

**ECONOMIC  
AND  
SOCIAL COUNCIL**

**CONSEIL  
ECONOMIQUE  
ET SOCIAL**

RESTRICTED

E/CN.1/Sub.1/

2/W.3

31 January 1947

ORIGINAL: ENGLISH

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RECONSTRUCTION OF DEVASTATED AREAS  
WORKING GROUP FOR ASIA AND THE FAR EAST

Background material prepared in the United Nations Secretariat for submission to the Working Group for Asia and the Far East of the Temporary Sub-Commission for Economic Reconstruction of Devastated Areas at its meeting at Lake Success on 14 February 1947.

PART II

COUNTRY STUDIES

C. & D. MALAYAN UNION : SINGAPORE

MALAYAN UNION: SINGAPORE

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MALAYAN UNION: SINGAPORE

I. IMPACT OF WAR AND EXTENT OF RECOVERY

1. Introduction

The total area of the Malayan Union\* comprising Perak, Selangor, Negri Sembilan, and Pahang (these four States known hitherto as the Federated Malay States), Kedah, Perlis, Kelantan, Trengganu, and Johore (hitherto known as the Unfederated Malay States) and Penang (including Province Wellesley), and Malacca (hitherto part of the Straits Settlements) is 50,660 square miles, and that of Singapore 220 square miles\*\*.

'Malaya' is the term in common use to describe the Malayan Union and Singapore together\*\*\*.

The population has grown greatly in the last few decades, the Chinese outnumbering the Malays for the first time in 1941.

Population of Malaya (including Malayan Union and Singapore)

Racial Division	Population (thousands)				Percentage of total		
	1911	1921	1931	1941	1921	1931	1941
Europeans (a)	11.1	15.0	17.8	31.4	0.4	0.4	0.6
Eurasians	10.9	12.6	16.0	19.3	0.4	0.4	0.4
Malays (b)	1437.7	1651.0	1962.0	2278.6	49.2	44.7	41.0
Chinese	916.6	1174.8	1709.4	2379.2	35.0	39.0	43.0
Indians	267.2	471.7	624.0	744.2	14.0	14.2	14.0
Others	29.3	33.0	56.1	58.4	1.0	1.3	1.0
<b>TOTAL</b>	<b>2672.8</b>	<b>3358.1</b>	<b>4385.3</b>	<b>5511.1</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Including all white races

(b) Including other indigenous races of the Malay Peninsula and Archipelago.

The 1941 figures are an estimate based on the formula : Census + Births - Deaths + Migration Surplus.

\* The Malayan Union was created on 1 April 1946. A "Federation of Malaya" to replace the Malayan Union was forecast in a British Government announcement of 23 December 1946.

\*\* Christmas Island in the Indian Ocean (63 square miles) is administratively part of Singapore.

\*\*\* The Malayan Union and Singapore are politically quite separate but because the pre-war figures relate to Malaya as a whole it has been found convenient in most cases to treat them as one.

The population is densest in the more developed strip of territory along the western sea-board and in Kelantan and northern Trengganu where the Malays predominate.

The Chinese population has in the past been largely migrant but in recent years there has been a tendency towards permanent settlement. In 1931 about two-thirds of the Chinese population were China-born. The Indian population, in which the South Indian State labourers predominate, has also been largely migrant.

The Japanese invaded Malaya on 8 December 1941 and Singapore was occupied on 15 February 1942. The British re-entered Singapore on 5 September 1945 and Kuala Lumpur on 12 September of that year. Three and a half years of Japanese occupation left Malaya with its economy generally stagnant. Its mining industries (except for iron) were suffering from disrepair and dismantled machinery, its plantation agriculture was depleted of tools and processing equipment, its power machinery and water supply plants had deteriorated, and its railway transport system lacked track, rolling stock, and machine repair shops. There was relatively little physical war damage to the Malayan industrial plant except for the application of British "scorched earth" policy to tin dredges in 1942 and a few Allied B-29 bombing raids in 1945, notably on the major railway workshops.

The Japanese, who did not need Malaya's major industries, did not keep its plant in good condition; instead they "cannibalized" machinery for other purposes. They opened a few factories which manufactured small goods, such as electric light bulbs. They also encouraged an increase in domestic food production, since their shipping was unable to bring in the food supplies which Malaya had normally imported. However, they contributed nothing important to Malaya's economic development.

/The policy

The policy of the British Military Administration which came into the country in September 1945 and of the British Civil Government, which succeeded it in April 1946 has been to restore prewar economic conditions. The principal emphasis has been on repair of transport, increase in local food production, the provision of needed consumer goods imports, and the rehabilitation of the rubber, tin, and pineapple export industries. This programme has, of course, been dependent on a revival of trade. Although orders for tin mining machinery, rubber equipment, textiles, and many other types of items were placed in the United Kingdom prior to the British reoccupation of Malaya, deliveries have been slow.

Rehabilitation of the rubber and tin industries is considered basic to economic recovery. In tin mining, the Malayan Government has indicated that it plans to provide loans for rehabilitation and that it will give priority in financial aid and necessary equipment to those mines which can be put into operation most quickly. Producers in both the tin and rubber industries complain that the prices established for their products are too low to permit any profit and that they thus destroy the incentive to resuming large-scale production.

