Edited by
Paul H. Kratoska

Food Supplies and the Japanese Occupation in South-East Asia

Studies in the Economies of East and South-East Asia
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Preface

The period of Japanese domination in South-East Asia between 1941 and 1945 is widely acknowledged as an important episode in the modern history of the region, but remarkably little is known about people's lives during these years. Academic studies have tended to focus on military or political developments, and in many cases examine the occupation in the light of post-war events. Memoirs and popular accounts often dwell on atrocities, such as mass killings and torture at the hands of the Kempeitai. Source materials dealing with other issues are scarce because the Japanese destroyed much of the documentary record of their military administrations when the war ended, and those papers which survived wound up in archives scattered throughout the world, where for many years they remained closed to researchers. This situation has begun to change; most records are now open to the public, and researchers have approached the period with a fresh set of questions, focusing more on social and economic developments than on the political issues that preoccupied earlier writers.

Food shortages plagued nearly every occupied territory, a result of breakdowns in the regional economy that characterized South-East Asia before the war, but the subject has generally been treated within individual countries and often in a cursory fashion. Because the Japanese administered South-East Asia on a regional basis and imposed many policies – including those relating to food supplies – with little regard for local conditions, these issues are best examined from a broader perspective. The present volume attempts to do this by pooling the expertise of a number of scholars who are specialists dealing with particular countries or regions in South-East Asia. The articles they have prepared draw on a very wide range of source materials in many languages, and offer an account of the food situation that spans most of the region.

The Toyota Foundation has been of considerable assistance in the preparation of this volume. It funded a Symposium on the Japanese Occupation organized by the Department of History at the National University of Singapore in December 1995 which was attended by many of the contributors, and provided additional support during the editorial phase of this project. I would like to express

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PAUL H. KRATOSKA

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1 Introduction

Paul H. Kratoska

Japan's advance into South-East Asia was an extension of the conflict which began in China in 1937. Active penetration of the region commenced in 1940, when Japan used diplomatic means to gain access to northern Vietnam, and the process continued in 1941 when the Vichy government in France agreed to place Indochina under Japanese protection. French colonial authorities in Vietnam reluctantly acceded to this arrangement on 29 July, following the landing of 30 000 Japanese soldiers in the southern part of the country. The move caused the United States to freeze Japanese funds and, together with Britain and the Netherlands, to impose a *de facto* embargo on exports to Japan. Because Japan drew on South-East Asia for oil, bauxite and other raw materials needed by the military, the restrictions threatened Japan's capacity to wage war, and instead of restraining Japanese aggression as intended, precipitated open conflict.

Japan invaded Hong Kong, Malaya and the Philippines on 8 December 1941, inflicting heavy casualties and causing severe damage to military installations. Attacks on Clark Field in the Philippines destroyed half of the aircraft belonging to the United States Air Force in the Far East. In Malaya Japanese forces rapidly overwhelmed the territory's inadequate defences to achieve air superiority, and by sinking two British warships, the *Repulse* and the *Prince of Wales*, also won control of the seas around the peninsula. Thailand signed a treaty of alliance with Japan on 21 December, and on 15 February 1942 British forces surrendered in Singapore, completing the conquest of Malaya. By this time the Japanese had also occupied the greater part of the Philippines as well as northern Borneo, and were beginning to attack the Netherlands Indies and Burma. These operations gathered pace after troops engaged in the Malayan campaign were freed to join the invasion forces. Java capitulated on 8 March, and the Japanese entered Rangoon on the same day, following a British decision to withdraw from Lower Burma. By May they were firmly in control throughout South-East Asia.

In attacking the European colonial powers, the Japanese hoped to deal with a threat to their prosperity that had taken shape during the preceding half-century. The country's industrial economy, like that of Britain, was based upon the import of raw materials and the export of manufactured goods. Both Britain and Japan required a broad area within which to operate and depended on free trade to sustain their industrial economies, but Britain enjoyed the added security of a large colonial empire. The shift toward protectionism that began in Europe in the late nineteenth century had little effect on the South-East Asian region, and Japan was able to operate in Asian markets with few constraints until the 1930s. Then the Depression changed the situation. Colonial powers moved to contain trade within empire trading blocs, and in South-East Asia, which was a significant market for Japanese manufactured goods, they took steps directly aimed at limiting imports from Japan. The rise of an aggressive militarism in Japan caused colonial administrations to intensify these efforts, and what was more serious from the Japanese point of view, to restrict access to South-East Asia's raw materials and food production.

Although Japan built its national economy within a free trade environment, around the beginning of the twentieth century it also laid the foundation for an Asian empire by taking control of Korea and Taiwan. Further expansion into northern China and Manchuria in the 1930s gave Japan areas suitable for expanding its industrial capacity, while South-East Asia offered a complementary source of raw materials and a market for manufactured goods. Japan's advance to the south came at a time when imperial systems were losing their viability, but this point was far from obvious in the 1930s. The Depression had given fresh life to those who argued for greater unity and coordination within the European empires, which had never been particularly well integrated, and the logic of relying on comparative advantage rather than introducing uneconomical programmes of industrialization and agricultural development – appropriate perhaps for independent national states but not for the artificial territorial units carved out by colonialism in South-East Asia – remained unshaken.

Within this context, a re-positioning of territories that had served as markets and suppliers of raw materials for the European powers in order to make them markets and suppliers of raw materials for Japan seemed a reasonable solution to the country's economic dilemma. Displacement of the European powers could only be

accomplished through the use of armed force, and the outbreak of war in Europe created a set of conditions that allowed the Japanese to proceed. They designated their proposed new Asian economic order the Greater East Asian Co-Prosperity Sphere, but the exigencies of fighting a war throughout Asia prevented development of the scheme once the initial step had been taken. There was never a detailed plan for the Co-Prosperity Sphere, and in the absence of significant inputs from Japan it was little more than a propaganda device.

In the short term, the Japanese saw South-East Asia as a supplier of key resources needed to prosecute the war, notably petroleum and bauxite, and concentrated their efforts on securing these commodities. They had no immediate need for many of the other raw materials that had been central to the regional economy before the war. For example, rubber and tin production in Malaya and the Netherlands Indies greatly exceeded Japanese requirements, and with established markets for these products no longer accessible, large numbers of people found themselves out of work. Imports of manufactured goods also came to a stop, as did the movement of commodities within the region. South-East Asian countries normally imported industrial and manufactured goods such as machine parts, tools and cloth, while petroleum, salt, fish and rice were produced at various locations within South-East Asia and distributed by regional commercial networks. Although the loss of all of these commodities caused considerable hardship, the most serious difficulties arose in connection with food.

South-East Asia was a net exporter of rice before the war, but the region had a number of food-deficit territories, and during the occupation a breakdown in mechanisms of distribution led to severe food shortages. Although there is good rice land in South-East Asia, much of the region is hilly and poorly suited for wet rice cultivation. Historically, most farmers grew rice for their own use, and their modest surpluses went to reserve stocks or to towns. A series of changes that began in the eighteenth century created large rice-deficit areas and greatly increased the demand for commercially available rice. The European market for pepper, sugar, coffee and tobacco was growing, and these products began to be cultivated for export on Luzon and Java, where there was ample vacant land and an adequate labour force. As production expanded, certain districts began to concentrate on non-food export crops, and brought in rice from districts which had surpluses. On Luzon,

for example, sugar producers in Pampanga grew progressively less food while rice farming expanded further to the north, with Pangasinan, Tarlac and Nueva Ecija supplying rice to the sugar haciendas, the tobacco-growing areas in Ilocos and the Cagayan Valley, and the provincial towns as well as the capital. On Java, sugar cultivation retained features of the earlier mixed commercial-subsistence economy, but there too people living in the main sugar-growing areas obtained part of their food requirements from nearby districts which produced surplus rice.[1] Toward the end of the nineteenth century, this pattern of specialization was replicated on a regional basis. The development of commercial rice cultivation in the deltas of the Irrawaddy, Chao Phraya and Mekong rivers made it possible to establish plantations on land situated far away from food-producing areas, and rice grown in mainland South-East Asia became central to the regional economy. Other locations sold rice on a smaller scale in local markets, among them Kedah, Bali, Lombok, the Celebes, parts of Java, and the provinces of Luzon mentioned above. Over time increasing numbers of people found opportunities to earn money through commercial agriculture or wage labour, and used their incomes from these sources to purchase rice and manufactured goods.

During the last decade before the war, large areas in South-East Asia depended on imports to obtain the greater part of their rice requirements. In 1939 imports accounted for some 42 per cent of rice consumption in the Philippines, two-thirds of consumption in British Malaya and Ceylon, and half of that in the East Coast Residency of Sumatra and in Sarawak. Moreover, dependence on imported rice was not limited to mine or plantation labourers and urban populations, for territories where the population consisted of peasant farmers also drew on external sources for a substantial part of their food supplies; the dry zone of Burma, South and East Borneo, Sarawak, Menado and the Moluccas, Southern Luzon and several islands in the Visayas (Samar, Bohol, Leyte, Cebu, Negros and Panay), and the east coast states of Malaya all imported rice. In Malaya the largely rural states of Kelantan and Pahang produced just 60 per cent of their requirements.[2]

The key to this regional rice economy was transport. Traders moved supplies on foot, by boat along inland waterways, by road and by rail, and by sea, but following the Japanese invasion much of the communications network became unusable. Regional transport suffered damage during the fighting, and many of the vehicles

which remained operational were commandeered by the military. Moreover, equipment deteriorated as the occupation progressed owing to heavy usage, shortages of spare parts and reliance on inadequate substitutes for petroleum-based lubricants and fuel.

With trade at a standstill, Japanese administrations encouraged local production and emphasized the need to become self-sufficient, not only in the case of major territories such as Burma or Malaya, but also for provinces and even districts. As a response to the situation which had emerged in South-East Asia the Japanese policies were arguably necessary, but they were far removed from the ideal of an integrated co-prosperity sphere.

The chapters of this book deal with food supplies in wartime South-East Asia. Although there were significant differences between countries, the authors present similar pictures of growing hardship as local economies declined and food grew increasingly scarce. The responses of the Japanese were also much the same, with the military administrations conducting campaigns to encourage people to grow more food, and taking steps to relocate urban populations to the countryside. However, other Japanese activities aggravated the situation, in particular the requisitioning of rice for military use, and the practice of printing money to cover administrative and military expenses.

The wartime food crisis affected rice surplus as well as rice-deficit areas. In rice-exporting areas of mainland South-East Asia, as the first two chapters in this collection show, farmers faced a glut of rice which they could not sell, and began to cut back on production. By the end of the war the commercial rice-growing districts of Burma, Thailand and Cochinchina were producing little more than was needed to meet local requirements. In rice-deficit areas, people planted vegetables on whatever land was available, and substantial numbers of urban dwellers, most of them with no farming experience, relocated to the countryside to attempt to grow food. At the same time, other people moved into the towns to take advantage of the rations distributed there. Tonkin experienced famine in 1945, while elsewhere malnutrition caused deficiency diseases and increased the susceptibility of the population to a wide range of other ailments.

Although farmers normally could count on adequate supplies of food, even they faced hardships. To meet the needs of urban

populations, the Japanese limited the amount of rice that farmers could retain for personal use, and they paid relatively low prices for requisitioned stocks. At the same time, salt, edible oils, tools, clothing and kerosene became very scarce, and the prices demanded for supplies on the black market rose to exorbitant levels. In Rangoon, 100 pounds of cooking oil cost 22 rupees before the war, and nearly 286 rupees in 1943, while the price of a four-gallon tin of kerosene went from $3\frac{1}{2}$ to 64 rupees during the same period.[3] Malaya recorded similar increases. In Kota Star, Kedah, a tin of coconut oil sold for $2.40 before the war, $85 in August 1944, and $315 on 1 February 1945.[4] Farmers faced other difficulties as well. Because the military restricted access to weapons, they could no longer shoot wild pigs and monkeys that caused crop damage, and where farmers depended on irrigation, poor maintenance of feeder canals and dams affected crops. Disease reduced the numbers of draught animals, and people in rural areas were debilitated by attacks of malaria – which became increasingly serious as mosquito-control programmes were allowed to lapse.

Java, as Aiko Kurasawa indicates, was self-sufficient in food, but within Java there were regions with rice surpluses, and rice-deficit areas which depended on those surpluses. Although the conquest was accomplished with little fighting and the Japanese secured much of the island's infrastructure intact, the Dutch destroyed bridges as part of a 'scorched earth' policy, and transport rapidly deteriorated under the Japanese regime owing to fuel shortages, poor maintenance and military requisitioning. As a consequence, rice could not be shipped to regions that needed it. In the latter part of the occupation, widespread mobilization of *romusha* – conscripted labourers – both increased the need for food and reduced the capacity of the rural population to produce it. Shigeru Sato argues that ineffective Japanese efforts to deal with the shortages exacerbated the problem, and suggests that officials came to believe their own 'romantic' propaganda statements. A black market in rice went some way toward overcoming the shortage of supplies for the official rationing system, but Pierre van der Eng's analysis indicates that the black market did not wholly compensate for the inadequacies of the official system of purchase and distribution. He argues that food shortages in Java were a product of Japan's attempt to control the rice market at all levels, from production through retail sales.

Rice-deficit areas in Malaya and the Philippines depended on imports to make up shortfalls in local production, and early in the

occupation faced the prospect of serious food shortages. The Japanese called on people to plant vegetables on all available land, particularly in towns and cities, and established controls over the production and sale of rice. In parts of Malaya, rubber trees and forest were cleared to make room for agricultural colonies, and the state of Kedah, one of the few areas in the country with a marketable surplus, experienced difficulties because the Japanese requisitioned a substantial proportion of local production to satisfy military needs. In the Philippines, as Ricardo T. Jose shows, changing land use involved not only food production but also a scheme to increase the cultivation of cotton, which was badly needed for textiles and munitions. In both countries government intervention failed to overcome the food shortages. Some newly opened lands were poorly suited for food production, and the people who were expected to grow food often lacked farming experience. Moreover, rural infrastructure was crumbling, with irrigation facilities poorly maintained, and transportation becoming scarce and expensive. The currency introduced by the Japanese declined in value, and prices paid under official buying programmes lagged far behind the rate of inflation, making sales to the thriving black market ever more attractive. Agencies created by the Japanese within the administration, and the centralized trading organizations they supported, could do little to overcome this combination of circumstances, and in both Malaya and the Philippines the situation deteriorated sharply in the final stages of the occupation.

Conditions were far worse in the Tonkin area of Vietnam. Under normal circumstances the land holdings of many farmers in the densely populated Red River delta were barely sufficient for subsistence, and wartime policies requiring the cultivation of fibre-producing and oleaginous plants, combined with compulsory requisitioning of rice, pushed the population to the brink of starvation. During 1945 the inadequacies of this system combined with a succession of poor harvests produced famine. In this volume, Nguyên Thê Anh describes the course of the famine and its consequences, while Motoo Furuta explains efforts to use oral history to reconstruct this poorly-documented episode half a century after the fact.

Sarawak represents a partial exception to the situation described above. The Japanese introduced similar policies, but poor transport, sparse population, and a relatively small administrative apparatus made enforcement of the new regulations difficult, and outside of the main population centres people appear to have had reasonable

supplies of food. Where the administration could lay hands on supplies of rice, as in the vicinity of Kuching, they did so, forcing farmers to eat sago and root crops such as sweet potato and tapioca, viewed in Sarawak as famine foods. In other parts of the state the Japanese also ordered farmers to sell paddy, but many people successfully evaded the regulations. Overall, there was an increase in the cultivation of wet rice and of other food crops, and because Sarawak had sufficient land to increase agricultural production, most of the population was able to find enough to eat. Rice commanded high prices, but inflation and high prices paid for consumer goods largely offset gains by farmers on this account.

In conclusion, the chapters that make up this collection suggest a multiplicity of causes for the food deficits that plagued South-East Asia during the Japanese occupation. To some degree shortages can be traced to physical limitations such as poor soils and a lack of transport. Other causes are associated with limitations in human agencies, such as inefficient administrative arrangements and unrealistic policies, or conflicts involving administrative personnel. With the notable exceptions of the residents of Tonkin and some of the *romusha*, there was little outright starvation during the occupation, but food shortages caused malnutrition throughout the entire region, and were a constant reminder of the inadequacies of the regime imposed by the Japanese.

Notes

1 See Marshall S. McLennan, *The Central Luzon Plain: Land and Society on the Inland Frontier* (Manila: Alemar-Phoenix Publishing House, 1980), chs 3–4, and R.E. Elson, *Village Java under the Cultivation System, 1830–1870* (Sydney: Allen and Unwin, 1994), pp. 234–6.

2 Karl J. Pelzer, *Planters and Peasants* ('s-Gravenhage: Martinus Nijhoff, 1978), p. 119; J.E. Spencer, *Land and People in the Philippines* (Berkeley and Los Angeles: University of California Press, 1952), p. 60; Kelantan Drainage and Irrigation Department, Annual Report for 19 Oct. 1943 to 19 Oct. 1944, DID MP 6/1946; Kelantan Governor's Office 5/2486 [1943]; Census Regarding Surplus/Deficit of Rice in Each District, Pahang, after present Padi Harvest, 2602, District Office Temerloh 285/2602 [1942].

