229
Other British Empire	34,536	49,409	43,325	134,026	127,865	179,284
Other Countries	20,961	27,081	29,217	31,184	85,321	109,859
Total	410,576	472,138	528,518	498,882	650,325	764,482

TABLE XI

MALAYA. IMPORTS OF RICE

Origin.	*1933.* Tons	*1934.* Tons	*1935.* Tons	*1936.* Tons	*1937.* Tons	*1938.* Tons
Siam	348,621	420,419	398,027	479,353	394,279	529,390
Burma	220,093	175,364	211,128	199,952	275,591	251,278
Indo-China	15,448	16,999	39,405	28,365	30,999	21,568
India	6,580	6,195	7,114	7,732	9,851	12,479
Other Countries	2,170	222	171	226	861	204
Total	592,912	619,199	655,845	715,628	711,582	814,870

TABLE XII

MALAYA. EXPORTS OF RICE

Destination.	*1933.* Tons	*1934.* Tons	*1935.* Tons	*1936.* Tons	*1937.* Tons	*1938.* Tons
Netherlands East Indies	126,656	114,684	133,107	130,503	91,998	159,029
Sarawak	16,054	23,897	31,626	35,958	32,348	30,430
Other British Empire	15,653	25,670	18,547	14,017	12,619	11,648
Other Countries	1,383	1,717	1,183	1,357	1,553	1,368
Total	159,746	165,968	184,463	181,835	138,520	202,475

TABLE XIII

MALAYA. IMPORTS OF COTTON PIECE GOODS

Origin.	*1933.*		*1934.*		*1935.*	
	yd. 000	$000	yd. 000	$000	yd. 000	$000
United Kingdom	25,877	4,941	29,006	5,388	33,363	6,251
India . .	851	188	920	205	4,154	592
Hong Kong .	1,512	200	1,562	228	900	173
Japan . .	99,466	8,918	99,239	9,512	53,758	5,076
China . .	12,032	1,408	9,503	980	7,533	744
Other Countries .	6,125	721	4,173	582	3,940	640
Total .	145,903	16,377	144,403	16,895	103,648	13,483

Origin.	*1936.*		*1937.*		*1938.*	
	yd. 000	$000	yd. 000	$000	yd. 000	$000
United Kingdom	38,075	6,718	53,253	10,934	46,597	10,092
India . .	6,143	767	19,010	2,466	20,955	2,760
Hong Kong .	3,423	420	4,657	696	6,894	1,003
Japan . .	53,032	4,871	51,113	5,943	26,408	2,485
China . .	10,609	952	10,112	1,123	8,077	925
Other Countries .	3,128	572	3,657	900	6,063	1,151
Total . .	114,410	14,300	141,802	22,062	114,994	18,416

TABLE XIV

MALAYA. IMPORTS OF COTTON SARONGS

Origin.	*1933.*		*1934.*		*1935.*	
	1,000 pieces	$000	yd. 000	$000	yd. 000	$000
United Kingdom .	59	40	26	22	370	51
India . . .	1,279	1,232	1,216	1,117	4,015	1,160
Netherlands East Indies . .	1,805	1,117	1,688	1,258	2,816	1,240
Japan . . .	5,751	2,089	3,039	1,163	3,591	411
Other Countries .	1,024	789	640	459	1,786	483
Total . .	9,918	5,267	6,609	4,019	12,578	3,345

Origin.	*1936.*		*1937.*		*1938.*	
	yd. 000	$000	yd. 000	$000	yd. 000	$000
United Kingdom .	390	66	1,017	184	261	60
India . . .	6,363	1,417	6,579	1,793	2,762	1,176
Netherlands East Indies . .	2,893	1,306	2,979	1,504	2,745	1,325
Japan . . .	2,637	270	2,647	314	737	81
Other Countries .	2,790	526	1,942	516	1,098	413
Total . .	15,073	3,585	15,164	4,311	7,603	3,055