The prewar Malayan economy was centred in the production and processing for export of tin, rubber, pineapples, tea, copra, and a few other raw materials and on the entrepot trade of the Straits Settlements. Apart from a few plants, such as foundries, brickworks, breweries, rice mills, rubber factories, and saw-mills, Malaya had no industries manufacturing finished goods for domestic consumption. The 1939 net imports for domestic use were typical of the prewar decade and amounted to about US\$140 million, including among the more important

items some 500,000 tons of coal, 400,000 tons of fuel oil, 100,000 tons of petrol, 50,000 tons of kerosene, 4,000,000 gallons of lubricating oil, 700,000 tons of rice, and 108 million yards of cotton, silk, and rayon textile piece-goods. During the Japanese occupation there was an almost complete cessation of imports, except those for Japanese military use. Between September, 1945 and July 1946 imports consisted mainly of foods, amounting to several hundred thousand tons. The imports of rice, coal, petroleum, and textiles have not been resumed on anything like the normal scale. Malaya's prewar coal imports came primarily from Japan and the Netherlands East Indies. Neither area has yet resumed coal export. Malaya's prewar rice imports came principally from Siam and Burma. In view of the present world food crisis Malaya's rice imports since September 1945 have been allocated as part of an international food distribution plan. The petroleum industry of the Indies has not been sufficiently revived to provide Malaya with its petroleum needs. Use was made in the early months of reoccupation of the stocks left by the Japanese. Although orders for some 14 million yards of textiles have been placed in the United Kingdom, an additional 11 million yards in India, and an unknown amount in China, deliveries of textiles were up to mid-1946 under 100,000 yards.

By the end of 1946 considerable progress had been made in the reconstruction of power, water, transport, and other public services. Enough supplies had been imported by mid-1946 to enable the resumption of rubber tapping and rubber processing on a small scale. Sufficient foods and consumer goods had been imported and distributed on a rationed basis to bring prices in late June down from their February peak to an index

of 345 (1941 = 100). Progress in reopening mines had been slow due to lack of machinery imports and there was still a huge demand for textiles.

## 2. Living Conditions of the People and Manpower

It will be possible to assess the effects of the Japanese occupation on the numbers and distribution of the population only when a new census is taken in 1947. As regards expatriations, figures obtained from the Japanese showed that 73,502 Asiatics were transported to work on the Siamese railway. Of this total 24,490 were reported to have died, 12,269 as having returned to the places from which they came and 4,552 as having deserted, leaving a balance in Siam of 32,081 for repatriation at the time of liberation. The Japanese records also show that 1,120 labourers were transferred during the occupation to Borneo and Sumatra. The bulk of those sent to Siam were Southern Indians. The Japanese figures almost certainly understate the position and in addition to losses in transit others occurred locally as the result of malnutrition, neglect of public health, and execution.

The data given above does not, of course, mean that the population formerly engaged in the various industries has disappeared during the Japanese regime. The potential rubber and tin production of the Southeast Asia territories was well in excess of Japanese requirements and output was sharply curtailed. Some of the surplus labour in these industries was removed for the building of the Bangkok-Moulmein railway, but a lot of it drifted to the towns to take up occupation such as trishaw (a three wheeled bicycle and sidecar introduced during the occupation) coolies or hawkers, while others grew foodstuffs such as tapioca, sweet potatoes, and ragi. It was estimated that the

/acreage

acreage under such crops was 37 percent greater than on 31 December 1940. The increase in the factory workers was due to the setting up of small local industries to produce substitutes for several articles which could no longer be imported.

The quality of the population was reduced owing to the lack of adequate medical treatment and proper prophylactic vaccination, neglect of public health measures, and low diet. This is reflected in the production figures.

### Health

Malaya before the Japanese occupation, was one of the healthiest parts of the tropics and this was brought about by lavish expenditure and unremitting effort. Anti-malarial measures were perhaps the most important. In 1937 in the Straits Settlements medical and health measures accounted for 8.5 percent of the total expenditure: in the Federated Malay States the percentage in 1935 was 7.1.

In Singapore after the liberation it was expected from past history that diseases of greatest importance would be malaria, dysentery, tuberculosis, and beri-beri. Statistics from September to December 1945 show them closely associated as causes of death. Beri-beri led for over a month, in the period from 2 September to 6 October 1945, it was the cause of 16.2 percent of all the deaths. Under Japanese rule Malaya was very short of food and Singapore was the chief sufferer. Australian milk, evaporated or dried was rushed in after the liberation, and distributed to babies, mothers, and younger children through the ten health centres of the city. Later, imports of rice and flour helped the situation. For malaria, reliance was placed on giving quinine or atabrin to as many previously untreated patients

/as possible



as possible to reduce the size of the carrier reservoir. To rehabilitate and enlarge the extensive system of drains in Singapore will take 2 or 3 years. Against dysentery, efforts were made to get in chlorine cylinders by air, and to get refuse collection going to diminish fly breeding. A vaccination campaign was undertaken whereby 100,000 were vaccinated in the last few months of 1945. The Japanese kept up vaccination well so that Singapore may escape the epidemics raging almost everywhere in the north (China, etc., etc.). There were no diphtheria deaths in Singapore until early January, 1946.

A health information service started to operate in June, 1946. The King Edward VII College of Medicine made plans to reopen. The Japanese had used its plant for the mass production of vaccines.

The infant mortality in the period from 2 December 1945, to 9 February 1946, was 130. From 1935 to 1938, the annual rate in Singapore was between 172 and 191.

#### Housing and Clothing

The houses of both Malays and Chinese in the rural districts and to some extent in the towns are built mainly of timber or bamboo frames and walled and thatched with atap (palm leaves). Their construction is a comparatively simple matter and housing in this tropical climate, at least in the rural areas, is not as great a problem as food, clothing, and health. Labour forces on the estates are usually housed in large barn-like structures, divided into cubicles. In the larger towns there is much overcrowding. Before the war measures were in progress for alleviating the overcrowding (such as those taken by the Singapore Improvement Trust and through the Slum Clearance Scheme in Penang).