3 Burma Intelligence Bureau, *Burma during the Japanese Occupation*, vol. 1, pp. 67–8.

4 Kota Star District Office, Annual Report for 2487, 28.2.2488 [28 Feb. 1945], Kedah Sec 208/2488.

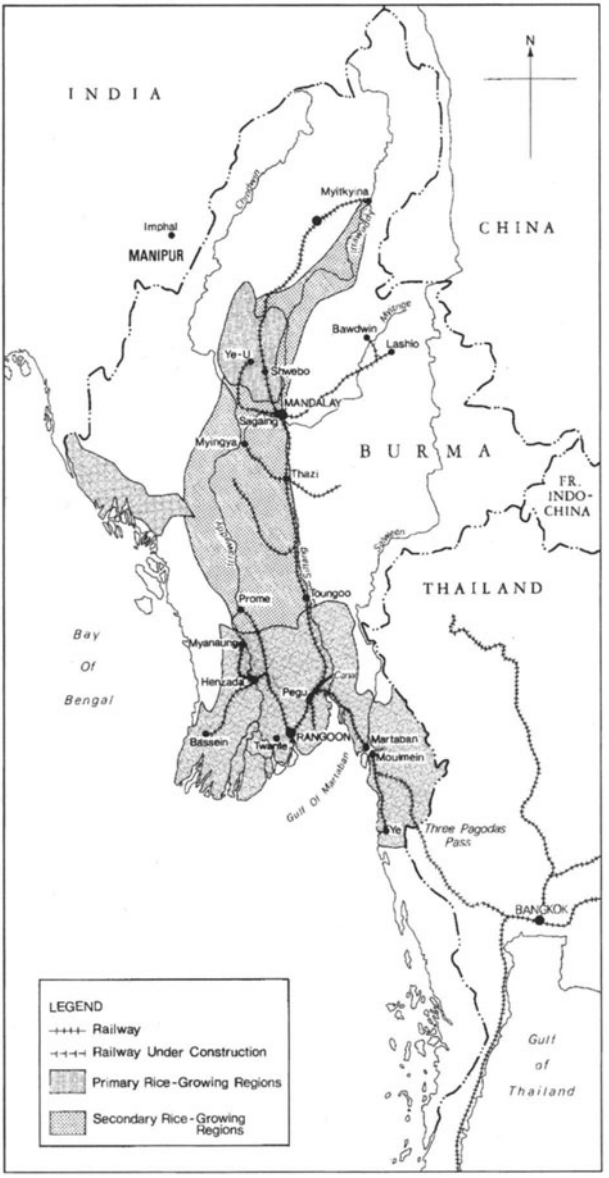
2 The Impact of the Second World War on Commercial Rice Production in Mainland South-East Asia

Paul H. Kratoska

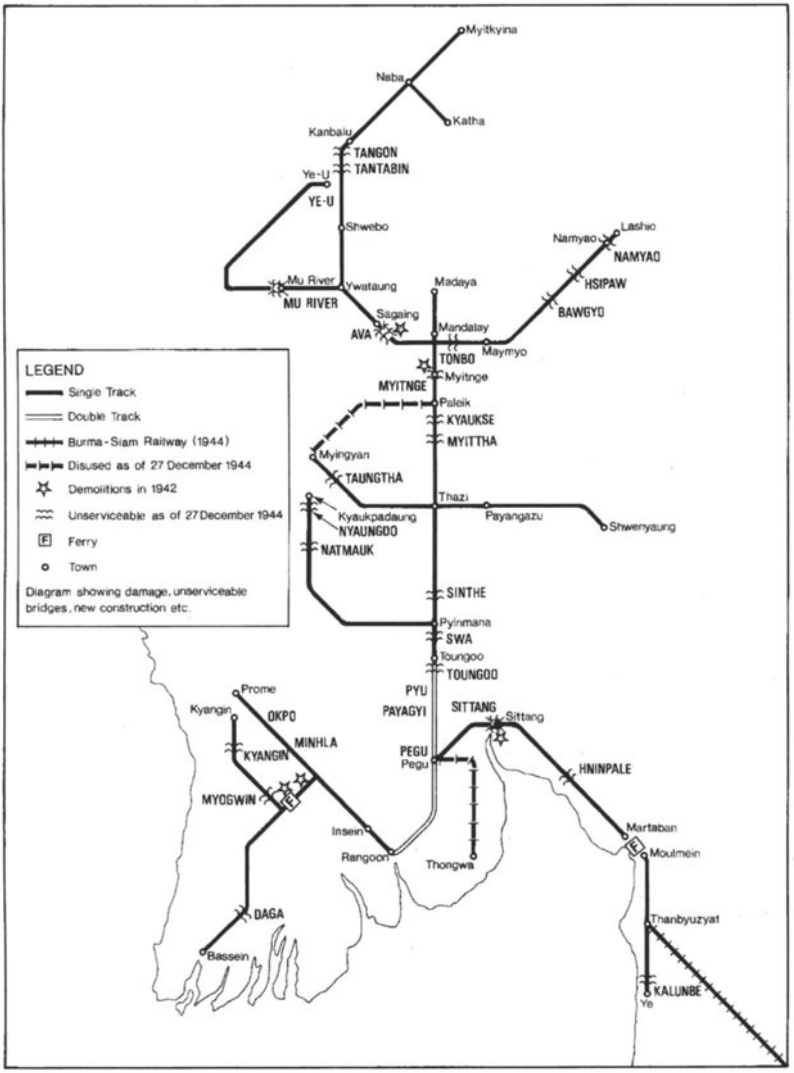
South-East Asia's commercial rice economy all but collapsed during the Japanese Occupation owing to the disruption of existing trade networks and a severe shortage of transportation and fuels. Unable to find a market for their grain, farmers in rice-exporting territories cut back on production, and by the time the war ended were growing little more than they needed for their own use. In rice-deficit areas, people experienced food shortages and malnutrition as they struggled to grow vegetables and root crops to replace imported rice. The post-war period brought a degree of recovery, but government controls and domestic political turmoil prevented the restoration of the export trade, while territories with food deficits before the war increased agricultural production to reduce their dependency on imported rice.

THE RICE INDUSTRY IN PRE-WAR SOUTH-EAST ASIA

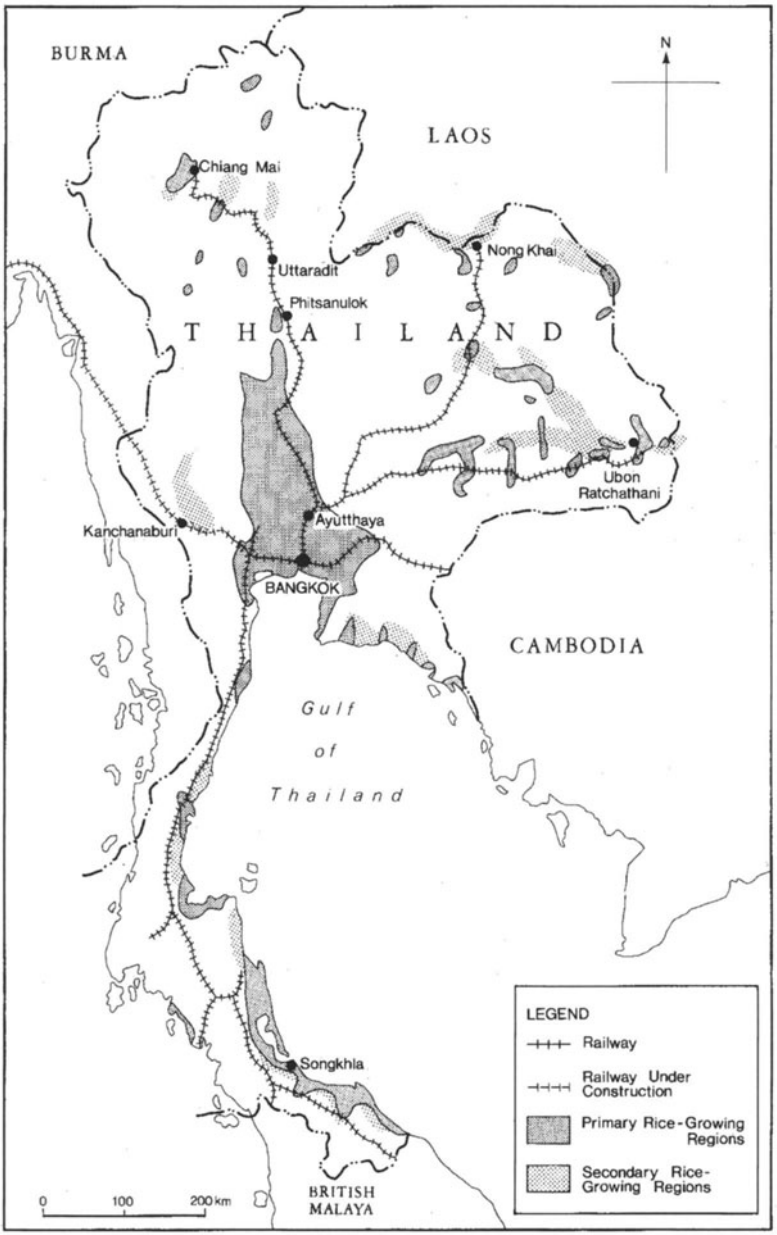
In 1930 the three major rice-exporting areas of mainland South-East Asia – Lower Burma, the Central Plains of Siam ('Thailand' between 1939 and 1945, and again after 1947), and Cochinchina – accounted for 67 per cent of the rice entering world trade (see Maps 1, 2, 3 and 9). About one-third of this rice was sold in South-East Asia, while most of the balance went to China, India and Europe. Rice marketed within South-East Asia was medium-quality grain, and was consumed by people living in towns and cities, by mine and plantation workers, and by smallholders growing rubber and other commercial crops. Rice exported to Europe was of



Map 1 Railways and rice-growing areas of Burma, 1940s



Map 2 Burma Railways in 1942 and 1944



Map 3 Railways and rice-growing areas of Thailland, 1940s

high quality if for food, or low quality if it was intended for the brewing industry or for making industrial starch. China and India puchased grain that failed to find a market elsewhere, and absorbed around half of the rice exported from Burma, Siam and Indochina.

Farmers in the rice plains of mainland South-East Asia utilized rainfall and the flood waters of rivers that rose in the Himalayas to grow wet rice; there was little controlled irrigation, but the monsoon rains rarely failed. Farms were small, and cultivators used family labour, supplemented during the planting and harvest seasons by itinerant hired labour. Apart from the farmers, the rice industry consisted of a trading network that purchased, collected, milled and exported the grain, and another network to receive and distribute the rice in importing countries. Throughout most of South-East Asia, the rice trade was in Chinese hands, while in Burma – where Indian and European merchants initially dominated this field – Chinese rice millers made substantial inroads during the 1930s.

The system could not function without transport, both internally to carry unmilled rice (paddy) from the field to the mill, and externally to deliver rice to consumers. In South-East Asia, millers and speculators stored rice in producing areas as paddy, which was more durable than milled rice, and processed and shipped the grain on close to a year-round basis, creating a constant demand for transport. The most common arrangement involved collection of rice by small boats, transport to the mills by barges, and the use of lighters to carry milled rice to steamships for export, but rice also moved by train, lorry and oxcart.

Commodity exports from rice-deficit areas in South-East Asia normally commanded sufficiently high prices to cover the cost of imported rice with little difficulty. During the depression, however, governments tried to reduce their dependence on imported rice. To encourage rice production within the Netherlands Indies, where cheap grain from Burma and Vietnam was depressing prices for local rice, the Dutch administration banned rice imports from outside the archipelago into South and East Borneo and the Moluccas, and restricted imports to Menado, in order to force these territories to buy rice from Bali and Lombok and the Celebes. For Bangka, Western Borneo, Jambi, Riau, Palembang and Aceh, the government used quotas to shift consumption away from imported grain. The East Coast Residency of Sumatra was a special case, a region that imported large quantities of rice but was a considerable distance from the major rice-producing areas within the archipelago,

and there the administration simply stipulated that at least some rice must be imported from Java, where the collapse of the sugar industry had freed some 170 000 acres of land for wet rice cultivation.[1] In British Malaya the government attempted to increase yields, but existing rice-surplus areas in Kedah, Perlis, and northern Perak did not have sufficient capacity to meet local requirements, and the expansion of rice production meant committing large sums of money to irrigation facilities and diverting labour from more lucrative pursuits. As a result, little was done until just before the war.

Government attempts to steer the rice trade of the Netherlands Indies into certain preferred channels fuelled competition among the major rice-exporters for what remained of the South-East Asian market, and for markets outside of the region. China was a major purchaser of Siamese and Indochinese rice, but China's imports fell from an average of 944 000 tons per year during the 1920s to an average of 338 000 tons per year between 1936 and 1938. In India, which normally purchased Burmese rice, imports rose from an average of 702 000 tons during the 1920s to 1 290 000 tons between 1936 and 1938, and both Vietnam and Siam attempted to capture a share of this market.[2] There was a flurry of interest in sales to Latin America and particularly to Cuba in the mid-1930s, but this market proved to be limited and transient.

Japan imported nearly 2.3 million tons of rice per year during the 1930s, but 98 per cent of Japanese imports came from Korea or Formosa, and Japan purchased little rice from South-East Asia. In 1939, however, both Korea and Formosa had poor harvests, and Japan was able to obtain just 1.6 million tons from these sources. Rice stocks held in Japan fell from 1.45 million tons in 1938 to 677 000 tons in 1939, forcing the Japanese to turn to suppliers outside the yen bloc. The rice-producing countries in South-East Asia were eager to sell to this market, but with Japan in the midst of a military build-up and experiencing shortages of foreign exchange, rice sales had important political implications.[3]

For Thailand, Japan's sudden need for imported rice created an opportunity to redress a longstanding trade imbalance, but because of the Sino-Japanese War the Chinese merchants who dominated the Thai rice trade refused to deal with Japan. Efforts by Thailand's Ministry of Economic Affairs to overcome their boycott by entering the market as a buyer and exporter of rice proved ineffective, and Chinese control over the market was so complete that European firms also refused to sell rice to Japan for fear that the

boycott might be extended to them as well.[4] To break the impasse, a group close to the Thai government, led by the Head of the Oil Fuel Department of the Ministry of Defence, Wanit Pananom, approached the Japanese with an offer to establish a rice mill and export rice to Japan and to territories under Japanese control,[5] an initiative that led to the creation of the Thai Rice Company in November 1938. Apart from Wanit, the promoters of the company included the heads of the state railway system, the Department of Commerce and the Division of Civil Aviation, while the Ministry of Finance and Ministry of Commerce owned a majority share.[6] The promoters' stated purpose was to improve the rice industry by producing better quality rice and by paying farmers more for their grain, but they also planned to bypass Chinese middlemen and purchase rice through cooperative societies set up under the Ministry of Agriculture.[7]

In 1940 the Thai Rice Company used its government connections to become the dominant force in the industry. Moreover, the unofficial monopoly enjoyed by the company enabled it to raise prices at will, and competition between the Malayan government and buyers from Hong Kong helped push quotations to high levels. In Singapore, where wholesale prices had held steady at about $6 per bag (f.o.b.) for several years before the war, Thai rice sold for $8 per bag in September 1940, and a year later reached $15–$20 per bag.[8] The Thai Rice Company said the increases were due to a rice shortage in Thailand, but production figures do not support this contention. The local European Chamber of Commerce in Thailand claimed that in 1941 large quantities of grain, perhaps as much as a million tons, remained unsold just prior to the new harvest, and this allegation is consistent with the low export figures for 1940 and 1941 (see Table 2.1). Moreover, prices paid to rice farmers for unmilled rice remained low, suggesting that the country had ample supplies.[9]

Burma, too, was eyeing the Japanese market. India purchased large quantities of Burmese rice during the first half of the 1930s and accounted for over two-fifths of Burma's exports in 1936.[10] However, the trade then fell off, and the outbreak of the European war cost Burma its markets in central Europe, where the brewing industry normally purchased substantial amounts of low-quality rice. Japan offered an important alternative, and when the British Ambassador there suggested in October 1940 that measures to raise prices against Japan in Thailand, Burma and French Indochina,

Table 2.1 Thai paddy production and exports of milled rice ('000 metric tons)

Year	*Paddy Production*	*Rice Exports*
1936/37 [BE2479]	3413	1574
1937/38 [BE2480]	4601	1113
1938/39 [BE2481]	4568	1570
1939/40 [BE2482]	4605	1911
1940 [BE2483]*	4972	1222
1941 [BE2484]	5171	1175

Note:
* With effect from 1941 [2484 of the Buddhist Era], Thailand followed the Western practice of commencing the new year on 1 January instead of 1 April as before. Figures for 1940 [BE2483] cover the months of April through December.

Source: Thailand, *Statistical Year Book*, No. 21.

combined with a programme of pre-emptive buying, could have a good and perhaps decisive effect in limiting Japanese aggression, the reaction of British officials in Burma was cool. 'There is and will be a surplus of rice in Burma for which no buyer other than Japan seems likely to be forthcoming, and we feel that to restrict the supply to Japan would be unduly and quite clearly provocative.'[11] Burma urgently needed to find a market for some 300 to 500 thousand tons of rice. If Burmese rice was withheld, the argument ran, Japan would simply turn to Thailand, 'and her influence over that country may well increase, to our disadvantage'.[12] Burma continued to sell rice to Japan until Japanese credits were frozen in August 1941[13] (see Table 2.2).

Cochinchina's exports to Japan were governed by an agreement with the Vichy regime in France. Shipments to Europe and to French colonies elsewhere fell sharply in 1940, and East Asia absorbed the greater part of the excess exportable surplus (see Table 2.3). In January 1941, the Vichy government agreed to sell Japan 80 per cent of Indochina's rice exports for the year, and gave Japan an option on the balance. In 1941 Japan anticipated purchasing 700 000 tons of rice; in 1942 1 050 000 tons, in 1943 950 000 tons and in 1944 900 000 tons. In the event, Japan purchased the entire 1941/2 export surplus of slightly less than one million tons of rice. Substantial amounts went to Japan through 1943; although there

Table 2.2 Exports of rice from Burma ('000 tons)

	India	*Ceylon*	*Malaya*	*Germany*	*Sumatra*	*China*	*Japan*	*Other*	*Total*
1930–1 to 1932–3 (ave.)	944	323	277	212	96	328	25	820	3025
1934–5 to 1936–7 (ave.)	1695	338	202	97	64	87	20	464	2967
1938–9	1475	359	243	169	96	17	0	567	2926
1939–40	1862	368	178	89	54	30	126	342	3049
1940–1	1250	360	218	0	0	111	551	409	2788

Source: Reports on the Maritime Trade and Customs Administration of Burma, India Office Records, V/24/487, V/24/488, V/24/489.

are significant differences between French export figures and Japanese import figures[14] (see Tables 2.3 and 2.4).