TABLE XV

MALAYA. IMPORTS OF ARTIFICIAL SILK PIECE GOODS

Origin.	*1933.*		*1934.*		*1935.*	
	yd. 000	$000	yd. 000	$000	yd. 000	$000
United Kingdom	400	175	405	159	195	100
India	not available		2	1	70	16
Hong Kong	not available		163	56	21	5
Japan	15,813	1,985	13,538	1,940	7,635	1,149
China	721	295	609	269	459	161
Other Countries	50	31	29	34	107	116
Total	16,984	2,486	14,746	2,459	8,487	1,547

Origin.	*1936.*		*1937.*		*1938.*	
	yd. 000	$000	yd. 000	$000	yd. 000	$000
United Kingdom	187	113	668	315	578	297
India	209	46	372	88	330	76
Hong Kong	2	(a)	655	159	734	177
Japan	11,625	1,824	15,104	2,253	11,621	1,525
China	977	255	946	269	689	210
Other Countries	189	121	575	258	776	350
Total	13,189	2,359	18,320	3,342	14,728	2,635

(a) $206

TABLE XVI

MALAYA. IMPORTS FROM THE UNITED KINGDOM

Values in $000

	1933.	*1934.*	*1935.*
Cigarettes	10,691	12,816	14,027
Foodstuffs and Drink	5,364	7,998	9,536
Iron and Steel	5,717	6,739	6,394
Machinery	2,255	4,090	5,764
Cutlery, Tools, and Hardware	767	1,061	1,278
Electrical Goods	1,143	1,927	2,266
Cotton Yarns and Manufactures	6,297	6,811	7,571
Motor and Other Vehicles	2,805	7,228	8,348
Chemicals, Drugs, and Dyes	2,421	2,885	3,144
Total	50,672	67,067	75,118

	1936.	1937.	1938.
Cigarettes	14,296	16,847	16,094
Foodstuffs and Drink	9,582	12,085	12,114
Iron and Steel	8,105	11,036	10,610
Machinery	7,344	11,491	13,860
Cutlery, Tools, and Hardware	1,521	1,819	1,356
Electrical Goods	2,577	3,697	3,984
Cotton Yarns and Manufactures	8,040	12,503	11,700
Motor and Other Vehicles	7,086	11,130	8,886
Chemicals, Drugs, and Dyes	3,075	3,965	3,889
Total	76,276	105,959	101,979

TABLE XVII

MALAYA. EXPORTS TO THE UNITED KINGDOM

Values in $000

	1933.	1934.	1935.	1936.	1937.	1938.
Rubber	15,630	62,057	51,935	25,701	57,828	50,736
Tin	4,162	9,034	7,641	9,583	14,912	6,462
Copra and Vegetable Oils	4,122	3,882	9,865	7,814	10,140	8,066
Foodstuffs	9,114	14,600	15,882	8,880	10,031	7,412
Total	35,314	91,639	87,714	53,943	98,523	81,054

TABLE XVIII

MALAYA. IMPORTS FROM THE BRITISH EMPIRE

Values in $000

	1933.	1934.	1935.	1936.	1937.	1938.
Foodstuffs, Drink, and Tobacco	27,591	28,072	31,649	31,434	43,859	41,070
Petroleum and Other Oils	7,729	4,271	7,726	8,289	11,026	11,884
Cotton Yarn and Manufactures	1,913	1,900	2,224	2,968	5,672	6,763
Other Textiles	5,002	3,881	4,714	3,201	3,678	2,269
Apparel	944	1,149	789	1,058	1,409	1,367
Motor Vehicles	569	1,466	2,714	2,092	4,026	3,528
Total	62,214	69,781	79,905	82,803	117,615	98,844