In Singapore the housing problem, already great before

the Japanese occupation, has been much aggravated by the influx of population caused by the political disorder in the Netherlands Indies. The reoccupying military forces have taken up much of the civilian accommodation and this is still another obstacle to a solution. Also a large number of the people in the rural areas have found it necessary to come to Singapore to live in order to be near the very meagre supplies of food and clothing which have been available in the last few years. The result is that much land in the Municipal area which was vacant before the war has been occupied by unauthorized squatters and it is impossible at the present time to find any alternative accommodation for them. These squatters are living in insanitary conditions, mainly in huts built of wood and a tarp with no proper drainage or means of sanitation. These agglomerations of temporary dwellings present a very serious menace to the health of the city.

The lack of textiles is a serious matter. None were imported during the Japanese occupation and a large part of the population are in rags. In 1939 \$14,434,344\* worth of textiles were imported for domestic consumption including 88,509,462 yards of cotton piece goods, 1,293,816 yards of silk piece goods, 11,016,510 yards of rayon piece goods, and 5,578,825 yards of jute piece goods. Imports of Japanese textiles of all kinds alone were valued at \$6,312,000.

In view of the general world shortage of textiles and the elimination of Japan as an exporter it appears clear that Malaya's requirements for 1946-48 (which amount to three times the above quantities) will not be met. Current allocations of cotton textiles indicate that Malaya will

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\* All values are given in U.S. dollars unless otherwise stated.

/receive

receive about 22 million square yards during the second half of 1946. It is unlikely that this rate will be more than double during 1947 and the first half of 1948.

#### Education

Education in Malaya was in English, Malay, Chinese (Mandarin), and Tamil. English primary and secondary education was provided at Government and aided schools. Primary education in Malay was free for Malay boys and girls and compulsory in the Malay States for Malay boys residing within 1-1/2 miles of a school; Chinese primary and secondary schools received grants-in-aid from the Government. Higher education in English was given at Raffles College and the King Edward VII College of Medicine, Singapore. There were also technical colleges and trade schools. In 1931, 35.5 percent of all children of 5-14 were attending school. In the Straits Settlements the Government expenditure on education was 5.3 percent of the total in 1937, and in the Federated Malay States 5.2 percent of the total.

From December 1941 to October 1945 there was little or no education in Malaya. While Malay schools were allowed to continue, the curriculum was often subordinated to the teaching of Japanese and attendance in many cases fell as low as 10 percent of the pre-occupation level. Chinese schools ceased to exist and were replaced by Japanese schools which Chinese and others could attend. Indian schools were closed owing to the conscription of Indian labour for the Bangkok - Moulesin railway and the drop in rubber production. English schools were continued in certain places but only in the primary and elementary classes, the courses being limited to the Japanese language, Japanese songs, gardening and drill.

Since the liberation there has been a phenomenal recovery in enrolment at the schools, and much overcrowding. This was partly due to the fact that all age restrictions had to be removed. There is a great shortage of teachers, of school buildings, and of textbooks.

School enrolments are as follows:

Schools	1941	1946
English	32,382	63,371
Malay	122,199	136,800
Chinese	83,200	172,054
Indian	25,573	51,852

The population has suffered not only educationally but morally. A large proportion of the "gangster" elements are young men who have been deprived of the right influences in their youth while a great part of the black market activity to which the people were forced to resort during the Japanese regime has been carried on into the liberation period.

#### Labour

Most of the labour on the rubber estates before the Japanese occupation came from South India. In 1937 there were 243,999 Indian labourers on estates out of a total of 306,759. There were 75,500 Chinese estate labourers in 1937, 51,906 were employed in tin mines, 44,586 in factories and 6,424 in Government Departments. The total numbers of Japanese labourers in 1937 was 15,603, mostly in estates.

#### MALAYAN UNION

Industry	1941	1946	Percentage change between two periods
Estates	300,104	218,841	- 27%
Government Depts.	33,441	32,654	- 2%
Mines	29,120	16,008	- 45%
Factories	6,701	7,448	+ 11%

### 3. Food, Agriculture, and Forestry

Since the prewar Malayan economy has centred on rubber\* and tin and a few other commodities, food production was comparatively neglected and Malaya imported two-thirds of its rice needs, all of its wheat flour, and considerable quantities of beans, meat, vegetables and beverages. Rice was imported mainly from Siam and Burma, although about 50,000 tons came from Indo-China. During the Japanese occupation imports practically stopped, except for a little smuggling of rice from Siam, and Malaya had to support itself. Tapioca and sweet-potato were the country's staple diet and there was much malnutrition in consequence. After the liberation of Malaya in September 1945 the rice shortage in the Far East prevented the resumption of adequate imports. This necessitated the increase of local production of foodstuffs and in March 1946 the Government required that 2 percent of the area of any holding larger than 100 acres be planted with staple foods. By this means it was hoped that 500,000 additional acres might be brought under food production.

Food imports were resumed by October 1945 and by March normal quantities of vegetables and fish were arriving from nearby countries and China. It can be assumed that this junk trade in miscellaneous foods will continue at a normal rate. Rice remains Malaya's greatest need.

The following table sets out the Malayan Union's prewar and postwar rice production.

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\* Rubber is discussed below under Industry.

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Padi (Unhusked Rice) Production

Year	Wet	Paddy	Dry	Paddy	Total	
	Acreage	Yield (gantangs)	Acreage	Yield (gantangs)	Acreage	Yield (gantangs)
1939	704,390	218,604,000	48,850	8,805,006	753,240	227,409,000
1940	721,580	211,077,000	63,870	10,593,000	785,450	221,670,000
1941	742,600	204,473,000	77,000	11,451,000	820,480	215,924,000
1946	604,005	143,303,000	105,635	6,577,000	789,640	149,880,000
1947	729,630	172,969,000	100,000	7,500,000	829,630	180,469,000

Conversion : to convert gantangs of paddy to tons rice divide by 666

It is anticipated that the yield in the 1947-48 season will reach the prewar level.