THE WAR YEARS

Japan's advance engulfed all three of the major rice-exporting territories of South-East Asia, and its rice-deficit areas as well. The commercial rice-growing regions of Cochinchina and the Central Plain of Thailand survived the transition unscathed, but Burma was the scene of combat during the invasion, and the infrastructure for the rice industry was badly damaged by fighting and by Britain's scorched earth policy.

Pre-war rice surpluses in Burma, Thailand and Cochinchina were more than sufficient to meet the needs of South-East Asia's rice-deficit areas, and of Japan as well, but under wartime conditions the Japanese administration was unable to sustain the basic conditions that underlay the rice export industry. The problem did not lie in war damage, for apart from Burma, internal transport facilities, rice mills, and warehouses in mainland South-East Asia were more or less intact. Other elements of the rice trade, however, ceased to function. Chinese commercial networks could not operate as before owing to restrictions on transport, communications and the movement of capital. Labour, which was abundant at the start of the occupation, became scarce by 1944 owing to recruitment of manpower for military projects. Canals and dykes, and irrigation works where these existed, were poorly maintained owing to a lack of labour and materials. Inadequate stocks of fuel and lubricants, the use of transport for military purposes, and a severe shortage of cargo vessels to handle exports, made it difficult to move bulk commodities such as rice, although traders did manage to supply an active black market. Finally, even if more rice had been shipped, many of those who needed it would have been unable to purchase the grain, for they had lost their sources of income.

Japan continued to face rice shortages at home. Purchases made in South-East Asia during 1940 allowed the country to build up domestic reserves to nearly 1.2 million tons, but stocks declined thereafter, and imports dropped to very low levels. By 1944 Allied attacks were making it difficult to bring in South-East Asian rice even on a reduced scale. (See Table 2.4 for data on Japan's wartime rice imports as reported in Japanese sources.) This inability

Table 2.3 Rice exports from Indochina ('000 tons)

	France	*Other European countries*	*Other French colonies*	*Hongkong*	*China*	*Japan*	*Other*	*Total*
1939	451	144	137	211	84	8	638	1673
1940	90	49	107	361	265	468	246	1586
1941	22	7	57	74	160	583	40	944
1942	—	—	37	—	—	937	—	974
1943	—	—	15	—	—	1008	—	1024
1944	—	—	1	—	—	497	1	499
1945	—	—	—	—	—	45	—	45

Source: *Annuaire Statistique de l'Indochine, 1943–1946*, p. 298.

Table 2.4 Japanese rice imports ('000 tons)

	Indochina	*Siam/ Thailand*	*Burma*	*Total From South-East Asia*	*Korea and Formosa*	*Grand Total*
1936	0	67	0	67	2299	2366
1937	0	48	0	48	1932	1980
1938	0	25	0	25	2521	2546
1939	0	26	0	26	1608	1634
1940	461	313	556	1330	530	1860
1941	677	461	500	1638	879	2517
1942	741	628	55	1424	1157	2581
1943	688	164	29	881	302	1183
1944	39	35	0	74	800	874
1945	0	0	0	0	268	268

Source: Jerome B. Cohn, *Japan's Economy in War and Reconstruction* (Minneapolis: University of Minnesota Press, 1949), p. 369. For another, slightly different, set of figures, see Yukichika Tabuchi, 'Indochina's Role in Japan's Greater East Asia Co-Prosperity Sphere: A Food-Procurement Strategy', in Takashi Shiraishi and Motoo Furuta (eds), *Indochina in the 1940s and 1950s*, (Ithaca: Southeast Asia Program, Cornell University, 1992), p. 99. French figures for wartime exports to Japan are substantially higher (see Table 2.3).

to import rice caused severe food shortages, and people supplemented their diets with soybeans, wheat, barley, and coarse grains imported from Manchuria such as maize, millet and sorghum.

Thailand

The market for Thai rice remained strong through 1943. Serious flooding in October 1942 damaged the standing crop, and in 1943 local demand was sufficient to absorb production, making up for the decline in exports. A.G. Baker, a Malayan rice expert sent to Bangkok in 1941 to conduct negotiations concerning rice purchases and interned there during the war, believed the country had a carry-over of a million tons of rice in 1941, but that this reserve had been wiped out by the end of 1943. A good harvest in 1944 produced a new carry-over, and difficulties experienced by farmers in marketing this grain had a dampening effect on production, as did diversion of labour from agriculture to military projects, and the slaughter of draught animals for food. Farmers reduced production in 1945, but according to Baker's Chinese sources, dealers and farmers held a surplus of around one million tons of unmilled rice when the war ended[15] (See Table 2.5).

The authorized retail price of milled rice was about 10 baht per picul ($133\frac{1}{3}$ pounds) in December 1941, and stood at 15 baht per picul in December 1944. The free- (or black-) market price of rice was 35 baht per picul in May 1945. Since the purchasing power of the baht had fallen to about one-tenth of pre-war levels, even the black-market figure represented a significant decline in the real value of rice. The official minimum price paid to farmers for unmilled rice (fixed by the government at 7.50–10 baht per picul in May 1945) maintained the pre-war ratio between the retail price of white rice and the price paid to farmers for paddy, around two to one in 1941, but did not reflect wartime price increases in consumer goods.[16]

A decline in milling capacity caused by poor maintenance and shortages of replacement parts for rice mills contributed to the difficulties faced by exporters, while gunny sacks, formerly imported from India, were also in very short supply. The Japanese encouraged jute cultivation in Thailand and the output, which by 1944 probably exceeded 3000 tons per year, was used to make bags. Traders also packed rice in bags woven from rushes, which they obtained both locally and from southern China. Jute sacks commanded premium prices, with new sacks quoted at 10 baht each, and serviceable second-hand sacks at 7 baht.[17]

Table 2.5 Exports of Thai rice according to Thai statistics ('000 metric tons)

Year	*Paddy production*	*Singapore*	*Malaya*	*Hong Kong*	*China*	*NEI*	*Japan*	*Other*	*Total*
1939/40	4605	719	57	329	39	31	138	598	1911
1940	4972	416	74	261	96	10	193	172	1222
1941	5171	199	66	264	167	1	448	30	1175
1942	3907	38	23	—	66	7	527	99	760
1943	5758	146	49	—	30	2	251	67	545
1944	5158	137	41	—	13	3	14	105	313
1945	4928	127	15	32	—	—	—	23	197

Source: Statistical Year Books, Thailand, covering B.E. 2482 [1939/40] to 2488 [1945]; Annual Statement of the Foreign Trade and Navigation of the Kingdom of Thailand, no. 46. B.E. 2490 [1947], p. 274. Regarding the figures for 1940, see the note to Table 2.1.

Burma

Burma was the world's largest pre-war exporter of rice, but very little grain left the country during the occupation. The 1941–2 crop was exceptionally large, and paddy prices collapsed when much of it failed to find a market. Toward the end of 1942, grain could be purchased in the rice-growing areas of Lower Burma for Rs. 45–50 per 100 baskets, compared with prices of more than Rs. 200 per 100 baskets in the mid-1930s. In 1943 the military administration attempted to support the market by buying paddy for Rs. 80 per 100 baskets, but it could not absorb the entire crop and private buyers were able to obtain paddy by offering prices as low as Rs. 60. A serious rice shortage was developing in Upper Burma, causing prices there to rise to extremely high levels (in Mandalay paddy sold for as much as Rs. 800–1000 per 100 baskets), but internal transport had broken down following the scuttling of the fleet belonging to the Irrawaddy Flotilla Company as part of the British 'scorched earth' policy, and it was impossible to move large quantities of grain north from the Delta.[18] Finding their crops unsaleable, farmers in the south cut back on production and surpluses dwindled. By 1945–6 the area planted with rice was less than half of that cultivated in 1941–2, and farmers were growing little beyond what they required for personal use. Because the price of goods in rural areas had increased, many cultivators found it impossible to earn a living from agriculture and moved into the towns

where there was a steady demand for labourers to work on military projects, or else turned to banditry. An additional difficulty was that the Chettiar moneylenders who financed much of the pre-war rice cultivation in Burma had left for India and there was no alternative source of funds to sustain farmers through the growing season. Moreover, the Indian labourers who handled rice in the mills and at the port of Rangoon before the war had fled the country when the Japanese invaded.[19]

British forces moved down the Irrawaddy River valley during the early months of 1945 and reached Rangoon on 3 May, but fighting continued for some time in the surrounding rice-growing districts. The Delta region was in a disturbed state during the period when farmers normally planted their main crop, with guerrilla bands active and isolated bodies of Japanese troops trying to live off the land. The poor security situation made peasants reluctant to follow their usual practice of building temporary huts in the fields, so only land lying close to the villages was cultivated. Intervening areas became overgrown with brush, and sheltered pests that attacked the growing crop.

Burma's rice industry emerged from the war in poor condition: the area planted with rice was greatly reduced, draught animals and agricultural equipment were in short supply, mills were in a state of disrepair, buying arrangements had broken down, and transport was scarce.[20] The figures in Table 2.6 show the scale of the decline. Between 1936 and 1940 Burma produced an average of 4,900,000 tons of milled rice per year, and exported about 2,900,000 tons.[21] Thus the country's internal food requirements can be placed at roughly two million tons, equivalent to 3,575,000 tons of paddy.[22] Table 2.6 indicates that paddy production dropped below this level in 1943, 1944, and 1945, and barely exceeded subsistence levels in 1946. The change was greatest in the commercial rice-growing areas concentrated in Lower Burma, as can be seen from Table 2.7.

Cochinchina

In Cochinchina production remained at pre-war levels until 1943, but then fell sharply owing to reduced purchases by Japanese Army buying agents, and to low prices. The French Comité des Céréales, a body created in December 1942, handled rice purchases until the final months of the war when it was replaced by the Mitsui Bussan

Table 2.6 Paddy production in Burma ('000 metric tons)

Year	*Sown Area ('000 ha)*	*Production ('000 tons)*
1936	4927	7322
1937	5053	6892
1938	5011	6744
1939	5031	7942
1940	5066	6894
1941	4988	7738
1942	4329	5752
1943	3090	3053
1944	2631	2545
1945	2629	2677
1946	3201	3844
1947	3479	5440

Source: U Khin Win, *A Century of Rice Improvement in Burma* (Manila: International Rice Research Institute, 1991), Appendix I, p. 143. U Khin Win obtained figures for the war years from Season and Crop Reports prepared by the Department of Settlement and Land Records.

Table 2.7 Burmese production of milled rice

	Five-year average (1935/6–1939/40)		*1945/6*	
	Area (000 acres)	*Yield (000 tons)*	*Area (000 acres)*	*Yield (000 tons)*
Lower Burma	9682	5980	4686	1986
Upper Burma	2113	1051	1588	643
Total	11795	7031	6274	2629

Source: *Season and Crop Report of Burma for the Year Ending 30th June 1947* (Rangoon: Supt of Govt. Printing, 1947), Appendix, Statement V.

Kabushiki Kaisha. Before the war around 1 300 000 tons of paddy were normally available to be milled for export from Cochinchina after local requirements had been met. In 1942 and 1943 the quantities received for export in Cholon, where the major rice mills were located, exceeded this figure, but the figure for 1944 was just 743 121 tons, and exports from Cochinchina fell sharply. Paddy shipped to Cholon during the first seven months of 1945 came to less than one-third of the already low 1944 figure, and the area

planted with rice in Cochinchina during the 1944/5 season was substantially less than before the war, with around 490 000 acres abandoned between 1943 and 1945[23] (see Tables 2.8 and 2.9).

The cost of living in Cochinchina increased nearly fivefold during the war, but the controlled price paid for paddy by the Comité des Céréales rose only slightly, from five to seven piastres per picul; in June 1945 Mitsui raised the price to nine piastres. By selling paddy on the black market, farmers could get between 12 and 18 piastres per picul. As in Burma the Japanese army offered good wages for coolie labour (as much as eight piastres per day by July 1945) and many rice planters in the Mekong Delta, where the incidence of tenancy was high and few cultivators had rice land of their own, left farming to work for the military, reducing the size of the workforce available to handle the rice crop.

On 1 October 1945 stocks in Saigon were estimated to be 81 000 tons, but some of this grain, possibly as much as 30 000 tons, had been kept in storage for several years and was unfit for human consumption. Requirements in the south for October through December, when the rice harvest would get underway, amounted to 35 000 tons, leaving a surplus of just 15 000 tons. This rice was urgently needed in the northern part of the country, where people were dying of starvation, but in Vietnam as elsewhere shipping shortages made the movement of grain difficult.[24]

THE RICE INDUSTRY IN POST-WAR SOUTH-EAST ASIA

After the war, a severe worldwide food shortage created heavy demand for foodgrains. Rice was placed under international control and available supplies were allocated among importing countries, initially by the Combined Food Board, and then by the International Emergency Food Council (IEFC) which succeeded it. Once allocations had been settled, buyers and sellers had to make their own arrangements, but much of the trade was conducted on a government-to-government basis.

There were a number of obstacles to the rapid recovery of the commercial rice industry in mainland South-East Asia, including shortages of draught animals and tools, deterioration of irrigation systems, and damage to milling and storage facilities. In many areas the security situation was poor, and farmers could not cultivate their fields. Moreover, the system of international controls, along

Table 2.8 Paddy production in Indochina ('000 metric tons)

Crop Year	*Production*	*Quantity of Paddy Delivered at Cholon*
1939/40	6548	na
1940/1	6867	na
1941/2	6762	1335
1942/3	7259	1341
1943/4	7270	743
1944/5	6497	222
1945/6*	4491	na

Note:
* Combined figure for North Vietnam and the Republic of Vietnam.

Source: Food and Agriculture Organization of the United Nations. *The World Rice Economy in Figures, 1909–1963*. Commodity Reference Series No. 3 (Rome: FAO, 1965), Table 4, p. 15; Economic Intelligence Section, HQ SACSEA, Trade and Industry: Economic Intelligence (Far East), Conf. No. 134, BMA DEPT/18/7.

Table 2.9 Indochina: Two sets of data on wartime exports of rice ('000 metric tons)

Year	Exports from *Cochinchina*	Exports from *Indochina*
1940	1444	1586
1941	870	944
1942	973	974
1943	922	1024
1944	500	499
1945*	61	45

Note:
* Through August.

Source: Export figures for Cochinchina are from Economic Intelligence Section, HQ SACSEA, Trade and Industry: Economic Intelligence (Far East), Conf. No. 134, BMA DEPT/18/7; Indochina export figures are from *Annuaire Statistique de l'Indochine, 1943–1946*, p. 298.

with internal restrictions demanded by nationalist politicians, impeded the activities of the commercial and financial networks that had handled the rice trade before the war. Finally, the shortage of transport made it difficult to move rice out of producing areas, and to ship grain which did reach the ports.

Table 2.10 Cost-of-living indices

	Indochina	*Siam (Thailand)*	*Burma*
Pre-war	100	100	100
March 1946	1292	1203	384
March 1947	2359	1343	321
March 1948	3047	1438	292

Note: Figures for Indochina are for a working-class budget, and the base is Jan.–June 1939; figures for Siam are for a clerical-class budget, and the base year is 1938; figures for Burma are for Rangoon and the base is 1941.

Source: The Commissioner-General for the United Kingdom in South-east Asia, *Monthly Economic Bulletin*, 4, 1 (Jan. 1949).

With world demand for food at unprecedented levels, rice commanded very high prices. Yet there were dangers in the flow of large sums of money into rice-producing countries which had fragile economies, and little in the way of consumer goods to purchase. Inflation already stood at high levels throughout the region (see Table 2.10), and Siam's currency was in an especially precarious state.

For Burma the administration tried to set buying prices for paddy that were high enough to stimulate increased production but low enough to control inflation.[25] The wartime planning team at the Burma Office had hoped to hold the internal price of rice at Rs. 150 per 100 baskets of paddy, but it quickly rose to Rs. 300. Even this figure was well below the price of rice in world markets, and the government charged overseas buyers a much higher rate, using some of the substantial profits gained in this way to provide agricultural credit and rehabilitate the rice industry. According to Sir Bernard O. Binns, post-war Finance Commissioner to the Government of Burma, these arrangements prevented complete financial breakdown, providing the government with much-needed revenue while limiting inflation.[26]

Prices were also kept artificially low in Siam (which had temporarily reverted to its earlier name as part of an effort to mollify the Allied powers), although both the mechanisms for setting prices and the underlying logic were more complex than in Burma. The peace settlement with Britain imposed an obligation on Siam to contribute 1.5 million tons of rice for international allocation free

of charge, representing surplus stocks the British claimed existed within the country, although the figure was disputed both by Thai and by US officials. The British government argued that members of the United Nations should not have to pay artificially high prices to overcome scarcities arising from the suspension of trade during the war, and that Siam, as a country which had sided with Japan, should not be allowed to profit from high prices arising from post-war shortages. An agreement negotiated following the signing of the peace treaty with Britain, which came into force on 1 January 1946, gave the Siamese government a central role in the rice trade, making it responsible for fixing the price at which millers purchased paddy, and for buying milled rice at a controlled rate for sale under the international allocation programme. The government undertook to fulfil these obligations through a wartime body known as the Central Rice Purchasing Association, made up of the quasi-governmental Thai Rice Company together with representatives from the Ministries of Commerce, Interior, Agriculture and Communications.[27]

The free-rice scheme was ill-conceived and impractical. The grain in the country, however much of it there may have been, was in private hands, and the government lacked the resources to buy it. Moreover, had purchases been made on the scale envisaged, rice prices would inevitably have risen sharply, causing inflation and damaging overall prospects for economic recovery. The controlled price for rice in Siam was £8 per ton in 1945, £2 more than the pre-war price but less than the world price, which exceeded £30 per ton. Prices rose in 1946 but remained relatively low, with buyers under the IEFC allocation system paying slightly less than £13 per ton for Thai rice, compared with £18 per ton paid for Burmese rice, and £30 per ton for rice from Indochina. In 1947 the official price for Thai rice was £25 a ton, but the black-market price had risen to £170 per ton.[28] Under these circumstances it is hardly surprising that Siam exported little rice under the official system of allocation, or that the grain it did supply was of very poor quality. Moreover, the free-rice requirement interfered with the flow of grain through normal trade channels, and contributed to the shaping of a large and flourishing black market.[29]

Although South-East Asian rice farmers and traders were paid far less than they would have received in a free market, returns were sufficiently high to stimulate a recovery of the rice trade, in part because the legitimate market operated alongside a black market

Table 2.11 Post-war paddy production in mainland Southeast Asia ('000 metric tons)

Year	*Burma*	*Vietnam*	*Thailand*
1939/40	6879	6548	4560
1945/46	2845	4491	3699
1946/47	4010	4290	4642
1947/48	5603	4800	5506
1948/49	6327	4350	6835
1949/50	4745	—	6684
1950/51	5565	3510*	6782

Note:
* Combined figure for North and South Vietnam.