TABLE XIX

MALAYA. EXPORTS TO THE BRITISH EMPIRE

Values in $000

	1933.	1934.	1935.	1936.	1937.	1938.
Foodstuffs, Drink, and Tobacco	14,499	17,847	22,024	22,353	27,171	24,919
Petroleum and Other Oils	19,219	21,746	23,956	28,116	33,314	31,049
Rubber	2,002	8,546	11,232	18,870	30,679	19,113
Tin	4,258	5,884	8,954	7,688	10,571	7,415
Copra and Vegetable Oils	2,263	4,572	6,725	8,453	7,440	6,484
Cotton Yarn and Manufactures	1,104	1,356	1,104	1,264	1,651	1,237
Total	50,189	66,792	81,187	93,556	119,747	98,513

TABLE XX

MALAYA. IMPORTS FROM THE UNITED STATES

Values in $000

	1933.	1934.	1935.	1936.	1937.	1938.
Iron and Steel	235	635	581	1,377	1,825	1,910
Electrical Goods	532	1,014	1,344	966	1,482	1,039
Machinery	216	675	1,122	943	2,176	3,539
Lubricating and Other Oils	887	969	342	836	2,620	3,084
Motor Vehicles	336	1,085	921	817	1,665	1,231
Total	5,568	8,257	9,120	9,361	15,908	17,125

TABLE XXI

MALAYA. EXPORTS TO THE UNITED STATES

Values in $000

	1933.	1934.	1935.	1936.	1937.	1938.
Rubber	67,817	132,975	133,476	192,198	258,874	111,477
Tin	51,403	51,410	76,128	99,922	131,760	52,599
Copra and Vegetable Oils	2,178	765	834	966	1,403	593
Total	125,268	188,552	213,592	295,609	398,849	171,000

TABLE XXII

MALAYA. IMPORTS FROM JAPAN

Values in $000

	1933.	1934.	1935.	1936.	1937.	1938.
Foodstuffs and Drink	1,597	4,105	4,254	4,094	4,383	929
Iron and Steel	865	2,146	2,116	2,963	3,361	305
Cotton Yarn and Manufactures	11,541	11,494	6,404	6,100	7,416	2,788
Silk Goods	950	1,987	2,552	2,167	3,492	1,022
Other Textiles	2,191	2,497	1,341	2,137	2,964	1,677
Apparel	1,058	2,085	1,964	2,458	2,951	825
Vehicles	1,184	1,881	1,761	999	1,564	322
Rubber Manufactures	682	1,315	1,169	1,114	1,391	120
Total	26,590	37,502	30,405	32,542	40,482	12,426

TABLE XXIII

MALAYA. EXPORTS TO JAPAN

Values in $000

	1933.	1934.	1935.	1936.	1937.	1938.
Rubber	10,511	21,591	18,609	23,989	26,173	17,640
Petroleum and Other Oils	16,171	16,232	18,515	7,370	11,303	12,020
Tin	3,019	5,368	4,692	5,325	10,490	14,031
Iron Ore	3,686	4,896	6,080	6,511	7,874	7,352
Total	36,684	51,388	52,689	48,293	60,712	53,887

TABLE XXIV

MALAYA. IMPORTS FROM NETHERLANDS EAST INDIES

Values in $000

	1933.	1934.	1935.	1936.	1937.	1938.
Rubber	15,623	53,295	44,618	58,724	93,035	38,412
Petroleum and Other Oils	55,795	63,477	61,670	56,475	71,987	64,818
Tin Ore	2,153	42	69	69	36	29
Copra	5,164	3,681	6,372	9,450	12,031	6,117
Foodstuffs, Drink, and Tobacco	21,503	28,906	23,148	23,876	27,036	24,387
Cotton Manufactures	1,122	1,266	1,292	1,347	1,504	1,326
Total	110,415	159,662	147,829	161,219	220,054	147,821