Malaya 1939 Imports and 1946-48 Import Requirements of Food

Item	Unit	1939	Estimated	Est.	Cost of 1946-48
		Imports (1000)	1946-48 Imports	Unit Cost	Imports (US\$ Million)
<b>A*</b>					
Rice	long ton	702	844	\$100	84.4
Beans	long ton	22	44	\$ 75	3.3
Animals, living	head	177	350	\$ 12	4.2
<b>B**</b>					
Wheat, flour	long ton	60	90	\$125	11.3
Meat	long ton	12	16	\$175	2.8
Misc. food	long ton	102	240	\$120	28.0
Misc. drink	gallon	1,063	1,400	\$ 10	14.0
Total		...			148.8

Coconuts were second to rubber in Malayan export agriculture. Of the 609,417 acres planted in 1937 only one-third was composed of large estates.

\* Foods (except rice) under A are assumed to be required chiefly for the native population and are estimated at the 1939 annual rate for 1946-48. Because of anticipated increase in local production, rice requirements have been calculated at 544,000 tons for 1946-47 and 300,000 tons for 1947-48.

\*\* Foods under B are assumed to be required chiefly for the European and wealthy Asiatic population and are estimated for 1946-48 at two-thirds of the 1939 annual rate because of the decline in the purchasing power of the well-to-do Malayan residents.

/There were

There were 165 estates with an estimated pre-depression capital value of US\$30,240 000, 54 million dollars SS; while the native small-holders were believed to be about 300,000 and the value of their territory about US\$67,200,000 120 million dollars SS.

The cultivation of pineapples has greatly increased in importance in the last decade or so. In 1940, 1,543,492 cases, valued at SS\$8,435,768 were exported.

Oil palms at the end of 1937 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 36 estates 9 were over 2,000 acres in size. In 1937 the export of oil was 42,787 tons.

There were in addition a number of other minor agricultural products including tea (1939, 1,573,854 lbs. produced: 1946, 316,000), coffee, spices, tobacco, and fruits.

During the past decades attempts have been made to promote stock and poultry farming. Buffaloes were raised primarily for their use in paddy planting and hauling timber and only recently 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. Malaya was largely dependent upon imported milk. Pig keeping was carried on by the Chinese small-holders, the local supply being supplemented by imports. Poultry were kept by Malays and Chinese in the country districts.

#### Fishing

In 1938 there were 26,500 fishermen in the Straits Settlements and Federated Malay States alone, nearly 14,000 of these being Malays and 10,500 Chinese. In 1939 the total catch of "wet" fish for Malaya was about 80,000 to

/100,000 tons.

100,000 tons. Its value was between US\$3,750,000 and \$5,000,000. The average daily landings of fish for the 5 pre-occupation years was 235 tons; in 1946 only 123 tons.

#### Forestry

About 40,000 of the 50,000 square miles of the peninsula is still under forest, the bulk of which, in the east coast states, and a large part has at present no commercial value because of its inaccessibility. The internal market was limited, cost of transport was heavy, and the Chinese saw-mills at Singapore found it cheaper to import 70 percent of their logs from Sumatra.

#### 4. Industry and Mining

The principal industries of Malaya were based on tin and rubber.

##### (a) Tin and Tin Mining.

The most important mineral production in Malaya is tin, of which the peninsula had supplied 54 percent of the world production in 1903 and since 1919 about 34 percent. Output had reached a peak in 1937 of 77,224 tons under a tin restriction scheme, whereby the price was maintained at between £200 and £230 a ton (US\$988 - \$1136). This scheme was controlled by the International Tin Committee.

Other mineral productions consist of iron ore, coal, phosphates from Christmas Island, gold and tungsten.

The following indicates the mineral production in 1937.

		Value (1,000)
Tin	77,192 tons	17,902
Iron Ore	1,560,828 tons	852
Petroleum	653,590 cu.m.	495
Coal	628,951 tons	387
Phosphates	162,563 tons	322
Gold	34,653 oz.	223
Tungsten	1,099 tons	193
All mineral production		20,622

/Tin mining



Tin mining was by hydraulic and open-cast methods and by dredges. As late as 1912 the Chinese were responsible for 80 percent of the tin mining, but since then the more economical methods used by Europeans have reduced the Chinese holding to about one-third of the mines (1941).

In 1930 the total amount of capital invested in tin dredging alone was £ 13,099,431 (US\$63,661,140).

Nearly all the tin dredges had been rendered unserviceable before the British withdrawal from Malaya and those which the Japanese repaired ran to a standstill through lack of spare parts. An official survey of the tin industry in December 1945 by British mining experts revealed that of the 126 dredges in Malaya in 1942, 22 were worth their scrap only, 41 were expected to resume operation by June 1947 and 17 by January 1948. However, it was expected that five months would have to elapse between the starting of the dredges and this full scale operation. European-owned hydraulic and open-cast mines were all expected to be operating by August 1946 and to reach their full capacity of 9,000 tons a year by January 1947. Some 71 Chinese mines were expected to start operation before August 1946, 193 by June 1947, and 219 by January 1948. Actually by March 1946 only 4 dredges were in operation, and only 14 by the end of the year.

#### MALAYAN UNION

##### Categories of Mines in Operation

<u>Year</u>	<u>Dredging</u>	<u>Gravel Pump</u>	<u>Hydraulic</u>	<u>Other Methods</u>
1939	73	538	33	250
1940	72	733	34	182
1941	74	668	31	160
Sept. 1946	14	73	21	73

Only 603 tons, monthly average, were produced from

/January

January - September 1946, as compared with 6,935 tons, monthly average, from January - September 1941.

Some 12,500 labourers were employed in the tin mines in March 1946 as compared with 80,000 in 1937.