Source: Food and Agriculture Organization of the United Nations, *The World Rice Economy in Figures, 1909–1963*. Commodity Reference Series No. 3 (Rome: FAO, 1965), Table 4, p. 15.

so well developed that it was poised to become a new regional market once controls were lifted. By 1948, production in Burma and Thailand had returned to pre-war levels (see Table 2.11), and both countries were pressing for an end to the international system of allocation and a return to free markets. However, the government agencies that dominated the rice trade during the period of international controls did not relinquish their powers when these controls were removed at the end of 1949, and in rice-deficit countries nationalist aspirations led to a continuation of pre-war efforts to reduce dependence on foreign imports. The new administrations felt that in order to be secure, countries should produce their own basic food requirements, and saw the economic dominance of Chinese and Indian merchants, and of others perceived as outsiders, as inconsistent with nationalist plans to allow indigenous peoples to assume a more prominent role in economic affairs. Thus rice policies became a tool to achieve both economic and social change.

Whether nationalist leaders might have succumbed, as did their colonial predecessors, to the temptation of importing cheap rice instead of making heavy investments in infrastructure and stimulating domestic rice production, must remain a moot question, for the pre-war rice industry was never fully restored. The recovery in Burma eventually faltered as a result of political unrest, and conflict in Cochinchina, which involved both nationalist hostility to continued French rule and communist hostility toward capitalist

production, prevented restoration of the pre-war industry there. Moreover, rice became a source of much-needed foreign exchange for the administrations that now controlled the export trade, and rice sales continued to be governed by nationalist considerations. Under these circumstances, rice-deficit countries had little option but to promote domestic production, and the regional export economy that operated before the war gave way to mutually exclusive state-regulated economies which for social and political reasons undertook the uneconomic task of supplying rice to deficit areas from domestic sources.

Notes

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1 Information on policies in the Netherlands Indies is taken from an address by the Director of Economic Affairs to the Volksraad during 1934. The copy in my possession is a translation found in the Thai Archives (Ministry of Foreign Affairs 67.10/43), and does not indicate the date of the meeting. See also J. van Gelderen, *The Recent Development of Economic Foreign Policy in the Netherlands East Indies* (London: Longmans, Green and Co., 1939), pp. 27–9.

2 V.D. Wickizer and M.K. Bennett, *The Rice Economy of Monsoon Asia* (Stanford: Food Research Institute, Stanford University, 1941), pp. 92–7.

3 Jerome B. Cohn, *Japan's Economy in War and Reconstruction* (Minneapolis: University of Minnesota Press, 1949), pp. 367–9; B.F. Johnston with Mosaburo Hosoda and Yoshio Kusumi, *Japanese Food Management in World War II* (Stanford: Stanford University Press, 1953), pp. 138–9.

4 Crosby to Eden, 4 Feb. 1938, FO371/22211 (F2586/373/40).

5 Translation of a letter sent by Wanit Pananom [here rendered as V. Pananda] to Commander K. Chudo, the Japanese Naval Attaché in Bangkok, and to Lieutenant-Colonel Tamura, the Military Attaché, February 1938, encl. in Crosby to Eden, 4 Feb. 1938, FO371/22211. The British Legation reported rumours that Thailand's Ministry of Economic Affairs was considering a similar scheme.

6 Suehiro Akira, *Capital Accumulation in Thailand, 1855–1985* (Tokyo: The Center for East Asian Cultural Studies, 1989), pp. 124–5.

7 Crosby to Halifax, 1 Dec. 1938, FO371/23592, F251/251/40; see also FO371/24735, *inter alia* F4671/222/23 and F5086/222/23.

8 In baht per picul, the price in Siam rose from 4.40 in 2482 [1939/40] to 6.08 in 2483 [1940], and to 8.96 in 2484 [1941]. *Statistical Year Book, Thailand*, No. 21, BE 2482 (1939–40) to 2487 (1944).
9 A.G. Baker, 'The Siamese Rice Trade with Malaya', 27 Aug. 1945, CO852/568/127.
10 Burma Department of Agriculture, *Rice*, Markets Section Survey No. 9 (Rangoon: Supt Govt. Printing, Union of Burma, 1958. Reprint of a 1936 publication).
11 Monteath to Leith-Ross, 15 Oct. 1940, FO371/24734 (F4751/103/23).
12 Ibid.
13 'The Siamese Rice Trade with Malaya', by A.G. Baker, 27 Aug. 1945, CO852/568/12.
14 'Recent Developments in Indo-China: 1939–1945', by John R. Andrus and Katrine R.C. Greene, published as a supplement to the 1944 reprint of Charles Robequain, *The Economic Development of French Indo-China*, trans. Isabel A. Ward (London: Oxford University Press, 1944), pp. 367–9; Johnston *et al.*, *Japanese Food Management in World War II*, pp. 138–9; Admiral [J.] Decoux, *À la barre de l'Indochine: histoire de mon gouvernement général (1940–1945)* (Paris: Librairie Plon, 1949), p. 430.
15 Economic Intelligence Section, HQ SACSEA, Trade and Industry: Economic Intelligence (Far East), Conf. No. 134, BMA DEPT/18/7. See also Summary of Economic Intelligence (Far East) No. 135, 24 Dec. 1945, WO203/2325. About half of the rice crop planted in the Central Plain in 1945 was damaged.
16 A.G. Baker, 'The Siamese Rice Trade with Malaya', 27 Aug. 1945, CO852/568/12.
17 'Changes in Siamese Economy Arising from the War', Annex to a Memorandum by the Economic Advisory Branch, Foreign Office and Ministry of Economic Warfare, War Cabinet Far Eastern Sub-Committee, Secret, F.E.(E)(44)4, 21 Dec. 1944, FO371/41857.
18 For a brief account of the destruction of ships belonging to the Irrawaddy Flotilla Company, see H.J. Chubb and C.L.D. Duckworth, *Irrawaddy Flotilla Company Limited 1865–1950* (Greenwich: Maritime Monographs and Reports No. 10, National Maritime Museum, 1973), pp. 75–6. Vessels were scuttled throughout the country, with large-scale sinkings carried out at Mandalay (112 vessels) and Katha (96 big steamers together with a number of smaller craft).
19 Rice-Stringer (Min. of Food) to Jones-Parry, 29 Dec. 1944, MAF83/2026; Secretary of State for Burma to Governor of Burma, 18 Feb. 1946, Governor of Burma to Sec. of State for Burma, 21 Feb. 1946 (195 Secret), and Governor of Burma to Sec. of State for Burma, 21 Feb. 1946 (199 Secret), CO537/1391.
20 Record of the Activities of the Rice Division, MAF75/72; Summary of Economic Intelligence (Far East) No. 136, 7 Jan. 1946, WO203/2325.
21 Wickizer and Bennett, *The Rice Economy of Monsoon Asia*, pp. 317, 321; Summary of Economic Intelligence (Far East) No. 142, 9 Mar. 1946, WO203/2325. For a different set of figures, see *Report on the*

Marketing of Rice in India and Burma. Agricultural Marketing in India. Marketing Series No. 27 (Simla: Govt of India Press, 1941), p. 127.

22 Summary of Economic Intelligence (Far East) No. 142, 9 Mar. 1946, WO203/2325. The consumption figure was supplied by Burma's Agricultural Projects Board.

23 Economic Intelligence Section, HQ SACSEA, Trade and Industry: Economic Intelligence (Far East), Conf. No. 134, BMA DEPT/18/7; Pierre Brocheux, *The Mekong Delta: Ecology, Economy, and Revolution, 1860–1960* (Madison: University of Wisconsin-Madison, Center for South-East Asian Studies Monograph No. 12, 1995), p. 188.

24 Economic Intelligence Section, HQ SACSEA, Trade and Industry: Economic Intelligence (Far East), Conf. No. 134, BMA DEPT/18/7. On the famine in the north, see Nguyên Thê Anh, 'Japanese Food Policies and the 1945 Great Famine in Indochina', and Motoo Furuta, 'A Survey of Village Conditions during the 1945 Famine in Vietnam', in this volume, as well as Nguyên Thê Anh, 'La famine de 1945 au Nord – Viêt-Nam', *The Vietnam Forum*, 5 (Winter–Spring 1985): 81–100, and Bùi Minh Dũng, 'Japan's Role in the Vietnamese Starvation of 1944–45', *Modern Asian Studies*, 29 (1995): 573–618.

25 Britain had direct control over rice matters until 1947, when the country became independent. The rice industry was then placed under the government's Agricultural Projects Board, which asked Britain's Ministry of Food to handle rice exports on its behalf.

26 Binns to Glass, 21 Mar. 1950, FO371/84632 (FZ/307/8).

27 Minutes on the 'Thai Rice Situation', 31 Oct. 1945, FO371/46570.

28 Sanderson to Norman Young (Treasury), 27 Dec. 1945, FO371/53838; Hutton (British Food Mission, Washington) to Minister of Food, 5 Oct. 1946, and Minister of Food to Hutton, 8 Oct. 1946, Burma Economic 54/46, India Office Records, M/4/304; Thompson to FO, 19 May 1947, India Office Records, M/4/305.

29 Nicholas Tarling, '"An Attempt to Fly in the Face of the Ordinary Laws of Supply and Demand": The British and Siamese Rice 1945–7', *Journal of the Siam Society*, 75 (1987): 140–86; Paul H. Kratoska, 'The Post-1945 Food Shortage in British Malaya', *Journal of Southeast Asian Studies*, 19 (1988): 27–47.

3 Transportation and Rice Distribution in South-East Asia during the Second World War

Aiko Kurasawa

RICE SHORTAGES IN WARTIME SOUTH-EAST ASIA

South-East Asia experienced grave rice shortages during the Second World War as a result of increasing demand on the part of the Japanese and maladministration of the wartime economy. Before the war there were three big rice-surplus areas in the region; the largest was Burma, which produced an average of 4.9 million tons of white rice annually between 1936 and 1940[1] and exported 3 million tons.[2] Then followed French Indochina, with production of about 6.5 million tons and exports 1.5 million tons.[3] The other rice-surplus country was Thailand, which produced about 3 million tons and exported half of this amount.[4] Thus these three areas accounted for exports of approximately 6 million tons of rice annually in the pre-war period.[5] Part of this grain was sent to nearby rice-deficit countries, such as the Philippines, British Malaya, the Straits Settlements, British Borneo, and the Netherlands East Indies. Among these territories, British Malaya had the largest deficit, and imported about 700 000 tons annually during the 1930s.[6] After the needs of these South-East Asian countries had been met, large rice-surpluses remained which were exported to South Asia, East Asia and Europe.

Rice shortages during the Japanese occupation were caused by a combination of declines in production and the lack of a smooth flow of rice. Production decreased in most occupied areas despite enthusiastic campaigns to promote food cultivation. On this topic, a number of detailed scholarly works have already been written,[7] and most researchers, including myself, point to the following factors

as reasons for the decline: (a) the loss of any incentive to grow surplus rice arising from Japanese requisitioning of paddy; (b) shortages of labour and draught animals; (c) inadequate maintenance of irrigation systems; (d) use of land for other urgently needed crops, such as cotton and castor oil plants; and (e) unsuccessful trials of new varieties of seeds. These points apply to many parts of Japanese-occupied South-East Asia, although there were some differences in their manifestation and intensity depending on conditions in specific areas. It would be possible to develop the discussion of decreases in production further, but this article focuses instead on the second cause of shortages, namely, poor circulation of rice.

By 'circulation' I mean collection, processing, and distribution. The Japanese military government tried to control all of these activities by applying a system very similar to the one used in Japan, as contained in the Rice Distribution Control Law of 1939.[8] The basic idea of this policy was that the government should determine rice prices, and the amount of rice to be collected and allocated to various sectors, and the price to be paid. In South-East Asia, the Japanese introduced a system of 'forced delivery' under which peasants were required to sell to the government a certain percentage of their production at a very low official price. This arrangement created tremendous strains in rural society, especially where rice-surpluses were small and production mostly for personal consumption.[9]

The Japanese also introduced Japanese-style *kumiai*, officially supported associations for each trade or professional group; anyone who wanted to operate in a particular field was forced to join the appropriate *kumiai*. In the rice industry, each professional group – farmers, rice millers, wholesale rice traders, and retail rice traders – organized a *kumiai*, and *kumiai* also were created in the areas of transportation and port services.[10]

Alongside their policy for controlling rice marketing, the Japanese instituted 'regional autarchy', a catastrophic policy which prescribed self-sufficiency for each area, and prohibited the movement of commodities not only across national borders but also beyond province and regency boundaries. This was a basic policy of the Japanese military administration from the beginning,[11] but was further intensified in 1944. With regard to foodstuffs, each occupied area was ordered to achieve complete self-sufficiency.[12]

All these policies – the forced delivery of paddy, the *kumiai*-based controlled economy, and regional autarchy – helped shape

the wartime rice economy, and created turmoil in many parts of the occupied zone. The strong controls, unknown in pre-war South-East Asia and introduced by the Japanese in ignorance of traditional marketing patterns, caused much inconvenience and inefficiency. It is not clear to what extent the Japanese evaluated the suitability of their policies for South-East Asian societies. Were they aware, for example, that prior to the occupation, peasants routinely milled rice at home using simple equipment, and sold it at nearby local markets in relatively small amounts? This practice was banned by the Japanese, and the prohibition disrupted the supply of rice to local markets.

Adjustments were made to the policy only in Singapore. There a Private Rice Importers Association was organized in 1944 and private trade with Thailand was encouraged through the Overseas Chinese connection.[13]

In addition to policies intentionally applied by the Japanese, many other factors that were outside Japan's original calculations hampered the smooth flow of rice, and made the situation even worse. First of all, the gap between official and black-market prices gave rise to corruption and led to illegal seizures of rice stocks, and deliberate hoarding for speculation.

Second, the shortage of labour was very serious all over South-East Asia, largely because the Japanese required many labourers to work on military-related construction projects. But labour shortages were also caused by other factors: for example, Indians resident in Burma, who made up a considerable part of rice industry labour force, fled to India in large numbers at the time of the Japanese invasion.

Third, in addition to the rice supplied through the Army, significant quantities were purchased by agents of the Japanese Navy directly from peasants in army-controlled areas. This grain was shipped to navy areas, and a great deal was lost at sea owing to Allied attacks. This was especially true of rice from Java, and as a consequence agents had to purchase rice in Java over and over again. Thus, the amount of rice actually taken away from the domestic market was considerably larger than the figures recorded in Japanese military documents.

Fourth, wartime destruction and chaos created many difficulties. Because of inefficiency and poor handling, paddy stored in warehouses often went bad while awaiting shipment. This was partly because milling capacity was insufficient to process the rice that

was collected, owing to destruction of mills at the time of the invasion and shortages of labour (especially in the case of Burma).[14]

However, the major reason rice could not be supplied to deficit areas was inadequate transport, caused by the destruction of motor vehicles and cargo vessels, a shortage of fuel, and other related factors. For want of transport, surplus rice rotted in some areas, while elsewhere people had insufficient rice for subsistence, and had to seek substitutes. Thus, the primary problem was not how much rice was available as a whole, but uneven regional supply arising from defects in circulation.

This article deals with the effects of transport shortages during the occupation on three areas: Burma, which had a large rice-surplus; Java, which was self-sufficient; and Malaya, which was a rice-deficit area. It is part of a broader project to examine the wartime rice situation throughout South-East Asia, which can only be understood on a regional basis because in mobilizing resources the Japanese regarded the whole Greater East Asia Co-prosperity Sphere as a single entity. Comparative analysis is also necessary because the way rice policy was developed and executed differed from place to place depending on local conditions, although the Japanese applied the same basic set of principles throughout the occupied area.

RICE AND TRANSPORTATION IN BURMA

Internal Trade and the Decline of Rice Exports

On average between 1935/6 and 1939/40, Burma produced about seven millions tons of paddy, equivalent to 4.9 million tons of milled rice. During this period Burma was the largest rice exporter in the world, with annual exports amounting to around three million tons of milled rice, about 60 per cent of total local production.[15] The principal purchasers of Burmese rice are shown in Table 3.1, and exports to destinations within South-East Asia are broken down in Table 3.2.

The main rice-growing areas were in Lower Burma, Arakan and Moulmein, and accounted for 80 per cent of Burma's rice production.[16] The rice crop in Upper Burma was barely sufficient for local consumption because rainfall was uncertain and there were frequent droughts. Therefore Upper Burma had to import rice from Lower Burma. (See Map 1.)

Table 3.1 Average annual export of Burmese rice, 1931–40 ('000 tons)

Destination	*Amount*	*Percentage*
India/Ceylon	1855	59.0
Europe	420	13.4
Southeast-Asia	310	9.9
China/Japan	182	5.9
Others	374	11.9
Total	3141	

Source: Cheng, *The Rice Industry of Burma,* p. 201.

Table 3.2 Export of Burmese rice to South-East Asian countries, 1931–40

Destination	*Amount (000 tons)*	*Percentage*
Malaya	210	67.7
Java and Sumatra	88	28.4
Philippines	2	0.6
Others	10	3.2
Total	310	

Source: Cheng, *The Rice Industry in Burma*, p. 214.