TABLE XXV

MALAYA. EXPORTS TO NETHERLANDS EAST INDIES

Values in $000

	1933.	*1934.*	*1935.*	*1936.*	*1937.*	*1938.*
Foodstuffs, Drink, and Tobacco	19,055	17,208	18,204	18,671	17,874	21,583
Petroleum and Other Oils	3,383	2,707	5,506	4,168	2,771	4,263
Motor and Other Vehicles	1,153	1,281	1,729	2,063	2,886	3,217
Cotton Yarn and Manufactures	3,416	6,891	1,923	1,559	1,617	904
Other Textiles	686	755	907	1,343	1,363	868
Chemicals, Drugs, and Dyes	992	860	827	882	1,171	1,147
Total	33,889	30,228	33,502	32,951	34,757	36,858

TABLE XXVI

MALAYA. IMPORTS FROM THE CONTINENT OF EUROPE

Values in $000

	1933.	*1934.*	*1935.*	*1936.*	*1937.*	*1938.*
Iron and Steel	2,311	3,832	4,894	6,029	11,939	9,086
Machinery	488	453	769	1,792	2,821	2,749
Cutlery, Tools, and Hardware	549	678	662	749	1,185	1,013
Motor and Other Vehicles	404	805	1,110	1,097	2,024	1,288
Chemicals, Drugs, and Dyes	1,849	1,624	1,463	1,368	2,003	2,100
Cotton Yarn and Manufactures	883	776	836	640	1,012	1,286
Total	16,745	19,919	22,532	23,941	39,133	35,690

TABLE XXVII

MALAYA. EXPORTS TO THE CONTINENT OF EUROPE

Values in $000

	1933.	*1934.*	*1935.*	*1936.*	*1937.*	*1938.*
Rubber	25,001	50,763	40,815	39,964	103,939	69,039
Tin	25,291	24,380	19,292	18,165	21,227	14,777
Copra and Vegetable Oils	10,279	7,344	8,783	13,658	17,638	9,932
Total	65,092	87,838	74,422	76,238	147,413	96,470

TABLE XXVIII

HONG KONG. PRINCIPAL IMPORTS

		1931.	*1932.*	*1933.*	*1934.*	*1935.*	*1936.*	*1937.*	*1938.*
Rice	(Th. cwt.)	13,733	17,253	18,068	13,259	9,808	8,486	8,803	10,214
	£000	4,097	5,885	4,941	3,173	3,036	2,383	3,168	3,374
Cotton Yarn	(Th. lb.)	39,237	53,342	47,474	49,222	41,401	33,080	36,081	48,036
	£000	1,487	2,200	1,561	1,697	1,620	1,168	1,518	1,922
Cotton Piece Goods Coloured	(Th. yd.)	119,448	90,042	58,370	50,106	66,105	89,950	64,922	53,315
	£000	1,918	1,678	892	661	900	872	881	814
Cotton Piece Goods Bleached and Unbleached	(1000 pieces)	1,367	1,321	1,354	1,274	1,458	1,398	1,062	1,085
	£000	727	740	687	610	771	614	606	636
Petroleum Oils	(Th. gall.)	80,309	77,479	76,175	79,839	78,024	74,339	81,623	88,386
	£000	1,999	2,556	1,560	1,643	1,953	1,351	2,100	1,960
Drugs, Chemicals, and Medicines	(£000)	1,961	1,710	1,662	1,702	1,722	1,630	1,987	1,788
Iron and Steel	(£000)	1,268	1,561	1,291	1,067	1,294	1,020	1,981	2,981
Tin Slabs and Ingots	(tons)	7,969	7,308	7,826	7,111	8,855	9,032	8,535	6,737
	£000	897	884	1,210	1,308	1,809	1,393	1,696	1,205