To replace the 22 useless dredges would cost about \$500,000 a piece. Their replacement is not possible within the next two years at least. But it was rare in Malaya to have all existing dredges in operation simultaneously. In the short run the absence of 22 dredges will not reduce operation below that of the maximum prewar figure, for 95 dredges were in operation.

Repair of the existing dredges will be an extensive undertaking and will require the importation of considerable quantities of machinery, particularly electrical gear and engine bearings. For other types of mines all engineering tools and stores have to be replaced, shovels, buckets, hose and even pumps used for these mines were made in Malaya before the war. Pending re-establishment of these industries supplies must be imported.

#### MALAYA

Schedule of Estimated Tin Production, 1946-49  
(mid-1946 figures) Tons

Year	Dredges	European Gravel Pump and Hydraulic	Chinese Gravel Pump	Open Cast Mines	Lode Mines	Dulang Washing	Total
1946	5,000	2,000	3,200	500	-	1,500	12,300
1947	25,250	7,000	9,700	2,000	1,000	1,200	46,150
1948	39,800	9,000	17,000	3,100	2,700	1,200	72,800
1949	40,500	9,000	17,000	3,100	2,700	1,200	73,500

The output estimated for 1949 would be equal to 90 percent of the 1941 production rate, and a higher rate of production cannot be expected unless new ore discoveries are made. In point of fact production to mid-1946 indicated that the total production for the year would not be more than 7,000 tons. A later estimate than the official survey of December 1945

/prolongs

prolongs the rehabilitation of the tin industry to 5 years. Production has fallen behind the anticipated figure because of a number of factors, including shortage of European supervisory personnel, the difficulty of getting skilled labour together, slowness in receiving orders and imported machinery and lack of transport equipment.

The total cost of rehabilitating the tin industry has been estimated as follows:

	\$ U.S.
Repairing dredges, materials	\$13,097,500
Spare parts for dredges	5,037,500
Chinese mines	3,627,000
European Hydraulic and gravel pump mines	2,015,000
Open-cast mines	1,209,000
Spares for open-cast mines	403,000
Lode mine (at Sungai Lembing, Pahang)	<u>806,000</u>
Total	\$26,195,000

If deliveries are too slow it is possible that some manufacturing of mine machinery will be resumed in Malaya and part of the requirements can be supplied from parts manufactured locally from imported metals.

The resumption of tin mining at prewar levels depends to a large extent on the operation of power plant, which in turn depends on the reconstruction of Malaya's one coal mine (at Batu Arang, Selangor).

#### Tin Smelting

There were 3 tin smelters in Malaya in 1941. The tin smelting industry was maintained in Malaya by heavy export tax on unsmelted ore. The restriction of the smelting plants presents no difficulty. They were expected to be ready in July 1946 at a capacity greater than Malaya's full production capacity. The Butterworth smelter (Straits Trading Company) had been dismantled by the Japanese and there was no immediate plan to reopen it.

Raw Materials

Before the war Malaya was a large importer of raw materials, but almost all of these materials were imported for processing and/or re-export. Rubber, tin, copra, sago, tea and tobacco were important imports but more important exports. Malaya's largest industrial plants were the three tin smelters which concentrated tin for export. Malaya's few and small manufacturing plants - for example, rubber factories - used local materials. Except for fuel (see below) there are no raw materials which will be essential imports for Malaya during 1946-48.

Fuel

Petroleum

Malaya has no petroleum resources of its own but has easy access to Netherlands East Indies petroleum and to petroleum produced by British companies in the British areas of North Borneo. Before the war, Singapore was a storage and trans-shipment point for petroleum products for Southeast Asia.

Malaya's petroleum needs during 1946-48 should be similar to its prewar needs and thus equal to two years' prewar imports plus replenishment of stocks.

MALAYA

1939 Imports and 1946-48 Import Requirements  
of Petroleum

Product	1939 Net Imports* (long tons)	Estimated 1939 Storage (long tons)	1946-48 Im- port Require- ments (l.t.)	Cost of 1946-48 Imports Unit cost (\$ U.S.)	Total cost (\$ U.S.)
Fuel oil	541,618	72,030	1,155,266	8/ton	9,242,128
Gasoline	132,116	17,287	281,519	21/ton	5,911,128
Kerosene	34,156	4,802	73,114	16/ton	1,169,324
Lubricating oil	12,624	1,441	26,689	21/ton	560,469
Paraffin wax	1,417	480	3,314	80/ton	265,120
Total	721,931	96,040	1,539,902		17,149,440

\* For Domestic Consumption.

Coal

Prior to the war, Malaya's domestic production of coal furnished about half of Malayan consumption requirements. In 1937 one mine near Kuala Lumpur produced some 628,000 tons of sub-bituminous coal, (9,600 B.T. Us), which was used primarily by the railways, mines, and power plants. An additional 726,000 tons, mostly bituminous coal, were imported. Prior to the British evacuation of Malaya in 1942, the underground sections of the coal mines were flooded and considerable machinery was destroyed. Resumption of coal mining at a pre-war level is considered essential to revival of power, mining, and transport.

BATU ARANG COLLIERY

(Only Colliery in Malaya)

<u>Year</u>		<u>Average Monthly Production</u>
1937		52,412
1938		39,827
1939		36,752
1940		65,126
1941		61,851
1946	July	26,089
	August	20,358
	September	17,508

On the assumption that coal production has now reached 1,000 tons per day\* import requirements have been estimated as follows:

	1945-48	Cost (US)	
		Unit	Total
Twice normal pre-war imports	1,452,000		
Production deficit, 1946-47	328,000		
Stockpiles	<u>332,000 (a)</u>		
	2,112,000	\$5.40/ton	11,337,000

(a) Three months' supply

\* As anticipated in Straits Times, 11 March 1946.