Japan's seizure of power in March 1942 brought a suspension of rice exports to India and Ceylon and to Europe. However, the demand from Japan and her occupied territories was large enough to overcome the loss of these markets.

In September 1942 the 15th Army, which was in charge of military administration in Burma, declared that Burma should be regarded as a main supplier of foodstuffs to the Japanese empire, and that surplus rice should be treated to prevent it from deteriorating.[17] According to a 'Plan for the Exchange of Commodities in Southern Occupied Areas' approved on 15 May 1942 at Southern General Army Headquarters, Burma was to export 60 000 tons to the Philippines, 272 000 tons to Malaya and 286 000 tons to Japan in 1942.[18] However, soon after Japan's defeat at the Battle of Midway in the Pacific, export to Japan and to the Philippines became very difficult. As for the quantities actually exported to those territories, data is incomplete and it is difficult to discover the overall situation throughout the war period.[19] However, the main destination turned out to be only Malaya and Singapore, and even there

rice imports fell off sharply during the war period. In 1945 the trade between Burma and Japanese-occupied areas stopped entirely,[20] probably because of Allied attacks from India and the Pasapara rebellion staged by the Anti-Fascist People's Freedom League (AFPFL) against the Japanese in Burma itself. Reduced rice exports from Burma were responsible to a large extent for widespread rice shortages in Malaya and Singapore.

Besides the drop in foreign exports, shipments to Upper Burma from rice-producing areas in Lower Burma were also reduced, and people in Upper Burma suffered from inflated rice prices and uncertain distribution. The price of 100 baskets (one basket contained approximately nine gallons) in Mandalay in 1943 was as high as Rs. 800–1000, compared with just over Rs. 100 in pre-war days.[21]

Declines in both internal and external trade can be attributed to many factors. In addition to the general points mentioned above, there are several others peculiar to Burma. In this country the role of Indians in the rice industry was very important. Indian immigrants worked as agricultural labourers and also in the rice mills and ports. Especially prominent were those working at the mills; as of February 1939, Indians made up 75.4 per cent of the rice-mill labourers in the whole of Burma, the proportion was higher at large rice mills near harbours and in big towns.[22] Indians were also an important source of capital. Chettiars, a caste of hereditary moneylenders originating from Chettinad in South India near Madras, provided funding for agricultural activities. In 1929–30, for example, they loaned approximately Rs. 500 million to the agricultural industry, mostly in Lower Burma.[23] After the Japanese invasion, many Indians fled back to India and their departure dealt a major blow to the rice industry. With these features in mind, the analysis will now turn to the shortage of transportation, which was the single most important cause for reduced exports.

Domestic Rice Transport

By River

In Burma the principal means of internal transportation was by water; the Irrawaddy and Chindwin rivers, and the Twante and Sittang canals, were particularly important in this regard. Rice-threshing floors were often set up on waterways, and paddy was usually carried

to the collection points at the riverside by small paddy gigs called 'tonkin', with capacities of 500–2000 baskets.

At the time of the Japanese invasion, the British destroyed a large number of vessels.[25] In particular, the British-owned Irrawaddy Flotilla Company, which monopolized traffic on the Irrawaddy river, scuttled the greater part of its fleet, and brought other vessels to India when their staff evacuated. After the Japanese invasion, this company was confiscated by Minami Kikan, the Japanese army's intelligence agency. Management was entrusted first to the Senda Company, in July 1942, and then in September 1942 to Yamashita Kisen.[26]

The Japanese tried to salvage the sunken vessels and by late July 1943 had succeeded in recovering 77 boats with a total capacity of 25 435 tons, and had restored 38 of them to service.[27] Nevertheless, British Intelligence reports indicated that fewer than half of the 600 large boats operating before the war remained available to the Japanese.[28] To make the situation worse, storms in 1944 swept away about six to seven hundred of the small boats used to carry rice, vessels with an average capacity of about 15 tons.[29]

Coastal Shipping

In addition to river transport, there was coastal shipping in the southern part of the country, especially along the Malay peninsula. In March 1942, the Nihon Yusen Co. took over Burma's coastal shipping,[30] and in October 1942 began moving military goods between Rangoon and Moulmein using boats they had seized. Later they acquired additional vessels both from Japan and from local sources, and established routes from Rangoon to Moulmein, Tavoi, Mergui, and the Andaman Islands.[31]

However, the number of vessels was still insufficient, and in an effort to deal with the shortage, the Japanese organized a Cooperative Association for Sailing Vessels *(Hansen Kumiai)* in 1943 at Moulmein. The General Manager of the Rangoon Branch of Nihon Yusen simultaneously served as the head of this Cooperative Association, which had about 200 sailing boats under its control.[32] All Burmese owners of sailing boats were ordered to join the association, but many of them opposed the idea and hid their vessels so that the Japanese could not use them.[33]

In addition to the shortage of vessels, a lack of harbour labour caused by the departure of many Indian workers made it difficult

to load cargo. Allied bombers also concentrated on shipping, and the bombing intensified after the Japanese defeat at Imphal in May 1944. Sailing became extremely dangerous, and coastal shipping all but ceased by the end of 1943.[34]

Construction of Wooden Boats

In an attempt to overcome the shortage of vessels, the Japanese undertook construction of small-sized wooden boats throughout the occupied areas in South-East Asia and also in Japan. In South-East Asia plans called for the addition of one million tons of shipping capacity within five years. Most of the boats built in South-East Asia were of 150 tons burden and used locally-made 150-horsepower engines.[35]

In Burma construction activities began in July 1942. Former sawmills and timberyards were converted into shipyards at Moulmein, Rangoon, Andaman, Mergui, Bassein, Mandalay, Tounggou, and Akyab.[36] However, just eleven 150-ton vessels and two 300-ton vessels were built, and the programme had little impact.[37]

Roads and Railways

In addition to the decline in shipping, railway and road transport in Burma deteriorated, and this also affected the movement of rice. The total length of roads in 1938/9 was only 10 530 miles (17 000 kilometres). Most of the main roads were constructed alongside the big rivers and did not extend inland.[38]

More significant than roads for the transport of rice were the railways. The total length of track in Burma was 2059 miles (about 3300 kilometres), and before the war, three million tons of rice moved by rail each year.[39] The main rail line ran from north to south, and was an important route for carrying rice from Lower to Upper Burma. The railway was also used to transport rice from certain areas in Lower Burma such as Prome to the harbour towns for export; the Henzada–Bassein line was especially important in this regard.[40] (See Maps 1 and 2.)

When war broke out, the British sent freight cars loaded with commodities to the north, because the Japanese were approaching from the south. After most of the rolling-stock had been moved north, sappers destroyed important bridges to disrupt railway traffic. Destruction of the Sittang Bridge stopped the movement of trains between Moulmein and Pegu. Destruction of Myitmaka Bridge

halted through rail traffic between Rangoon and the Henzada–Bassein–Kyangin area. Destruction of the Myitnge Bridge separated the Mandalay–Lashio line from the Rangoon–Tounggoo–Thazi sector. Destruction of the Ava Bridge isolated the Ywataung–Myitkyina line from the main system to the south.[41] Destruction of the bridges was not as complete as originally planned by the British, mainly because the Japanese advance was so rapid,[42] but the damage was serious enough to cut the Burmese railway system into three parts: the Prome–Rangoon–Pleik zone with a route mileage of 535, the Myitnge–Mandalay–Lashio zone with a route mileage of 187, and the Sagaing–Myitkyina Ywataung–Alon zone with a route mileage of 453.[43] Thus the rail link between Upper Burma and Lower Burma was severed, and most of the locomotives and rolling stock as well as workshop machinery were confined to the region north of Ava Bridge. Out of 232 locomotives, 126 remained available to the Japanese, and most were in the northern area.[44]

The Japanese Army's Fifth Railway Regiment and Fifth Special Railway Corps assumed the management of the railway and in June 1943 set up a Railway Control Committee to repair the damaged parts of the system.[45] British analysts estimated that restoration of the Ava bridge would take at least two years,[46] but the Japanese poured tremendous energy into repairing the damage. Reports compiled by Japanese military authorities in Burma in September 1942 state that the Moulmein and Martaban lines were partly reopened in May and the Rangoon–Mandalay line resumed operations in August 1942.[47] According to a British intelligence report in 1943, 'The Japs appeared to have been successful in maintaining a railway service despite demolition. So far as is known all lines are running.'[48] However, some bridges such as that over the Sarwin river were not repaired until August 1943.[49] Many of the restored bridges were subsequently bombed, and the Japanese had to repair them again.[50] When the Allied Forces had gathered their strength and were in a position to deal a serious blow to the Japanese, they made the railways of Burma one of their chief targets.[51]

In contrast with Java and Malaya, discussed below, the railway system in Burma was put under direct control of the Japanese military forces and not under the military administration, and Burma did not receive experienced staff from the Japan National Railway Company.[52] According to British estimates, out of about 22 000 prewar railway employees, most of whom were Indians, about 7000 fled to India, and another 450 died in attempts to escape, leaving

14 000 still in Burma. Some 10 000 of them were thought to have been working for the Japanese.[53]

When Burma became independent in July 1943, management of the railway system was transferred to the Burmese government. However, priority was given to the transportation of military goods, and very little capacity was spared for Burmese interests. U Hla Pe has written of how crowded rail transportation was and how difficult it was to travel by train. Burmese people had to wait anywhere from 12 to 48 hours to get a ticket, and trains were often cancelled.[54]

Another quite serious problem concerning rice transport by railway was the shortage of gunny sacks, which Burma obtained from India. For railway transportation rice had to be bagged, while for river transportation this was not necessary.[55] Gunny sacks for rice came from India, and with the Japanese conquest supplies were cut off. They were in short supply not only because there were no fresh imports, but also because people cut up old sacks and used them for clothing material.

Export of Burmese rice to Malaya by rail was attempted after completion of the new railway between Burma and Thailand. In southern Burma, the railway ran only as far as to Moulmein in British days, and the Japanese wanted to extend this line and at the same time to establish overland communication with Thailand. The new railway was built between Nong Pla Duk, 79 km west of Bangkok, and Thanbyusayet, 58 km south of Moulmein, a total distance of 415 km. Ultimately, the Japanese envisioned connecting all of the Greater East Asian Co-Prosperity Sphere by railway (Daitoa Jukan Tetsudo), and the Burma–Thailand Railway was a part of this plan.[56]

Work began in June 1942 and was completed in October 1943. Because the line had to be built in such a short time, some 300 000 local labourers from Thailand, Burma, Malaya and Java, as well as about 60 000 Allied prisoners of war were recruited.[57] Locomotives and rolling stock, as well as railway employees, came from railway companies in Malaya and Java.[58] Rails were taken from the Rangoon–Mandalay line (where there were multiple tracks), the Rangoon– Taunggoo line, the east coast line in Malaya, and the Semarang–Surakarta line in Java.[59]

With the completion of the Burma–Thailand Railway, Burma was connected with Thailand and Cambodia through the existing railway line between Bangkok and Phnom Penh.[60] According to an

Allied intelligence report, a train with a signboard saying 'Moulmein–Phnom Penh' was observed.[61] The line also connected Burma with Malaya and Singapore through a junction at Nong Pla Duk with the railway between Bangkok and Singapore (via Butterworth and Kuala Lumpur). By means of the new railway link, locomotives were provided to Burma from Malaya, Thailand and French Indochina.[62]

RICE AND TRANSPORTATION IN JAVA

Java as a 'Self-Sufficient' Area

Java was barely self-sufficient in rice at the end of the Dutch period. In 1939 the island produced about 8.4 million tons of paddy (equivalent to about 4.5 million tons of milled rice),[63] and exported a small amount of good quality rice in exchange for cheaper rice brought mainly from Burma and Indochina. However, 'self-sufficiency' in Java did not necessarily mean that the island actually had 'enough' rice. Calculating from the amount consumed and the population in Java, daily intake per capita in the pre-war period was approximately 230 grams.[64] This amount was below the optimum level, and most of the poor population ate other, cheaper cereals in addition to rice.[65]

Even though there was no real surplus, the Japanese expected Java to provide rice to neighbouring deficit areas such as Malaya and Sumatra, and to areas of the former Dutch Indies occupied by the Navy. For example, in the three months between July and September 1943, Java exported 5300 tons of rice to Malaya.[66] Another source reported exports of 10 166 tons to neighbouring countries under Japanese occupation in the five months between April and August 1943.[67] These exports were arranged under barter agreements; for example, plans called for Java to send rice to Sumatra each month exchange for 10 000 tons of coal, which was indispensable as fuel for the island's railway network.[68] There is no data to show how much rice actually left Java during the occupation – exports in the latter phase were very limited because ships were in short supply, and many were being used to transport Javanese *romusha* (labourers) to neighbouring areas.

Domestic Circulation

Paddy production under the Japanese Occupation decreased to a very serious degree, and the 1944 crop was only 6 811 000 tons, 80 per cent of the average for 1937–41.[69] This quantity of paddy (unmilled rice) is equivalent to approximately 3 677 940 tons of milled rice, based on a 54 per cent extraction rate.[70] According to Japanese archival sources, the military government managed to acquire 759 000 tons in this year, out of which 166 500 tons were taken for military use and 592 500 tons were distributed to the urban population.[71] On the basis of these figures, people in Java (both peasants and urban population) theoretically had access to 3 511 440 tons of rice (3 677 940 − 166 500) in 1944, about 700 000 tons less than in 1939. That would mean that average consumption dropped to 192 grams a day.

However, the real situation seems to have been even worse than the figures indicate. Malnutrition occurred not only because of the absolute amount taken for Japanese military use, but also because of uneven distribution, caused mainly by shortages of transportation at various levels of rice circulation: from peasants to rice mills, from rice mills to wholesale rice traders, from them to retail traders, and so on.

Internal trade of rice between the surplus and deficit residencies was permitted only in accordance with the plans and orders of the central agency, and direct exchange between residencies was prohibited. This regulation made the shortage of transport even more serious. Table 3.3 shows the amount of rice that the military government planned to bring into and out of each residency in Java, and the amounts actually brought in and out.

The table shows that the amounts actually transferred were only about 30 per cent of the quantities originally intended. The gap between planning and realization can be attributed in large part to the shortage of formal, long-distance transportation. Had the administration allowed the spontaneous and natural flow of rice from surplus areas to nearby deficit areas, which could have been accomplished by traditional short-distance vehicles such as the oxcart, the situation might have been slightly better. Central government control caused tremendous inconvenience and inefficiency, and the supply of rice was very uneven, but it was mainly transportation that caused stagnation and uneven distribution in domestic circulation of rice in Java. The following is an analysis of internal transportation in Java under the Japanese occupation.

Table 3.3 Exports and Imports of Rice among Residencies (April-August 1943)

Residency	*Surplus Residencies*	
	Export Allocation (tons)	*Amount Exported (tons)*
Jakarta	50 000	22 306
Cirebon	60 000	15 519
Banyuman	30 000	10 798
Pekalongan	20 000	6 367
Pati	8 000	304
Kebu	15 000	3 042
Yogyakarta	0	1 560
Surakarta	5 000	304
Madium	8 000	2 493
Kediri	3 000	1 793
Malang	40 000	11 131
Besuki	205 000	68 375
Total*	444 000	143 992
Residency	*Deficit Residencies*	
	Import Allocation (tons)	*Amount imported (tons)*
Banten	10 000	757
Bogor	40 000	10 105
Priangan	40 000	12 503
Semarang	8 000	4 311
Surabaya	22 000	16 290
Bojonegoro	10 000	253
Madura	22 000	5 693
Total	152 000	49 912

Notes:
* The original figure stated in the statistical compilation for the amount exported was 138 378 tons, but this was an error and has been corrected. In theory the difference between the allocations for export and import was to provide supplies for non-domestic consumption.

Source: *Jawa Sangyo Sokan*, Pt. I, pp. 49–50.

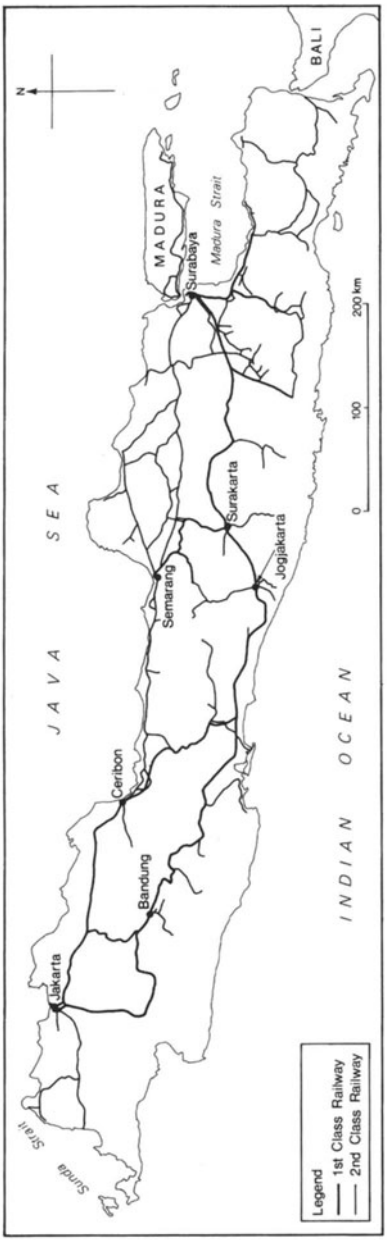
Changes in Railway Transportation

In Java the railway was the most important means of internal transport (see Map 4). Toward the end of the Dutch period, the rail system carried 900 000 tons of rice annually, while only 300 000 tons went by road.[72] For this reason the present essay will focus on the railways, and to a lesser extent on coastal shipping, another important form of transportation.