TABLE XXIX

Hong Kong. Principal Exports

		1931.	*1932.*	*1933.*	*1934.*	*1935.*	*1936.*	*1937.*	*1938.*
Rice	(Th. cwt.)	10,370	14,860	15,901	9,848	6,869	4,894	5,248	6,449
	£000	3,173	5,213	4,606	2,382	2,136	1,353	1,989	2,257
Cotton Yarn	(Th. lb.)	34,131	43,775	43,775	45,775	36,622	25,179	25,438	35,394
	£000	939	1,530	1,368	1,482	1,359	762	900	1,312
Cotton Piece Goods Coloured	(Th. yd.)	90,369	67,790	50,376	43,054	47,175	83,519	61,663	62,165
	£000	1,436	1,265	835	655	692	833	859	924
Cotton Piece Goods Bleached and Unbleached	(1,000 pieces)	1,029	746	845	853	1,045	764	539	447
	£000	477	444	457	431	580	336	289	287
Apparel	($000)	743	865	588	649	617	805	1,227	1,277
Petroleum Oils	(Th. gall.)	46,360	43,387	39,346	37,892	37,090	37,767	46,344	45,744
	£000	1,478	1,612	1,109	910	1,066	986	1,741	1,641
Drugs, Chemicals, and Medicines	(£000)	1,111	1,177	1,085	1,140	1,298	1,091	1,460	1,536
Tin Slabs and Ingots	(tons)	6,925	7,485	7,878	7,250	8,668	8,737	7,191	6,328
	£000	775	984	1,367	1,518	1,862	1,569	1,415	1,014

TABLE XXX

HONG KONG. IMPORTS AND EXPORTS BY COUNTRIES.

Values in £000

	United Kingdom.		*India.*		*Malaya.*		*Other British Countries.*		*China.*		*Kwong Chow Wan.*	
	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
1931	4,096	275	1,234	557	795	1,825	938	655	10,492	15,422	519	982
1932	5,087	229	1,581	666	603	1,568	1,570	591	11,245	18,509	552	892
1933	3,519	312	1,532	484	404	1,453	1,176	541	10,468	15,311	489	672
1934	2,449	479	684	449	414	1,877	1,081	676	11,206	11,759	439	603
1935	2,340	739	500	475	609	1,675	1,533	808	12,075	13,004	386	914
1936	1,836	841	399	465	465	1,644	1,029	961	9,621	9,476	382	670
1937	2,884	1,288	1,211	545	563	2,482	1,492	1,385	13,042	11,751	465	601
1938*	3,489	1,312	726	507	459	2,280	1,902	1,062	14,414	14,279	—	602

	Macao.		*Japan.*		*United States.*		*Netherlands East Indies*		*Siam.*		*Indo-China.*		*Other Foreign Countries.*	
	Impts.	Expts.	Impts.	Expts.	Impts.	Expts.	Impts.	Expts.	Impts.	Expts.	Impts.	Expts.	Impts.	Expts.
1931	547	1,343	3,575	1,441	2,994	1,056	4,185	745	2,500	1,213	2,653	1,777	4,124	1,130
1932	588	1,484	1,408	892	3,051	1,212	4,076	714	3,829	1,095	3,484	1,978	4,210	1,400
1933	534	1,442	1,706	869	2,105	1,301	2,623	646	3,385	982	2,858	1,637	2,990	1,554
1934	600	1,307	2,760	861	2,208	1,398	2,610	640	2,518	1,108	1,975	1,814	2,539	1,516
1935	586	1,302	4,223	1,125	2,591	2,080	2,211	606	2,011	1,025	3,189	1,418	3,485	1,381
1936	414	823	3,673	1,136	2,036	1,799	2,426	616	1,885	925	1,630	1,100	2,830	1,770
1937	682	1,055	3,582	1,221	3,196	2,538	2,896	961	1,398	883	2,517	1,481	4,157	2,685
1938*	—	1,298	1,147	190	3,364	3,229	2,523	886	2,256	981	2,141	1,425	5,812	3,610

* The figures for 1938 are approximately accurate and are compiled from the tables of the percentages of Hong Kong's import and export trade with the above countries on pp. 72 and 73 of *Colonial Reports No.* 1914, *Annual Report on Hong Kong*, 1938. Percentages are given for Hong Kong's exports to Macao and Kwong Chow Wan, but the imports from them are included under the heading " Other Foreign Countries ".