Manufactured Products

Iron and Steel

Although some 2,000,000 tons (1,935,314 in 1940) of high-grade iron ore (64 percent) were mined in Malaya annually before the war, nearly all the ore was exported to Japan. No pig iron was produced locally. Malaya imported all the iron and steel products consumed within the country; in 1939 these imports amounted to some 150,000 tons, valued at \$10 million. From these goods, most equipment for the rubber and tin industries was manufactured for local use and for export. To a considerable extent, reconstruction in these and other industries in Malaya will depend upon revival of this type of industry in Malaya. In the absence of specific data, it has been assumed that import requirements for iron and steel products are equivalent to four times the pre-war imports plus 1946-43 normal needs, or a total of six times pre-war imports.

Electric Supply

During the retreat in 1941-42, electrical supply undertakings were extensively damaged. The Japanese subsequently effected repairs but the plants were close on four years with inferior lubricating oil and negligible maintenance. The present installed plant capacity of the principal undertakings stated as a percentage of their pre-occupation capacity is:-

Selangor Government Supply	47 percent
Perak Hydro-electric Company	75 percent
Penang Municipality	70 percent

/Machinery:

Machinery: Import Requirements

MALAYA

1939 Imports and 1946-48 Import Requirements of Iron and Steel, Machinery and Electrical Apparatus

Product	1939 Imports (1,000 US\$)	1946-48 Import Requirements* (1,000 US\$)
Steel bars, rods, angles, shapes and sections	2,069	16,511
Holloware	310	2,474
Galvanized iron	776	6,192
Steel plates and sheets	776	6,192
Tin plate	2,328	18,577
Tubes, pipes, fittings, wrought iron and steel	569	4,541
Wire nails and staples	352	2,809
Wire, other	207	1,652
Other iron and steel mfrs.	<u>3,363</u>	<u>26,837</u>
Sub-total Iron and Steel	10,750	85,785
Aluminium ware	207	1,652
Cutlery, hardware, implements, instruments	2,225	17,756
Internal combustion engines	310	2,474
Machines and machinery, other	1,035	8,259
Parts for above	880	7,022
Other machinery	2,432	19,407
Electrical goods and apparatus	2,587	20,644
Equipment for 28,000 kw power plant		2,800
Extra boilers		155
Turbo-Alternator		<u>100</u>
Sub-total Machinery and Electrical Apparatus	<u>9,676</u>	<u>80,269</u>
Total	20,426	166,054

Rubber

Malaya had in 1937 3,302,170 acres under rubber, 2,026,348 being estates of over 100 acres each (both European and Asiatic owned) and 1,275,882 being Asiatic small holdings. The net export of rubber from Malaya in 1937 was 681,638 tons.

Reconstruction in the rubber industry has depended more on the rebuilding of destroyed and looted buildings

\* Calculated at 133 percent of prewar c.i.f. costs. United Kingdom price index for iron and steel stood in February 1946 at 178, base 100 = 1939.

and the clearing of undergrowth from areas which have been overgrown during the Japanese occupation than on imports of large pieces of machinery. A great deal of estate machinery for washing, drying, and coagulating rubber was looted or requisitioned and rebuilt for other uses by the Japanese. Equipment for tapping and collecting rubber was largely lost or worn out, so that it had to be almost entirely replaced. Machinery in the large rubber plants at Klang and Singapore deteriorated but was not looted since it was operated on a small scale by private Japanese firms. During 1943 and 1944 a tripartite rubber committee (U.S., U.K., and the Netherlands) meeting in Washington and London made plans for securing rubber from Southeast Asia as soon as the area was reoccupied. Orders for equipment to reconstruct the rubber industry of Malaya were placed in the United Kingdom and Australia. By October, 1945, the Straits Times reported that "large supplies of estate supplies, including knives, mangles, formic acid and other requisites for rubber tapping and manufacture" had already been shipped from Britain to Malaya. In December the first shipment arrived \*. It totalled 1,400 tons and included 4,000 cases of changkols, 600 of parangs, 1,000 of mangles, silicate of soda, tapping knives, buckets, etc. Although it was reported in March that the rate of rubber production was only 20 percent of the pre-war rate and that shortages of acids, tapping tools, and machinery continued, rubber estates supplies were coming from the United Kingdom in a steady flow \*\*, and some new trucks had arrived.

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\* Straits Times, 5 December 1945.

\*\* Straits Times, 15 March 1946.

/During



During the late spring additional rubber milling equipment was smuggled from Sumatra to Malaya. By mid-summer great progress had been made in the rehabilitation of estates and the supply of tapping equipment to native rubber producers. This rehabilitation had been achieved through planned imports. Prior to the war Malaya was an exporter of rubber plantation equipment and machinery, which was manufactured locally from imported iron, steel, and aluminium sheets. Manufacture of these goods has been resumed in Malaya. One leading firm reported in June that it... was swamped with orders for coagulating tanks and was having difficulty in filling the orders due to the slowness of imports of aluminium sheets from Britain\*.

On the assumption that imports between September 1945 and July 1946 have been sufficient to replace machinery destroyed during the Japanese occupation, import requirements for 1946-1948 may be estimated at four years' imports to replace deteriorated parts plus normal imports for 1946-1948 period. Since most rubber machinery was manufactured locally import requirements for rubber cannot be separately estimated but must be included with total iron, steel, and machinery requirements.

#### 5. Transport and Communications

Probably the most important imports required by Malaya are those to be used to repair its transport system, particularly railways.

##### Railway Equipment

Malaya's railway system suffered heavily during the Japanese occupation (1) from Japanese removal to Siam of 254 miles of rails, 45 bridges, one-third the prewar stock of locomotives, and one-half the prewar stock of cars; and (2) from one heavy Allied air raid which destroyed 60 percent of the central railway workshops.