Java enjoyed a very good railway system before the war. There were 23 railway companies, including one that was state-owned; the Japanese incorporated all these companies into a single entity.[73] Railway lines covered a total distance of about 5200 kilometres of land area, with 642 stations and 343 stops.[74] As of 1934 Java had 5.6 km of railway for every 100 square kilometres, less than in Europe but more or less the same as in Japan, which had 5.8 km per 100 square kilometres, and much higher than in any other country in Asia.[75] There were also about 10 000 km of railway siding.[76]

To manage land transportation in Java, the Japanese set up the Rikuyu Sokyoku (head office) in Bandung on 1 June 1942 as an external bureau of the Gunseikanbu (Office of Military Administration).[77] According to a report by the Head of the Transportation Department of the Gunseikanbu, which was submitted to the Gunseikan (the Military Superintendent), Japanese staff members (a total of 220 persons) were mainly recruited from the Japanese National Railway Company and Ministry of Transportation, while Dutch and Indonesian staff (about 38 000 persons) came from the various railway companies that had operated during the Dutch period. Because the Japanese needed their expertise, many Dutch railway employees were at first allowed to continue working, but on 1 October 1942, this group was finally placed in internment camps.[78]

Under Japanese rule, several important changes took place in the transport system as a result of military operations, demands by the Japanese military, and structural alterations to the economy. The first change derived from demolitions at the time of the Japanese invasion. Retreating Dutch forces destroyed a great deal of vital infrastructure, including parts of the railway system, and the first urgent task for the Rikuyu Sokyoku was to repair the railway lines. The Dutch had concentrated on bridges, destroying 46 of them. Great efforts went into repairing these installations, and by the end of 1943 most were again in use.[79] Apart from bridges, the Dutch partially destroyed railway lines to the harbours of Tanjung



Map 4 Railways of Java, ca. 1937

Priok in Jakarta, Tanjung Perak in Surabaya, and Cilacap, and caused damage to Cilacap station and the railway workshops at Tegal. Some locomotives were also destroyed.

Second, military demands for transportation received priority over civilian needs. In order to provide more space for military use, the number of passenger trains was reduced, and travel restrictions were imposed on the population. Moreover, military men stationed at each railway station often intervened in line management.[80]

Third, the kind of goods carried and the direction and distance of transport also changed. In the Dutch period, the main items of freight were export crops, especially sugar, but during the occupation the volume of foodstuffs such as rice, tapioca and maize (corn) increased. By 1943 the amount of rice transported by rail exceeded the amount of sugar (see Table 3.4).

Under the Dutch, many commodities generally moved from inland estate areas to the north coast, with more than half of the total volume of exports passing through the ports in East Java; Surabaya's Tanjung Perak Harbour alone had handled about one-third of the total volume.[81] Under Japanese rule, foreign trade was suspended and the shipment of commodities from north coast harbours was greatly reduced. Moreover, after the war turned against Japan, harbours other than Tanjung Priok in Jakarta could not be used for security reasons.[82] Thus the movement of commodities changed: the need was to move foodstuffs from agricultural areas in East Java to consumption centres in West Java. Thus the flow was in one direction, and there were few commodities loaded from West to East. This disturbed the allocation of railway rolling-stock.

The fourth change under the Japanese arose from a severe shortage of fuel. In the Dutch period, the main railway lines used coal imported from Sumatra and Kalimantan; trains burned wood on minor lines. In 1941 Java imported 63 200 tons of coal, and 37 800 tons of this total was for railway fuel. In the same year 824 500 tons of wood were used as railway fuel.[83] Following the outbreak of war, Java could no longer get adequate supplies of coal because of shipping shortages. To acquire coal locally, mines were developed in Bayah, in Banten, and a new railway line was built to transport coal from this site, which was in a very remote area.[84] However, production from the Bayah mine was not satisfactory, and wood had to be used as fuel to an ever-greater extent. Ironically, 500 railroad cars had to be allocated daily to carry wood to be used as fuel, reducing the space available for rice and other commodities.[85]

Table 3.4 Rice and sugar transported by rail (tons)

	Rice	*Sugar*
1942		
November	49 969	41 060
December	57 051	24 379
1943		
January	59 122	24 466
February	48 860	19 443
March	56 343	22 441
April	50 520	24 215
May	63 845	29 715
June	68 777	70 763
July	68 892	85 100
August	67 419	84 472
September	57 096	61 118
October	45 014	35 785
Total	692 908	522 957

Source: Marei Gunseikanbu Chosabu, 'Jawa ni okeru Kamotsu Yusono Genkyo' (June 1944), p. 33.

Fifth, there were two sizes of railway gauge in Java, and the Japanese planned to unify them into a narrow gauge of 1.067 metres, the standard used by railways in Japan.[86] The wide gauge track between Semarang and Surakarta was dismantled, and the materials were sent to Thailand to construct the new Burma–Thailand Railway.[87] However, a proposed narrow-gauge railway to replace the dismantled line was not constructed, and this aggravated the shortage of transportation.

Sixth, Java experienced shortages of locomotives and wagons. According to Dutch statistics, there were 1202 locomotives in 1939, and the number was just 295 in 1947; the number of wagons declined from 25 332 to 10 422 during the same period.[88]

As a result of these factors, the capacity of the railway network was greatly reduced. Though rice was given high priority, the amount actually carried fell from about 900 000 tons in 1940 to 612 439 tons between April 1943 to March 1944, and 466 937 tons in the same period of the following year.[89]

Coastal Shipping and Wooden Boats

To make up for the shortage of railway transportation the Japanese tried to upgrade coastal shipping. Out of 134 large ships used by the KPM (Koninklijke Paketvaart Mij) for inter-island transportation, 77 had been destroyed during military operations, and floating drydocks in Surabaya and in Jakarta had been sunk. Neither drydock was salvaged until after the war.[90]

Under the auspices of the Bureau of Maritime Affairs in the Gunseikanbu, a Java Sailing Vessels Cooperative Association (*Djawa Hansen Kumiai*) was set up to control all small junks and sailing boats. These vessels mostly operated along the north coast of Java.[91]

In addition the Japanese built small wooden boats under the Shipbuilding Bureau (*Zosenkyoku*) of the Gunseikanbu. Shipyards operated in Jakarta, Tegal, Semarang, Surabaya and Cilacap, and experts were sent from Japan to handle construction activities. In shipyards under the jurisdiction of Semarang, which was the largest operation, there were 215 Japanese and 44 455 Indonesians engaged in this project.[92] The target was to build 700 boats of 150 tons annually, but actual production was just 234 vessels in 1943 and 249 in 1944. Hot bulb engines (in which the cylinder heads were heated to high temperatures to ignite the fuel) and diesel engines were produced locally. Iron for the purpose was taken from sugar factories. Shipbuilding consumed a great deal of teakwood, and the demand was so urgent that builders made use of timber which had not been seasoned. As a result, gaps appeared in the hulls of many vessels after launching. Only about 10 per cent of the boats constructed could actually be used.[93]

In summary, transport policy during the Japanese occupation was characterized by ambitious reforms and construction activity; the process consumed large quantities of materials, manpower and funds, but produced few results. Transport capacity remained inadequate to move sufficient rice to satisfy the demand within Java.

MALAYA

The Japanese Occupation and the Decline of Rice Imports

In contrast with Burma and Java, British Malaya (consisting of the Straits Settlements, four Federated Malay States and five unfederated

Table 3.5 Import of rice to Malaya in 1938

Country of Origin	*Amount (tons)*	*Percentage*
Thailand	471 989	61.5
Burma	271 705	34.1
French Indochina	19 954	2.6
Others	13 814	1.8
Total	777 462	100.0

Source: Japanese Foreign Ministry, ed. *Eiryo Maraya Jijo* [Situation of British Malaya], p. 48.

Malay states) was a notorious rice-deficit area. Domestic production in 1939/40 amounted to 325 138 tons of milled rice, which was just 35 per cent of consumption.[94] Production was low, largely because the peasants could earn more by growing rubber and buying inexpensive rice from Burma and Thailand. The principal rice-cultivating areas were the three states in north, namely Kelantan, Kedah, and Perak,[95] and rice was grown only during the rainy season between September and January.

Malaya imported rice to meet local demand. In 1938, 777 462 tons of rice were brought in from neighbouring countries, as shown in Table 3.5.

Imports of Thai rice exceeded those of Burmese rice because the main consumers of imported rice in Malaya, the Chinese population, preferred Thai qualities to those from Burma.[96]

After the Japanese occupation began, imports from neighbouring countries declined (see Table 3.6 and 3.7.) Table 3.6, which is based on official statistics prepared by the Malay Gunseikanbu (Office of Military Administration), indicates that imports fell to 374 715 tons in 1942, 48 per cent of the 1938 level, to 228 777 tons in 1943 (29 per cent of the 1938 level), and to 94 102 tons in 1944 (just 12 per cent of the 1938 level).

Importation of Burmese Rice

It is apparent from Tables 3.6 and 3.7 that the decline of imports of rice from Burma was particularly striking in the latter part of 1943. Prior to the war, rice from Burma was shipped to Malaya by steamer, mainly from Rangoon. The fall in exports under the Japanese

Table 3.6 Imports of rice to Malaya and Singapore (tons)

Total	*1942 (to July)*	*1943*	*1944*	*1945*
Burma 281 586	220 022	55 877	5 687	—
Thailand* 351 728**	134 262	149 753	55 430	12 280
Indochina 21 935**	3 537	18 061	32 985	—
Java 21 980**	16 894	5 086	—	—
Total 709 832	374 670**	228 777	94 102	12 280

Notes:
* Excludes rice transported by junk from Ban Pak Phanang to Trengganu.
** These totals are inaccurate but are reproduced as they appear in the original documents.

Source: Statistics prepared by the Marei Gunseikanbu, quoted in Marai wo Kataru Kai (ed.), *Marai no Kaiso* (Tokyo, 1976), p. 113.

was partly a consequence of deteriorating communications by sea. According to data collected by the Malay Office of Military Administration, transport by steamers remained possible until October 1943 (see Table 3.7), but after that ceased entirely owing to Allied bombing raids and submarine attacks.

In the latter part of the occupation, the only coastal transport was by sailing vessels and small wooden boats. In Burma small boats collected rice from producing centres to be carried to Moulmein and then to Mergui, a port town at the northern end of the Malay Peninsula. From there it was shipped to Malaya, for the most part in vessels sent from Malaya. Prai, across from Penang Island, was a primary destination,[97] but shipments also went to lesser ports such as Telok Anson. Under Japanese rule, sea communication in Malayan waters was entrusted to a Japanese company, the Southern Regions Shipping Company (Nanpo Unko Kaisha), which was created in March 1943 by amalgamating three existing Japanese firms, namely, the Nihon Yusen Company, Osaka Shosen Company and Tokyo Kisen Company.[98] In addition, the Mitsui Bussan Company and Nichimen Jitsugyo Company were authorized to operate junks, and the Kanematsu Shoji Company to operate sailing vessels.[99]

Table 3.7 Imports of rice to Malaya and Singapore in 1943 (tons)

	Thailand				*Burma*			*Indochina*	*Java*	*Total*
	Boat	*Railway*	*Junk*	*Total*	*Boat*	*Junk*	*Total*	*Boat*	*Boat*	
January	1 006	1 500	0	2 506	23 474	0	23 474	914	3 508	30 402
February	1 622	2 600	0	4 222	19 516	337	19 853	2 623	4 765	37 000
March	13 924	6 956	0	20 880	14 751	1 200	15 951	0	1 500	38 331
April	14 590	1 898	0	19 480	0	1 491	1 491	0	0	20 979
May	15 124	8 622	0	23 746	0	60	60	3 739	0	27 545
June	19 004	8 667	0	27 671	0	0	0	4 119	0	31 790
July	1 661	372	117	2 151*	11 448	0	11 448	10 201	2 519	26 320*
August	508	1 419	0	1 927	17 266	0	17 226	0	1 531	20 724
September	1 016	589	85	1 690	9 516	0	9 516	0	1 250	12 456
October	1 934	1 618	0	3 552	4 482	0	4 482	0	0	8 034
November	1 881	5 570	820	8 271	0	1 035	1 035	0	77	9 383
Total				116 104			100 544	21 596	15 150	254 038

* These figures are inaccurate, but are reproduced as they appear in the original documents.

Source: Shonan Gunseikanbu and Marei Gunseikanbu (ed.), 'Senji Geppo' ['War Time Monthly Report'], Jan.-Nov. 1943 (figures for December are not available).

Remarks: The figures in Tables 3.6 and 3.7 are not in agreement, especially with regard to Burma. The writer considers the data in Table 3.7 to be more reliable, since they are based on the secret record of the Military Administration, which was compiled monthly.

Some 1200 vessels were sunk in Malaya and Sumatra during the first months of the war.[100] To bring as many of the surviving private vessels as possible under their control, the Japanese set up a Shipping Cooperative Association of Singapore (*Shonan Senpaku Kumiai*) in May 1942. By October this *kumiai* had registered several hundred vessels – including those owned by private firms and individuals.[101]

The Japanese also made strenuous efforts to increase tonnage by salvaging sunken vessels and constructing new ones. The *Shonan Times* of 27 November 1942 reported the launching of the first steamship built in Singapore,[102] but as in Java, there was greater emphasis on wooden boats. The Japanese claimed to have more than ten sites engaged in shipbuilding in Malaya, and diesel engines of 150–200 HP were constructed at Butterworth.[103] In spite of all these efforts, shipping capacity remained far below pre-war levels.

After completion of the Burma–Thailand Railway, some Burmese rice was imported by this route. For example, records indicate that 1816 tons of rice entered Malaya by rail in February 1944.[104] However, as mentioned above, imports of Burmese rice came to an end early in 1945 because of the anti-Japanese rebellion staged by the AFPFL, while the British re-occupation of Burma a few months later foreclosed the possibility of further imports.

Imports of Thai Rice

The loss of imports from Burma made Malaya more dependent on Thailand, but imports from this source were also declining. During the war, rice exports from Thailand to all destinations declined; the yearly average amount of exported rice between 1940–4 was only 52 per cent of the average for 1935–9.

Table 3.8 indicates that Malaya's imports from Thailand fell in 1942 to just 23 per cent of the level 1941. The figure rose to nearly-three-quarters of the pre-war level in 1943, but slipped to 67 per cent in 1944 and to 54 per cent in 1945.[105]

For Malaya, the loss of imports of Thai rice was very serious, but not as striking as the fall in imports from Burma, perhaps because both sea and land transportation could be used to import Thai rice. It was also possible to make use of Thai boats. Early in the occupation import by sea was almost double of import by land, but as the shortage of vessels got more serious, imports sent by land increased and finally exceeded those by sea.[106]

Table 3.8 Export of rice from Thailand to Malaya/Singapore ('000 tons)

Year	*Amount Imported*	*Index Number*
1941	265	100
1942	61	23
1943	195	74
1944	178	67
1945	142	54

Source: Extracted from Table 2.5 in Kratoska, 'The Impact of the Second World War on Commercial Rice Production in Mainland Southeast Asia'.

The Railway Network

Malaya and Singapore had been connected with Thailand by rail since 1918. There were two main railway lines, one running along the west coast, the other serving the east coast. Both lines shared the same track from Singapore to Gemas; from there a west coast branch ran through Kuala Lumpur, Ipoh, Taiping, Butterworth, and Alor Star, and an east coast line passed through Kuala Lipis, Kuala Krai, and Kota Baru. The two lines met again at Hat Yai, a Thai town 45 km. north of the border. The total length of the railway between Singapore and Bangkok via the west coast line was 2650 km.[107]

During the retreat, the British destroyed many bridges which the Japanese had to reconstruct. They rebuilt all the bridges on the west coast line, but on the east coast line, only those located south of Kuala Lipis were repaired. North of Kuala Lipis the east coast line was dismantled, and the materials were used in constructing the Burma–Thailand Railway and a new railway linking the Bay of Bengal with the Gulf of Thailand across the Isthmus of Kra.[108]

During the Japanese Occupation, the Malayan railway system was not run by the Army, as in Burma, but was operated directly by the military administration through a Malay Railway General Office set up in November 1943 (this agency was first called the *Marei Tetsudo Sekyoku*, but after Malay was separated from Sumatra in April 1943 was renamed the *Marei Tetsudokyoku*). The Office of Military Administration (*Gunseikanbu*) moved several times, but the Central Railway Office always remained in Kuala Lumpur, with a Liaison Office attached to the Gunseikanbu.[109] To increase

capacity and improve efficiency, a Railway Training School was set up in September 1943 at Kuala Lumpur, and railway employees underwent reeducation.[110]

The Road Network

Malaya is also linked with Thailand by road. In 1923 a causeway was constructed between Singapore and Johor, and this completed direct road links from Singapore through Malaya to Thailand. In 1938 the total length of paved road in British Malaya was 13 760 kilometres, and the Malayan road system was one of the best in the colonial territories.[111] To take the place of the railway that was dismantled, the Japanese constructed a new road along the east coast of the peninsula, a project completed in October 1943.[112]

Although Malaya's land communication network was well developed, there was a shortage of vehicles and fuels after the Japanese seized power. The Japanese confiscated many vehicles, and controlled all that remained in private hands by ordering re-registration in August 1943. The management of road transportation was entrusted to the Tokyo Kyuko Dentetsu Co. To increase transportation capacity, the Special Transport Unit (Tokubetsu Yusotai), a semi-military organization (later called Giyu Jidoshatai) was created.[113] In March 1944, a Taiwanese was assigned to set up a company called the Shofuku Unyu Kaisha exclusively to transport foodstuffs.[114]

Rice Smuggling

The rice trade between Thailand and Malaya became the monopoly of a big Japanese trading company, Mitsubishi Shoji Kaisha, and local traders were not allowed to take part.[115] The elimination of private trade disturbed the smooth flow of rice, although individual merchants continued to operate a small-scale clandestine junk trade between Ban Pak Phanang in Southern Thailand and Trengganu.[116] Much of the food needed by Singapore was reported to have come also from Java and Sumatra using small vessels.[117] There was also an extensive illegal trade between Singapore and Palembang, and rice smuggled out of Java was purchased in Palembang by Singapore merchants.[118] For this small-scale trade, wooden vessels weighing between 30 and 50 tons were used, and by late 1942 there were some 2500–3000 of these vessels in Shonan, twice the number of 1941.[119]

Rice purchased by small traders was not included in government statistics, although officials of the Malay Gunseikanbu were aware of the importance of this trade, and tried to learn how extensive it was by carrying out a survey in 1943.[120] In mid-1944 the Japanese authorized the private import of rice into Singapore, and for this purpose a Private Rice Importers Association was set up. Thus in Singapore there was a category of privately imported rice in addition to the grain which was officially regulated.[121]

A Japanese civilian who was in charge of a shipyard in Kuantan has written in his memoirs that to acquire labourers he had to provide rice in addition to a salary, and he went illegally to Thailand to buy grain. He purchased parboiled rice because Thai government prohibited free trade in milled white rice, and had to pay in gold that he purchased for huge sums paid in military notes because Thai merchants were reluctant to accept Japanese military notes.[122] Even for official purchases of rice the Thai government refused to accept military notes and demanded payment in Japanese Yen.[123]

Most of the merchants involved in the unofficial trade in rice were Chinese, and Teochieu rice traders in Singapore and Penang played a particularly important role in shipping Thai rice to Malaya.[124] However, further detailed research on the non-official or illegal flow of commodities is needed to understand the economic situation during the Japanese occupation.