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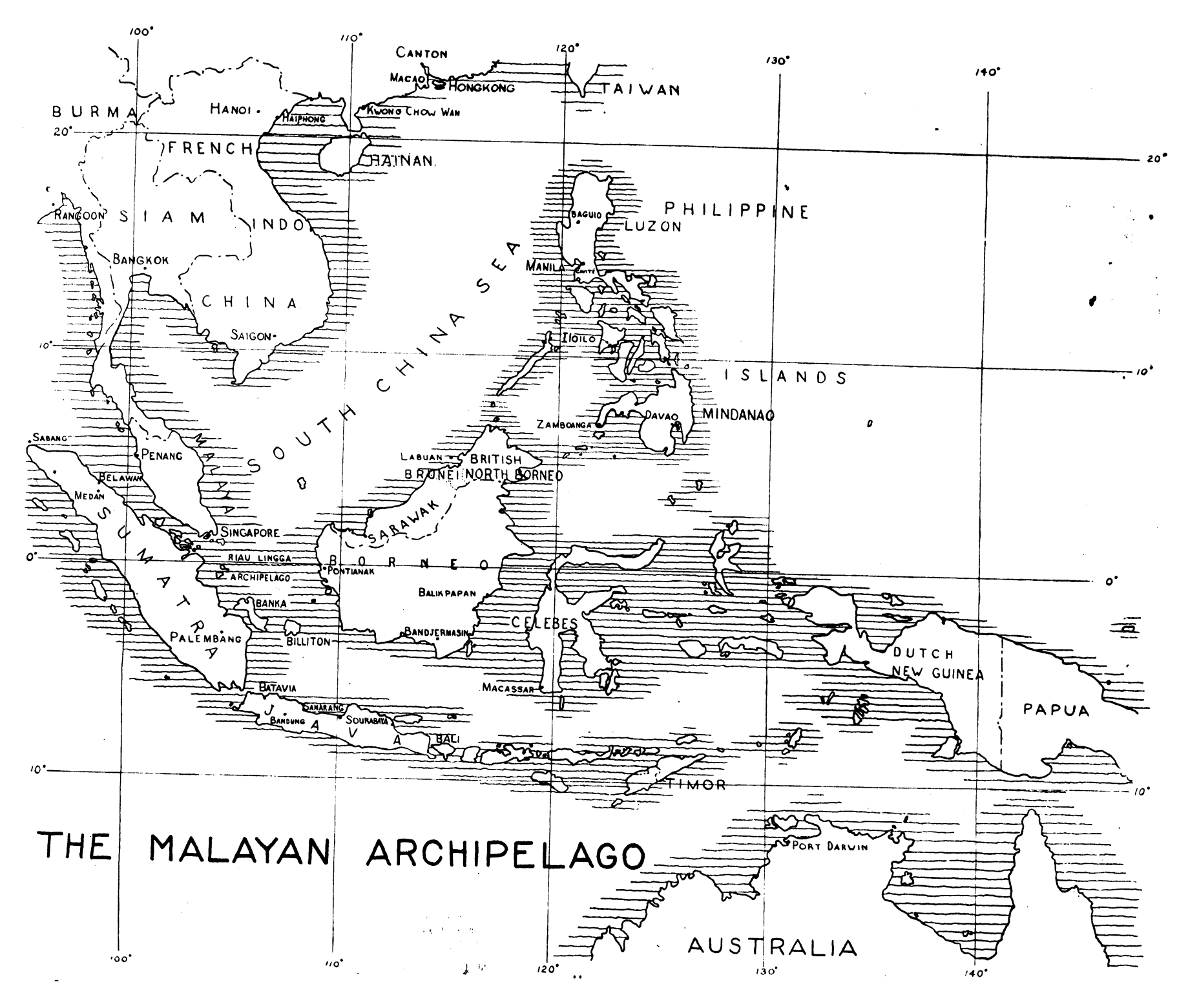