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\* Malaya Tribune, Singapore, 2 June 1946.

Although the British Military Administration made remarkable progress between September 1945 and June 1946 in restoring railways, its efforts were concentrated primarily on rebuilding of structures and repair of the permanent way and rolling-stock from local materials. Although a few locomotives and wagons were secured through American surplus property sales and orders were placed for others, the bulk of imports for reconstruction will arrive in the 1946-1948 period.

#### Permanent Way

The British hope subsequently to get back from Siam the bulk of the rails used for the Burma-Siam railway. For the purpose of arriving at an estimate of Malaya's import requirements it is assumed that 200 miles of track will have to be imported at a cost of \$5,160 per mile or a total of \$1,032,000. Local materials can be used in repairing or replacing sleepers.

#### Bridges

Some 36 railway bridges were destroyed and 45 removed during the Japanese occupation totalling about 10,000 lineal feet of spans of 100 feet and over. Of the bridging removed, some may still be recovered from the Burma-Siam railway. The important Klang railway bridge, with three 200-foot spans, has been under repair since November 1945. At best, there remain 35 bridges to be replaced. For these, steel girders and concrete must be imported, at an estimated cost of \$15,000 per bridge.

#### Locomotives

Of the 185 locomotives in Malaya prior to the war, 50 are in Siam, over 50 were in mid-1946 awaiting heavy repairs, and the remainder are in use although they are badly in need of repair as a result of lack of maintenance during the Japanese occupation. Some 28 MacArthur locomotives of Lend-Lease origin have been purchased from surplus

/property

property supplies, and 40 mainline locomotives plus 20 Diesel electric shunting locomotives are on order in England from the 1946 production programme. Delivery of the latter were expected towards the end of 1946 or early in 1947. By mid-1947 there should therefore be available in Malaya 173 locomotives in operating condition and 50 repaired and under repair. Some of the 50 removed to Siam may eventually be returned. Following mid-1947 locomotive imports at the 1939 rate, (i.e. 30) should suffice for Malaya's needs. The cost of locomotive imports has been estimated as:

On order from England:	Cost*
40 main line locomotives	\$2,800,000
20 Diesel shunting locomotives	1,400,000
1947-1948 normal requirements:	
30 locomotives	<u>2,100,000</u>
	\$5,300,000

#### Wagons

The Japanese took to Siam 2,900 of Malaya's 5,690 wagons. Only 1,333 of these have been recovered to date, the others being too heavily damaged by air raids and neglect. At present all are required to transport Siamese rice. Meanwhile, 300 wagons have been obtained through purchase from the United States Army, and an additional 610 are due to be imported during the third quarter of 1946. Orders for 1,500 new wagons have been placed in the United Kingdom. Delivery is not expected until mid-1947. However, by mid-1947 the number of wagons in Malaya should reach 5,710. It is assumed that the wagons in Siam will be needed there through 1948. Malaya will therefore have a deficit of 590 wagons. For the 1946-48 period total import requirements are estimated as:

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\* Calculated at \$70,000 each.



has been salvaged. However, permanent reconstruction of the workshops will be a major undertaking, requiring importation of steel girders, concrete, etc., as well as machinery. The cost of the imports necessary for this reconstruction is estimated at \$5,000,000, including \$1,200,000 for a large machine shop and \$35,000 for a turntable.

Road Transport

Malaya's roads survived the war in moderately good condition. The equivalent of four years' normal imports of asphalt and bitumen (90,000 tons at a cost of \$3,302,826)\* should be sufficient for necessary resurfacing. Deterioration and destruction of vehicles during the Japanese occupation left Malaya with a scarcity of motor cars and lorries, despite the fact that numbers of Japanese vehicles were captured in good condition. Since September, a minimum of 1,184 automobiles, 300 lorries, 70 buses, and 60 motorcycles have been imported. Some 150 additional buses and hundreds of automobiles are on order in England for Singapore. Malaya's vehicular needs are estimated at three times 1939 imports, or;

	<u>1939</u> <u>Imports</u>	<u>1946-1948</u>	<u>Cost</u>
Motor cars	4,000	12,000	\$14,400,000**
Lorries	940	2,820	8,610,000***
Motorcycles	236	708	354,000****

In addition, Malaya will need some 30 Diesel road rollers and some 50 steam rollers, at an estimated cost of \$1,000 each.

Port Equipment

The godowns, wharves, and lighters damaged in Malayan ports can be

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\* Calculated at 133 percent of prewar.  
\*\* \$1200 each.  
\*\*\* \$3500 each.  
\*\*\*\* \$ 500 each.

repaired with local materials, but several cranes must be imported.

#### Shipping

Malaya lost over 25,000 gross tons of shipping. Thirty-one of the Straits Steamship Company's 50 vessels were lost. By mid-1946 this company alone had constructed three new 970-ton vessels; some 25 ICT's had been sold to civilians for use in the coastal trade; and an unknown number of other vessels had been provided for Malayan waters. It has been assumed that by mid-1946 15,000 gross tons still required replacing and that, of this total, 10,000 gross tons would be imported. Total costs of replacing 10,000 gross tons, at \$200 per ton, would amount to \$2,000,000.

#### Miscellaneous Transport Equipment

In addition to the above, Malaya's 1946-1948 import requirements of miscellaneous transport equipment - including bicycles, small boats, and spare parts - are estimated at three times prewar imports of miscellaneous items, totalling \$6,812,079. The total cost of imports of transport equipment is estimated as \$57,985,905.

#### Telecommunications Equipment

Nothing specific is known of import requirements for telecommunication equipment. An elaborately equipped United States communications and weather station at Singapore was recently transferred to local authorities.