Rice Supplies in Malaya

By the end of the war, supplies of rice in Malaya had fallen to just 17 per cent of the levels in the early days of the Japanese occupation. Table 3.9 indicates the amount of rice available in the earlier stage (between October 1942–March 1943) and the later stage (October 1944–March 1945) of the occupation in various states.

The scarcity of rice caused sharp rises in black-market prices. For example, in Ipoh the price of Thai rice in August 1945 was 1250 times higher than in December 1941, as is shown in Table 3.10.

According to another source, the black-market price of rice in Singapore, which was $5 per picul in December 1941, had risen to $200 in March 1944 and to $5 000 in June 1945.[125] Such extreme inflation shows how scarce food had become.

Table 3.9 Supply of rice in Malaya (tons)

State	*(A) Quantity available Oct. 1942– Mar. 1943*	*(B) Quantity available Oct. 1944– Mar. 1945*	*Quantity Imported Oct. 1944– Mar. 1945*	*(B) as a percentage of (A)*
Singapore	21 500	5 250	5 250	24
Johor	10 500	1 320	1 320	13
Malacca	4 800	470	425	10
Negri Sembilan	4 000	540	520	14
Selangor	13 500	2 130	1 985	16
Perak	10 800	1 280	—	12
Penang	5 800	1 090	500	19
Pahang	1 800	220	35	12
Trengganu*	2000			
Total	73 700	12 700**	10 035	17

Note:
* Trengganu, along with Kedah, Kelantan and Perlis, was transferred to Thailand in 1943.
** According to the writer's calculation, this figure should be 12,300.

Source: *Marai no Kaiso*, p. 114.

Table 3.10 Black-market price of Thai rice at Ipoh

Date	*Price per Kati*	*Index Number*
Dec. 1941	$6	100
Dec. 1942	$50	830
Dec. 1943	$250	4 167
Dec. 1944	$820	13 667
July 1945	$3600	60 000
Aug. 1945	$7500	125 000

Source: Chin Kee Onn, *Malaya Upside Down*, Appendix C.

The Japanese military administration imposed a strict system of collecting and rationing rice. The rationing of rice to city dwellers started in 1942, following the formation of a Security Association (*Jikeidan*), which carried out a scheme of family checking and census-taking.[126] Each head of household had to register in order to get a ration card. Outside the cities and towns, people registered

through *penghulu* (*mukim* or sub-district headmen) and received rations at the *mukim* level.[127]

During the last stage of the Japanese Occupation, the basic standard ration in large cities was six katis (3.6 kg) per month for an adult male, four katis (2.4 kg) for an adult female and three katis (1.8 kg) for a child. In medium-sized cities it was three katis (1.8 kg) for male adult, two katis (1.2 kg) for adult females and one kati (0.6 kg) for children. There was no distribution in agricultural areas.[128]

CONCLUSION

This chapter has examined three areas in South-East Asia under Japanese rule: Burma as a rice-surplus country, Java as a self-sufficient territory, and Malaya as a rice-deficit area. Each place experienced shortages of rice to a different extent, caused by a combination of factors including reduced production and supply, increased demand by the Japanese military, inadequate distribution systems, corruption, and black-marketeering. Decreased supplies and ineffective marketing policies affected distribution at the consumer level. Rationing was introduced in deficit areas, but because the supply was not constant consumers did not have enough to eat, and living conditions became so bad in Java that peasant uprisings took place there.

One of the major causes of the food shortage was a lack of transport, and this chapter has examined the supply and marketing of rice mainly in the light of this problem. In all three areas, the Japanese controlled transport as a way of regulating the economy and ensuring that military requirements were met. However, transport facilities were inadequate for a number of reasons, among them the destruction of equipment by the Allied Forces, a lack of skilled manpower and shortages of fuel. As B.F. Johnson has noted, at the outset of the Pacific war the Japanese government held an unduly optimistic view of the shipping position, and failed to anticipate the severity of Allied attacks.[129]

In Lower Burma, export-oriented rice cultivation with an 'industrial' character suffered a serious decline in productive capacity. The loss of capital which had previously been provided by Chettiar moneylenders, and a reduction of the number of labourers in the rice fields, had a deleterious affect on the rice industry as did the destruction of rice mills and other facilities. In addition to these

factors, the transport system and infrastructure were damaged in the course of military operations. The destruction of steamboats used for river transportation and damage to the railway system greatly reduced the country's capacity to export rice, and disturbed the smooth flow of rice to Upper Burma. Thus, although there were large surpluses in Lower Burma, people in Upper Burma experienced rice shortages.

In Java the relatively good railway system inherited from the Dutch did not work efficiently under Japanese rule. It had been geared to a colonial economic structure where priority was given to export of tropical agricultural crops, and did not fit the Japanese wartime economy where priority had to be given to the internal movement of rice. The transport of rice within the island was not smooth and there was very uneven supply depending on the district.

Malaya also suffered from inadequate transport and the destruction of railway bridges. The reduction and finally the suspension of rice imports from Burma owing to a shortage of vessels threatened people's well-being. Under these circumstances, the railway connection between Singapore and Bangkok was of vital importance, but the Japanese dismantled the east coast line to provide materials for the Burma–Thailand Railway. In 1945 the total amount of rice supplied to Malaya was only 17 per cent of the pre-war level, and malnutrition had become a serious problem.

Because of the uneven distribution of rice, there were rice surpluses in certain rice-growing areas such as Lower Burma, Thailand, Cochinchina, while elsewhere there was hunger and even starvation. Ironically enough, seen from the perspective of the rice industry, it was Burma, the country with the highest export capacity in pre-war days, that was most seriously affected. When the war was over, Burma had little capacity to provide rice to neighbouring countries, and even lacked sufficient grain to supply non-rice-growing provinces within Burma. Thailand played a vital role in rehabilitating the food situation in South-East Asia, and this strengthened Thailand's bargaining power in international politics.

Notes

1 See Paul H. Kratoska, 'The Impact of the Second World War on Commercial Rice Production in Mainland South-East Asia', in this volume.

2 The average annual export during the 1930s was 3 141 000 tons. Cheng Siok-Hwa, *The Rice Industry of Burma, 1852–1940* (Kuala Lumpur: University of Malaya Press, 1968), p. 201.
3 Kratoska, 'The Impact of the Second World War on Commercial Rice Production'. The production of milled rice was 6 548 000 tons in 1939/40, 6 867 000 tons in 1940/1 and 6 762 000 tons in 1941/2.
4 James C. Ingram, *Economic Change in Thailand, 1850– 1970* (Stanford: Stanford University Press, 1971), pp. 38, 53. Between 1935 and 1939 exports averaged 25 370 000 piculs or about 1.5 million tons per year. Total production was 4.4 million tons of paddy per year.
5 Besides South-East Asia, the main rice-exporting countries were Taiwan, the USA and Egypt, with annual exports of 750 000 tons, 350 000 tons and 150 000 tons respectively. 'Rice Situation in South-East Asia and Neighbouring Countries', WO203/5274 (XC16710).
6 In 1938, for example, Malaya imported a total of 777 462 tons of rice, mainly from Thailand (61.5 per cent) and Burma (34.1 per cent). Japanese Foreign Ministry (ed.), *Eiryo Maraya Jijo* [Situation of British Malaya] (Tokyo, 1942), p. 48.
7 See, for example, Shigeru Sato, *War, Nationalism and Peasants: Java under the Japanese Occupation* (Sydney: Allen and Unwin, 1994); Pierre van der Eng, *Food Supply in Java during War and Decolonisation, 1940–1950* (The University of Hull, Centre for South-East Asian Studies, 1994); and Aiko Kurasawa, 'Mobilization and Control: Social Change in Rural Java 1942–1945' (Ph.D. diss., Cornell University, 1987), ch. 1. This dissertation has been translated into Indonesian and Japanese, and published respectively as *Mobilizasi dan Kontrol: Studi tentang Perubahan Sosial di Pedesaan Jawa 1942–1945* (Jakarta: Grasindo, 1993) and *Nihon Senryoka no Jawa Noson no Henyo* (Tokyo: Soshisha, 1992).
8 Regarding the Rice Control Law in Japan, see B.F. Johnson, *Japanese Food Management in World War II* (Stanford: Stanford University Press, 1953); Akemitsu Kubota, *Senjika no Shokuryo to Nogyo Kiko* [*Food and Agricultural Structure during the War*] (Tokyo: Jitsugyo no Nihonsha, 1943); Naoji Suzuki, *Kome: Jiyu to Tosei no Rekishi* [*Rice: History of its Free and Controlled Economy*] (Tokyo: Nihon Keizai Shinbunsha, 1974).
9 For details on the policy of forced delivery of paddy in Java, see Kurasawa, 'Mobilization and Control', ch. 2.
10 For details on *kumiai* in Java, see Kurasawa, 'Mobilization and Control', ch. 4.
11 According to 'Nanpo Senryochi Gyosei Jisshi Yoryo' ['*Basic Principles for Military Administration in Southern Areas*'], adopted on 20 November 1941 prior to the outbreak of war, one of the basic principles was to assure self-sufficiency in each occupied area. Boeicho Boei Kenkyujo Senshishitsu (ed.), *Nanpo no Gunsei* [*Military Administration in Southern Areas*] (Tokyo: Asagumo Shuppansha, 1985), p. 91.
12 Nanpogun Soshireibu, 'Showa 19 nendo Gunsei Shisaku nikansuru Shiji', in *Nanpo no Gunsei*, pp. 311–12.

13 Masuzo Fujimura, 'Marai Gunsei Gaikyo' ['Brief Outline of Malay Military Administration'] in *Nanpo no Gunsei*, p. 494, and Paul H. Kratoska, *The Japanese Occupation of Malaya: A Social and Economic History* (London: C. Hurst, Honolulu: University of Hawaii Press, Sydney: Allen & Unwin, 1998), ch. 9.

14 According to a Japanese report most of the approximately 600 rice mills that existed in pre-war Burma were destroyed. Eizo Akiyama (ed.), *Dai 15-gun Gunsei Gyoumu Gaikyo* [*Outline of Works at Military Administration by the 15th Army*] (18 Sept. 1942). This is a summary of a report by Major Akiyama, an accounting officer of the 15th Army, presented at the Conference of Accounting Bureau Chief. This document is reprinted and published in *Nanpo no Gunsei*, p. 398. In Java, because of the destruction by the Allied Forces and the lack of spare parts, some of the rice mills had to be closed down and milling capacity once declined to 49 per cent of the pre-war capacity. (Tan Tjong Yan, 'De Rijstpellerijen in Midden-Java gedurende de Japansche Bezetting', in *Economisch Weekblad voor Nederlandsch Indië*, 12,21 (Aug. 1946): 161–2; Nanpo Gunseisokanbu, 'Gunseika ni okeru Jawa-Madura no Shokuryo Jijo to Sonotaisaku' ['The Food Situation and Recommended Measures in Java and Madura during the Japanese Occupation'], Boeicho Senshishitsu Gunseishiryo no. 117 (Oct. 1943): 51–2.

15 Cheng, *The Rice Industry of Burma*, pp. 198, 201.

16 *Nanpo Nenkan* [*Almanac for Southern Areas*] (Tokyo: Tohosha, 1943), p. 643.

17 Akiyama (ed.), *Dai 15-gun Gunsei Gyoumu Gaikyo*, p. 398.

18 Ibid., p. 401.

19 The followings are sporadic data on the amount of rice exported from Burma: Export to Malaya and the Philippines between May and July 1942 was only 54 541 tons (ibid.). The amount exported to Japan was less than 50 000 tons in 1942 and only 18 000 tons next year (Johnson, *Japanese Food Management*, p. 139). Between April 1942 and January 1943, 102 699 tons were sent to Japan. ('Senji Geppo' ['Wartime Monthly Report'], June 1943, p. 53, and Sept. 1943, p. 48. This report was first compiled by the Shonan Gunseikanbu, but after April 1943 by the Marei Gunseikanbu.) A total of 256 144 tons were sent to other Japanese-occupied areas during the 14-month period between May 1942 and July 1943 (Tsunezo Ota, *Biruma ni okeru Nihon Gunseishi no Kenkyu* [*Study on History of Japanese Occupation in Burma*] (Tokyo: Yoshikawa Kobunkan, 1967, p. 93)).

20 Lee Ting Hui, 'Singapore under the Japanese 1942–1945', in *Journal of the South Seas Society*, 17 (April 1961): 31–69.

21 Kratoska, 'The Impact of the Second World War on Commercial Rice Production'. In 1939 the wholesale price for 100 baskets in Rangoon was Rs. 117. Cheng, *The Rice Industry of Burma*, p. 73.

22 Cheng, *The Rice Industry of Burma*, pp. 132–3.

23 J.S. Furnivall, *An Introduction to the Political Economy of Burma* (Rangoon: Peoples' Literature Committee and House, 1983) (3rd rev. edn.), p. 106. The citation is from the Japanese translation, entitled

Biruma no Keizai (Tokyo: Toa Kenkyusho, 1942), p. 135.
24 Cheng, *The Rice Industry of Burma*, pp. 62–3.
25 Kratoska, 'The Impact of the Second World War on Commercial Rice Production', p. 4.
26 Mori Dai 7900 Butai, 'Biruma Gunseishi' ['History of Military Administration in Burma'], Sept. 1943 (unpublished document of the Japanese Army), pp. 364–6, and U Hla Pe, *Narrative of the Japanese Occupation of Burma* (Ithaca: Cornell University South-East Asia Paper, 1961), p. 58.
27 Ota, *Biruma ni oke ru Nihon Gunseishi no Kenkyu*, p. 226.
28 J. Russell Andrus offered this estimate in a book that he wrote in Simla in India in 1944 based on intelligence reports. Josef Silverstein, 'Transportation in Burma during the Japanese Occupation', *Journal of the Burma Research Society*, 39 (1956): 2.
29 U Hla Pe, *Narrative of the Japanese Occupation of Burma*, p. 58.
30 Shibata, 'Nanpo Kyoeiken ni okeru Unyu Seisaku', p. 573.
31 Nihon Yusen Kabushikikaisha (ed.), *70 Nenshi* [*70 Years of History*] (1956), pp. 366–7, and Ota, *Biruma ni okeru Nihon Gunseishi no Kenkyu*, p. 220.
32 Ibid., pp. 366–7.
33 U Hla Pe, *Narrative of the Japanese Occupation of Burma*, p. 59.
34 *70 Nenshi*, pp. 366–7.
35 Tokuhisa Hashimoto, *Nihon Mokuzousenshiwa* [*History of Wooden Boats in Japan*] (Tokyo: Hasegawa Shobo, 1952), p. 340–55.
36 Silverstein, 'Transportation in Burma during the Japanese Occupation', p. 4.
37 Ota, *Biruma ni okeru Nihon Gunseishi no Kentuy*, p. 224, Table 22.
38 *Nanpo Nenkan*, p. 659.
39 U Hla Pe, *Narrative of the Japanese Occupation of Burma*, p. 61.
40 *Nanpo Nenkan*, p. 659.
41 'Report on the Burma Railway with Special Reference to the Hostilities in Burma', 1 Nov. 1942, Report compiled by General Headquarters of the Allied Forces in India jointly with British Transportation Directorate, p. 13. PRO WO203/5722 (XCO16710).
42 Ibid., p. 14.
43 Ibid., pp. 14–15.
44 Ibid., pp. 18–20 Appendices I–II.
45 Mori Dai 7900 Butai, *Biruma Bunseishi*, pp. 350–1.
46 Ibid., p. 14.
47 Akiyama (ed.), *Dai 15-gun Gunsei Gyoumu Gaikyo*, p. 402.
48 Silverstein, 'Transportation in Burma during the Japanese Occupation', p. 5.
49 Shibata, 'Nanpo Kyoeiken ni okeru Unyu Seisaku', p. 594.
50 Ibid., p. 594.
51 Silverstein, 'Transportation in Burma during the Japanese Occupation', p. 6.
52 Shibata, 'Nanpo Kyoeiken ni okeru Unyu Seisaku', p. 593.
53 'Report on the Burma Railway', p. 13.
54 U Hla Pe, *Narrative of the Japanese Occupation of Burma*, p. 62.