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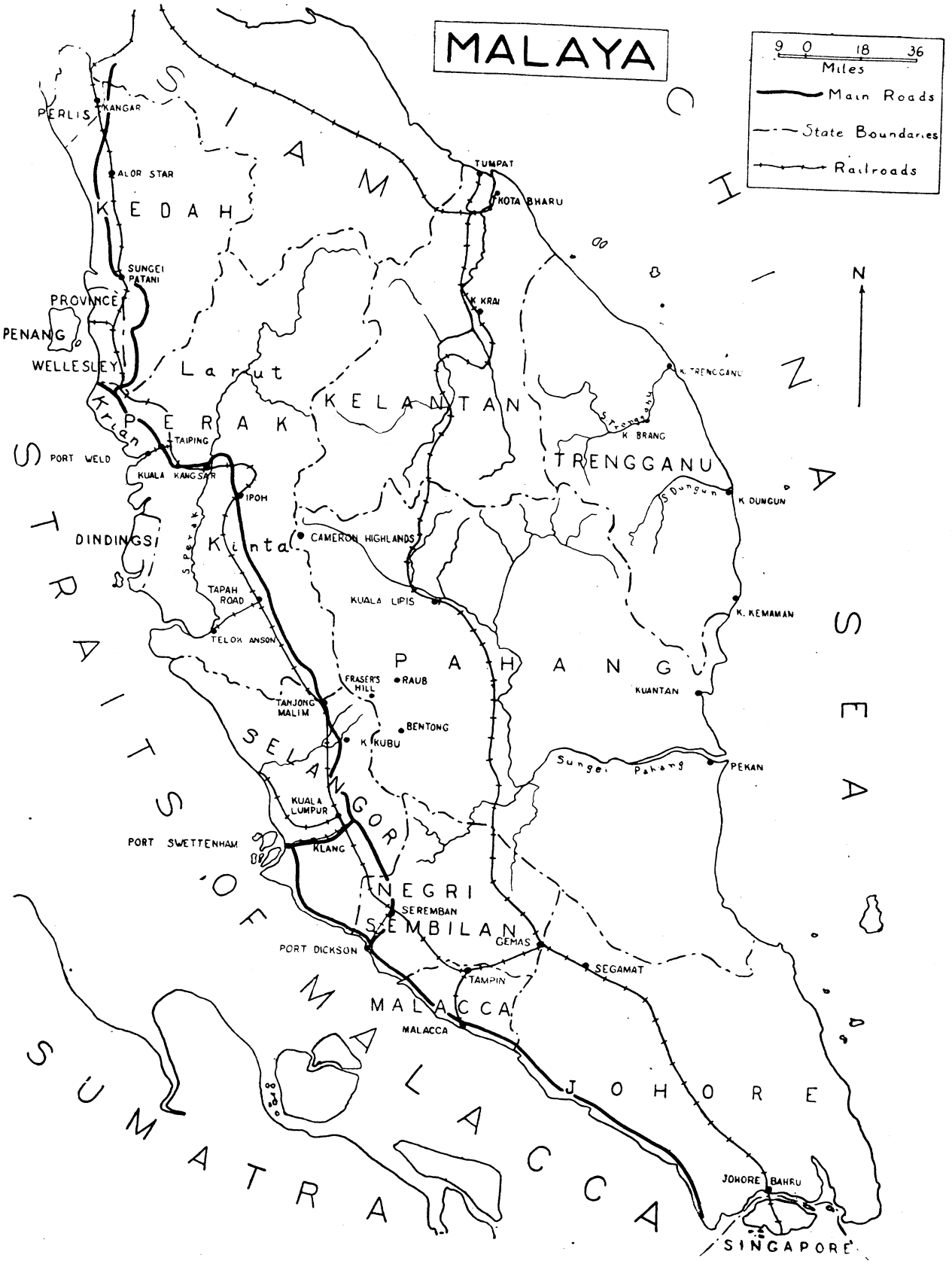
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