### 6. Foreign Trade

The following is the value of Malayan trade (Straits Settlements, Federated Malay States, and Unfederated Malay States) from 1935 - 1938 in Malayan (SS) dollars.\*

\* The mean value of the Malayan (SS) dollar was

1935	57.1733 cents U.S.	1939	51.7355 cents U.S.
1936	58.2584 cents U.S.	1940	46.9789 cents U.S.
1937	57.9728 cents U.S.	1941	47.1334 cents U.S.
1938	56.9172 cents U.S.		

/Imports

	<u>Imports</u>	<u>Exports</u>	<u>Total</u>
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 consisted of foodstuffs. Raw materials and articles mainly manufactured accounted for roughly another third of the imports, the principal items being rubber, tin ore (for processing in Malayan Smelters), copra, rattans, and various jungle gums. The greater part of the copra came from the Netherlands Indies, and was reshipped to Europe. "Articles wholly or mainly manufactured" were valued at SS \$246,507,000 in 1938. One item was mineral oils - petrol, kerosene, fuel, and lubricating oils - imported from Sumatra, Dutch Borneo, and Sarawak. A large part of this was re-exported (of \$87,788,000 of oil imported in 1937, \$55,906,000 was re-exported).

Malayan exports in 1938 accounted for the following percentages of the total.

<u>Item</u>	<u>Percentage of value of total export</u>
Rubber	47.8%
Smelted tin	16.9%
Mineral oils	9.8%
Copra and coconut oil	3.1%
Rice	2.2%
Canned Pineapples	1.2%
Areca nuts	1.7%
Salted and dried fish	1.2%
Total cotton piece goods, sarongs, thread, etc.	1.0%

The following table shows the percentage shares of the countries of origin of the total Malayan imports by value of merchandise from 1935-1938.

	<u>U.K.</u>	<u>British Empire</u>	<u>Europe</u>	<u>Japan</u>	<u>U.S.</u>	<u>N.I.</u>	<u>Siam</u>
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

- 7. Finance

The Malayan (SS) dollar is linked to sterling and its value is about 2/4\*. Malaya's finances, public and private, are hard to survey owing to the multiplicity of political organizations (10 in 1941) and the incompleteness of statistical information in some cases.

Straits Settlements - Revenue and Expenditure 1934-1941 (SS Dollars)

	<u>Revenue</u>	<u>Expenditure</u>
1934	34,247,603	30,937,262
1935	35,040,380	34,764,640
1936	35,124,137	33,398,912
1937	37,348,383	42,038,482
1938	69,372,328	40,378,960
1939	38,272,934	50,296,659
1940	47,762,825	58,876,576
1941	46,765,215	57,839,380

Federated Malay States - Revenue and Expenditure 1934-40

	<u>Revenue</u>	<u>Expenditure</u>
1934	50,926,323	47,211,228
1935	62,354,264	51,119,943
1936	68,090,932	52,702,228
1937	80,854,589	71,143,470
1938	62,527,675	100,740,929
1939	69,697,548	75,556,831
1940	99,691,101	77,913,676

\* The sterling value of the Straits Settlements (later the Malayan) dollar varied between the currency commissioners exchange selling rate of 2/3 3/4 and their purchasing rate of 2/4 3/16.



Inflation

No figures are available of the present price levels in the Malayan Union and Singapore, but it was estimated that they were in the third quarter of 1946 about 300 to 100 in 1941.

Unfederated Malay States, Revenue (SS \$) and Expenditure

		<u>Revenue</u>	<u>Expenditure</u>
Johore	1940	24,737,983	23,548,568
Kedah	1940-41 (financial year)	9,514,918	8,140,045
Perlis	1940-41 "	1,021,746	829,269
Kelantan	1940	3,874,708	3,334,091
Trengganu	1940	3,303,006	2,560,000

Public DebtStraits Settlements

In 1937 the General Revenue Surplus of the Colony was (SS) \$66,886,788 of which approximately (SS) \$48,590,000 was liquid. In addition the Opium Revenue Replacement Fund amounted to (SS) \$59,109,971.

The Government debt on 31 December 1940 amounted to (SS) \$55,000,000

(i.e. Straits Settlements 3 percent Local Loan 1962-72, \$30,000,000; Straits Settlements 3 percent Local War Loan 1952-59, \$25,000,000) (in 1937 it was a 3 percent loan of SS\$30,000,000 floated locally in 1936 to redeem the balance of a three and one-half percent sterling loan.) The proceeds were relaned to the Harbour Funds and Municipal Commissioners of Singapore and Penang. The Straits Settlements had no public debt then on purely government account and had made loans to Trengganu, Kedah and Perlis of which the unpaid balances amounted to less than SS\$5,000,000).

The surplus of the Straits Settlements in Opium Replacement and Currency Guarantee Funds was in 1937 approximately SS\$126,000,000 with a per capita tax of \$16.

#### Federated Malay States

The public debt of the Federated Malay States on 31 December 1940, was SS\$84,575,000, (in 1937 it was SS\$65,285,715). The annual charge on the revenue for interest and sinking funds was SS\$3,617,574. By 1938 the general revenue surplus had grown to SS\$85,880,937 and the net liquid surplus was SS\$58,023,390. The Opium Replacement Fund in 1937 stood at SS\$30,054,561.\* A Revenue Equalization Fund was created in 1937 with a nucleus contribution of SS\$35,000,000. This provision was owing to the great fluctuation in revenue of the Federated Malay States due to the variation in the price of tin and rubber.

#### Unfederated Malay States

##### Johore

Johore in 1940 had no public debt, (in 1937 it had a surplus of assets over liabilities, including the Opium Revenue Replacement Fund of

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\* It was the Government's policy to reduce, and eventually to abolish the revenue from opium. On the reoccupation of Malaya the manufacture and sale of opium was prohibited so that in future the revenue from this source will be nil.