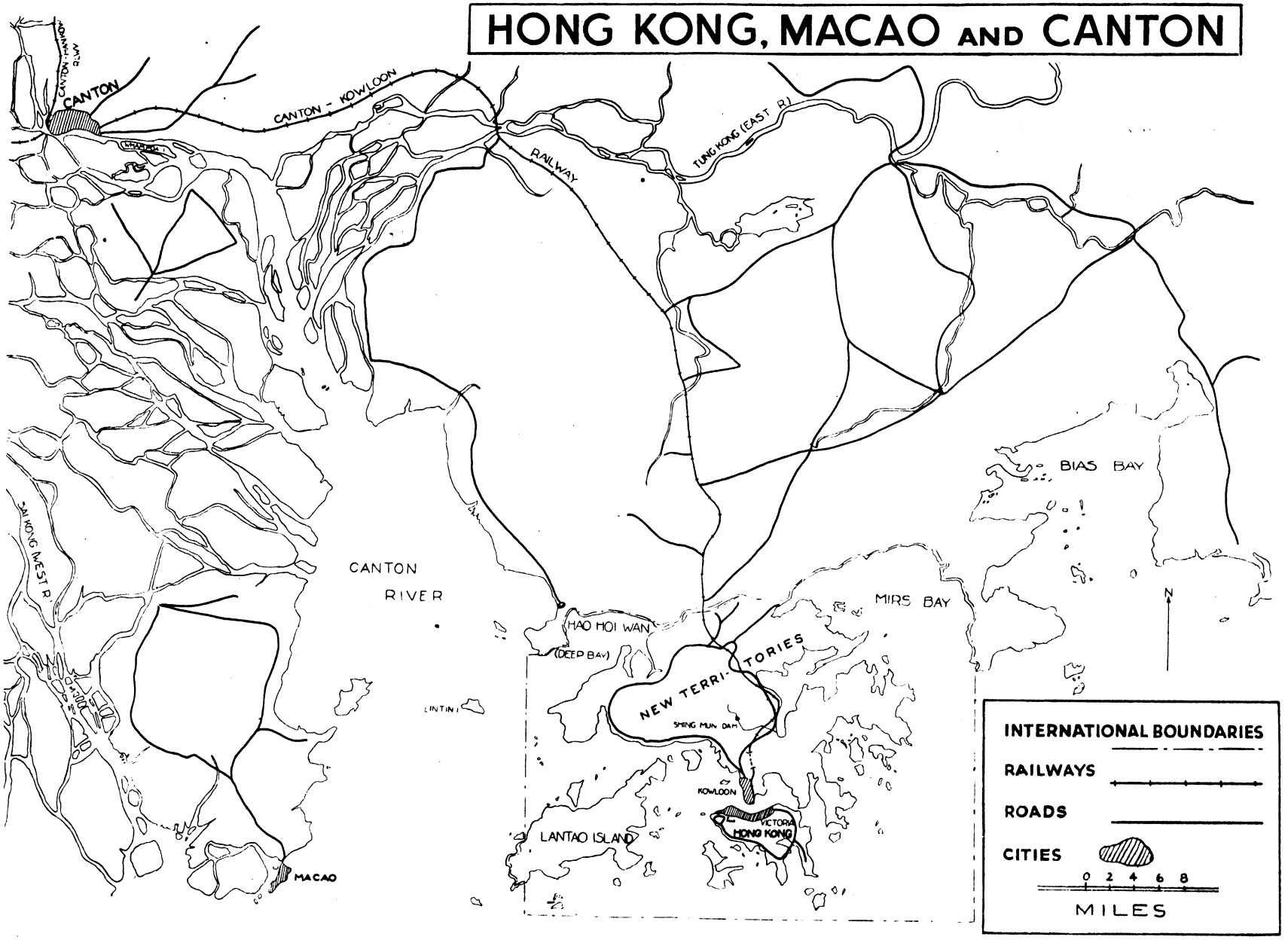
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