55 Cheng, *The Rice Industry of Burma*, p. 62.
56 Katsumasa Harada (ed.), *Daitoa Jukan Tetsudo Kankei Shorui* (Tokyo: Fuji Shuppan 1988), pp. 109–116. Yoshikawa also makes this point in his newly published book on the Burma–Thai Railway. See Toshiharu Yoshikawa, *Taimen Tetsudo* [*Burma-Thai Railway*] (Tokyo: Dobunkan, 1994), pp. 18–20.
57 For details, see Michiko Nakahara, 'Nihon Senryoki Eiryo Maraya ni okeru Romu Doin: Taimen Tetsudo no Baai', in Aiko Kurasawa (ed.), *Tonan Ajiashi no nakano Nihon Senryo* (Tokyo: Waseda University Press, 1997), pp. 171–98, and Yoshikawa, *Taimen Tetsudo*, pp. 113–23.
58 According to 'Senji Geppo' (Oct. 1943, p. 54), 45 locomotives were supplied from Malaya. The present writer's interviews with former Javanese railway workers showed that quite a few railway workers were sent to Thailand and Burma.
59 Silverstein, 'Transportation in Burma during the Japanese Occupation', p. 7.
60 Connections were possible because the width of the gauge used for the new railway was the same as that on the existing Bangkok–Phnom Penh line and the Bangkok–Singapore line. Yoshikawa, *Taimen Tetsudo*, p. 181.
61 Silverstein, 'Transportation in Burma during the Japanese Occupation', p. 7.
62 Ibid., p. 6.
63 Nederlandsch Oost Indië, Het Centraal Kantoor voor de Statistiek van het Departement van Economische Zaken, *Indisch Verslag 1940* (Batavia: Landsdrukkerij, 1940), p. 282.
64 Ministry of Economic Warfare, Enemy Branch, 'Economic Situation of Netherlands Indies prior to World War II', 12 Jan. 1944 (Collectie Warners: 068–108, Sektie Krijgsgeschiedenis), p. 51. According to research carried out during the Japanese occupation, well-to-do peasants were eating 400 grams of rice daily, while less affluent peasants were forced to substitute other cereals for part of their diet: Terauchi Kiyohiko, *Noson jittai chosa hokoku: Maran-shu, Maran-ken Shingosari-gun Karanpuroso-son Tashimadu-ku* [*Village Research Report: Tasikmadu Village, Karangpuroso Sub-district, Singosari-district, Malang-regency, Malang-residency*] (Jawa Gunseikanbu Chosashitsu, 1944), p. 147. This secret research report was published by Ryukeishosha (Tokyo) in 1995.
65 According to research done in 1937/8, the average rice consumption for estate labourers was 228 grams a day. Gunseikanbu Chosashitsu (ed.), 'Noen rodosha no seikatsu jotai' ['Living Conditions of Estate Labourers'], Nov. 1943 (translation of an unpublished Dutch research report), p. 60.
66 'Senji Geppo', July, 1943, p. 52; Aug. 1943, p. 37; Sept. 1943, p. 28.
67 Jawa Gunseikanbu, *Gunseika Jawa Sangyo Sokan* [*Industry in Java under the Japanese Occupation*], Pt I (Djakarta, 1943), p. 49. This secret research report was published by Ryukeishosha (Tokyo) in 1990.

68 Shizuo Miyamoto, *Tonan Ajia Rengogun no Shusenshori* (Tokyo, 1975), p. 482.
69 'Gunseika ni okeru Jawa-Madura no Shokuryo Jijo to Sonotaisaku', p. 57.
70 'De Rijstpositie van Nederlandsch Indië', *Economisch Weekblad voor Nederlandse Indië*, 12,11 (Mar. 1946): 81.
71 See Table 19-B in Kurasawa, 'Mobilization and Control', p. 155 (Kurasawa, *Mobilizasi dan Kontrol*, p. 94).
72 'De Rijstpositie van Nederlandsch Indië' ['The rice position in the Netherlands Indies'], *Economisch Weekblad voor Nederlandsch Indië*, 12, 11 (May 1946), p. 82.
73 De Commandant van het Nipponsche Leger, Afdeeling Spoorwegen, 'Mededeeling van den Bevelhebber van het Nipponsche Leger No. 1: Het Spoorwegbedrijf op Java', p. 1 (B: 2756, no. 1, 1942).
74 *Rikuyu Sokyokushi* [*History of Rikuyu Sokyoku*] (Tokyo: Jawa Rikuyu Sokyokushi Kankokai, 1975), pp. 52, 88.
75 *Nanyo Sosho Vol. 1: Ranryo Toindo Hen* [*Series on Southern Areas Vol. 1: The Netherlands East Indies*] (Tokyo: Toa Keizai Chosakyoku, 1937), pp. 263–4.
76 Marei Gunseikanbu Chosashitsu (ed.), 'Jawa ni okeru Kamotsu Yuso no Genkyo' ['The Situation of Cargo Transportation in Java'] (henceforth 'Kamotsu Yuso no Genkyo') (unpublished secret research report dated June 1944). Boeicho Senshishitsu Gunsei Shiryo No. 18, p. 24.
77 Prior to the inauguration of this bureau as an organ of military administration (*gunsei*), the Army Railway Troop seized all the existing railway facilities and put them under their control. During this period former Dutch directors of three big railway companies were appointed to manage the railways exactly in the same manner as in the Dutch period. 'Mededeeling van den Bevelhebber van het Nipponsche Leger No. 1', pp. 1–2.
78 'Jawa Tetsudo Senryo Iko Un'ei Fukkyu Jokyo Hokoku' ['Situation on Management and Recovery of Railway after Occupation of Java'] (25 Sept. 1942), p. 1 and *Rikuyu Sokyokushi*, Appendix 3, p. 96.
79 'Jawa Tetsudo Senryo Iko Un'ei Fukkyu Jokyo Hokoku', p. 2; *Rikuyu Sokyokushi*, p. 151.
80 *Rikuyu Sokyokushi*, pp. 78, 270.
81 'Kamotsu Yuso no Genkyo', p. 7.
82 *Rikuyu Sokyokushi*, p. 234.
83 'Kamotsu Yuso no Genkyo', p. 44. Van der Eng has given different data on this; his sources indicate that 325 000 tons of wood was supplied annually to the railways in pre-war days, and that this amount was increased to 900 000 tons in 1944 and 1945. *Food Supply in Java*, p. 22.
84 For coal mining at Bayah, see Gunseikanbu (ed.), *Gunseika Jawa Sangyo Sokan*, Pt II, pp. 280–5. For construction of the new railway, see the following: *Rikuyu Sokyokushi*, pp. 245–60; NEFIS, 'New Railway Built by the Japanese in West Java', Brisbane, 1 July 1944 (Maritime Historie in The Hague Ha-7/bb), p. 2; and Tan Malaka, *Dari*

Pendjara ke Pendjara [*From Prison to Prison*], vol. 2 (Djogjakarta: Pustaka Murba, 1948), pp. 147–60.

85 'Kamotsu Yuso no Genkyo', p. 45.
86 *Rikuyu Sokyokushi*, p. 150.
87 'Kamotsu Yuso no Genkyo', p. 21. Not only rails but also locomotives, rolling-stock and many of the skilled labourers working in railway repair depots were taken to Thailand.
88 Van der Eng, *Food Supply in Java*, p. 25.
89 'The Survey of the Railway Affairs to be Succeeded', RIOD. IC.012511–012512. As illustrated in Table 3.4, the amount of rice transported by railway between November 1942 and October 1943 was 692 908 tons, ('Kamotsu Yuso no Genkyo', p. 33), and this figure is consistent with that for the same period in IC.0 12511–012512.
90 Twang Peck Yang, 'Indonesian Chinese Business Communities in Transformation, 1940–50' (Ph.D. diss., Australian National University, 1987), p. 68.
91 Ibid., p. 70.
92 *Rikuyu Sokyokushi*, p. 317.
93 Ibid., pp. 319, 320, 326.
94 *Nanpo Nenkan*, pp. 676, 731
95 Ibid., p. 731.
96 Cheng, *The Rice Industry of Burma*, pp. 215–16.
97 Shibata, *Nanpo Kyoeiken ni okeru Unyu Seisaku*, pp. 562–3.
98 *Nanpo no Gunsei*, p. 364.
99 'Senji Geppo', Feb. 1943, pp. 160–2, Mar. 1943, pp. 103–5, Oct. 1943, pp. 68–9.
100 Twang Peck Yang, 'Indonesian Chinese Business Communities', p. 68.
101 Ibid., p. 69.
102 Lee Ting Hui, 'Singapore under the Japanese'.
103 Chin Kee Onn, *Malaya Upside Down* (Singapore: Jitts and Co., 1946; 3rd edn, Singapore: Federal Publications, 1976), pp. 172–3; also see Marai wo Kataru Kai (ed.), *Marai no Kaiso* (Tokyo, 1976), pp. 84–6.
104 'Gunsei Geppo', Feb. 1944. 'Senji Geppo' was renamed 'Gunsei Geppo' in 1944.
105 Ingram, *Economic Change in Thailand*, p. 38.
106 'Gunsei Geppo', Feb. 1944.
107 *Eiryo Marei Jijo*, p. 76.
108 'Senji Geppo', May 1943, pp. 66–7, July 1943, p. 78.
109 Ibid., Nov. 1942, pp. 64–5; Shibata, 'Nanpo Kyoeiken ni okeru Unyu Seisaku', p. 589, and *Marai no Kaiso*, p. 29.
110 'Senji Geppo', Oct. 1943.
111 *Eiryo Marei Jijo*, p. 73.
112 'Senji Geppo', Oct. 1943, p. 69.
113 *Marai no Kaiso*, pp. 29–30.
114 *Nihongun Senryoka no Singapore: Kajin Gyakusatsu no Shomei*, trans. Hiroshi Tanaka (Tokyo: Aoki Shoten, 1986), pp. 137–8. This work is a translation of ch. 4 of Shu Yun-Ts'iao and Chua Ser-Koon, (eds.), *Malayan Chinese Resistance to Japan, 1937–1945: Selected Source*

Material (Singapore: Cultural and Historical Publishing House, 1984). The Chinese title of this work is *Sinma huaren kangri shiliao, 1937–1945*.

115 Chin Kee Onn, *Malaya Upside Down*, p. 59; 'Senji Geppo', Sept. 1942.
116 'Senji Geppo', June 1943, p. 53.
117 Twang Peck Yang, 'Indonesian Chinese Business Communities', p. 71.
118 Ibid., p. 73.
119 Ibid., p. 69.
120 'Senji Geppo', June 1943, p. 53, and Sept. 1943, p. 48.
121 Fujimura, 'Marei Gunsei Gaikyo', p. 494, and Kratoska, *The Japanese Occupation of Malaya*, pp. 251–2.
122 Hashimoto, *Nihon Mokuzosenshiwa*, pp. 346–7.
123 Chin Kee Onn, *Malaya Upside Down*, p. 57.
124 Cheah Boon Kheng, 'The Social Impact of the Japanese Occupation of Malaya (1942–1945)', in Alfred McCoy (ed.), *South-East Asia under Japanese Occupation* (New Haven: Yale University South-East Asia Studies, 1980), p. 93.
125 Low Ngiong Ing, *When Singapore was Syonan-To* (Singapore: Eastern Universities Press, 1973), p. 62.
126 Chin Kee Onn, *Malaya Upside Down*, p. 59.
127 Ghazali bin Mayudin, *Johor Semasa Pendudukan Jepun 1942–1945* (Selangor: Jabatan Sejarah, Universitas Kebangasaan Malaysia, 1978), pp. 49–50.
128 *Marai no Kaiso*, p. 115.
129 Johnson, *Japanese Food Management in World War II*, pp. 140–1.

4 Food Production and Food Distribution Programmes in the Philippines during the Japanese Occupation

Ricardo Trota Jose

One of the enduring impressions of the Japanese Occupation of the Philippines, particularly in Manila and other cities, is the shortage of food. Rice and other basic foodstuffs became increasingly difficult to find, and when food was available it was often at prices that ordinary people could not afford. This chapter examines various production and distribution plans evolved during the Japanese occupation, and discusses the reasons for their lack of success.

CONDITIONS AND PLANS BEFORE THE WAR

Prior to the Second World War, the Philippines was not self-sufficient in many types of food, including rice, the staple food of most of the population. The Philippines had to import rice from its South-East Asian neighbours, and also imported large amounts of canned foods, meats, dairy products, wheat and bread.[1] There were several reasons for this state of affairs, notably antiquated methods of farming; shortage of fertilizers and irrigation systems; a feudal landlord–tenant system wherein farmers were kept in debt and not encouraged to produce more; a national economy which promoted the planting of export crops like sugar over staple foods like rice; an increasing population – especially in the cities where little food was produced; and a distribution system largely controlled by the Chinese and a few others. Yields per hectare were low, averaging only 26 cavans (1456 kilograms; one cavan = 56 kg) of paddy (in

Pilipino, *palay*) per hectare (see Table 4.7 and Map 5).[2]

In 1935, with the inauguration of a semi-autonomous Commonwealth government under President Manuel L. Quezon, the Philippines had entered a preparatory period which was to culminate in independence in 1946. Faced with a severe rice crisis caused by a small crop in 1935 and actions taken by shrewd merchants to corner the rice market, the Commonwealth established a National Rice and Corn Corporation (Naric) to stabilize prices and ensure the supply of these basic staple foods. Naric aimed to nationalize the rice industry and set prices at levels that would be beneficial to farmers and affordable to consumers. To accomplish this objective, Naric imported rice if local supplies fell short, and built a stockpile which could be distributed to areas where prices were high, thus causing prices to go down (see Table 4.1).[3] The government also sought to increase food production by building more irrigation systems, and by urging farmers to adopt more modern and scientific planting methods. In addition President Quezon planned a series of social justice programmes, among them one which envisioned purchasing agricultural estates from the church and redistributing the land to farmer-tenants.[4] These plans were well-meant, but they moved slowly, and by the time the Second World War began in Europe, conditions had hardly changed.

With the outbreak of war in Europe, a potential crisis situation in food developed. Merchant ships were diverted to the war front, and prices began rising. To deal with the situation, Quezon sought, and was granted, emergency powers which, among other things, allowed him to order the planting of idle lands with food crops, and to mobilize civilians to produce food. Quezon also created an Emergency Control Board in October 1939 to set up a schedule of maximum prices, and in April 1941, he created the Civilian Emergency Administration (CEA) to deal with disturbed conditions and to safeguard the people from the ravages of war, should hostilities reach the Philippines.[5]

The CEA had a Food Administration office which tried to build up stocks of rice and other food commodities. Although the organization devised many plans, it met with limited success: there were few ships to bring rice to the Philippines, and the price of rice elsewhere in South-East Asia was so high that enterprising businessmen in the Philippines realized windfall profits by exporting much-needed rice to other countries. Quezon responded by banning the export of rice and other foodstuffs from the Philip-

Table 4.1 Philippine rice imports, 1937–49

	Metric tons	*Cavans*	
1937	72 000	1 286 000	
1939	84 000	1 493 000	
1940	38 000	683 000	
1941	15 000	268 000	
1942	75 000	1 339 000	(planned by the Japanese)
	34 000	620 000	(actual imports till September)
1943	80 000	1 429 000	(planned)*
1944	?	?	
1945	?	?	
1946	149 000	2 661 000	
1947	125 000	2 232 000	
1948	120 000	2 143 000	
1949	145 000	2 589 000	

* No figures for the total amount of imported rice for 1943 are available. However, 18 000 tons arrived between September and November 1943.

Sources: *Yearbook of Philippine Statistics, 1940*; Hartendorp, *History of Industry and Trade*; Yamagoshi, Gunseika ni okeru Hitô Sangyô no Suii; Hitô Gunseikanbu Sangyôbu, Sangyô Kankei Yôko Sôran.

Note: Figures for the occupation period for this and the following tables are given only as guides. The degree of accuracy of some of data can vary widely, due to the unsettled conditions, or for propaganda purposes.

pines. The CEA also launched a food production campaign, and urged people to plant 'Victory Gardens' on idle lands.[6] The threat of war, however, was not taken seriously by most people, who felt the Japanese would not dare to attack the US or its territories. Food production and stockpiling thus proceeded at a leisurely, peacetime pace.[7]

OUTBREAK OF WAR AND THE BEGINNING OF THE OCCUPATION

When the war broke out in December 1941, most food programmes had barely gotten underway, and price control measures existed only on paper. Prices soared, shops closed and conditions became chaotic as Japanese forces advanced. Filipinos left the towns and

cities, which had become targets for Japanese aircraft, and farmers escaped to the relative safety of the mountains, leaving behind what had optimistically been described as one of the best rice crops on record. The Commonwealth's plans to meet the emergency proved of limited use, for events moved too rapidly for them to cope. Last-minute efforts to create emergency gardens came too late, although even in the midst of air raids, labourers in Manila and other cities worked to prepare idle lands for planting. Making matters worse, the war had broken out during the main harvest period. Manila was declared an open city by the US military commander, and military supplies which could not be moved were given to civilians. This in turn led to a rash of looting.[8]

Japanese forces entered Manila on 2 January 1942 and established the Japanese Military Administration (JMA). A Philippine Executive Commission composed of pre-war Filipino political leaders and bureaucrats helped the JMA enforce its policies.

The occupying forces faced the immediate task of restoring order and ensuring stable food distribution. Rice stores had been closed for several days and residents of Manila were beginning to run short of food. Throngs of hungry people gathered around the Naric warehouses demanding rice, and immediate action was needed to forestall food riots.[9] Acting in conjunction with Naric, the Japanese army quickly reopened rice stores in Manila, and sold rice at a rate of 1.2 kg per person per day, at a fixed price of P0.15. This marked the beginning of a rationing system, and when new residence certificates were issued people had to produce these documents to purchase rice. There were few markets, and long queues of people had to wait for as much as half a day to get their share. Another bottleneck was the issuance of the new residence certificates, which was initially limited to one office run by the Japanese military.[10]

After a few weeks, rice sales more or less stabilized as order was restored. The Japanese urged vendors to resume selling in the markets, and attempted to shift ownership of stalls from Chinese to Filipinos. The rice sold at this stage had been stockpiled in Manila prior to the war, but once that grain was used up, there would be no more local supplies because farmers had abandoned their standing crops at the time of the Japanese invasion. In January 1942, the rice was beginning to spoil in the fields,[11] but American and Filipino forces were still resisting in Bataan and Corregidor, and conditions remained unstable in the rice producing provinces. The

Japanese required people to hold special permits to go to Central Luzon to harvest the crops, and farmers and landholders needed military protection because peace and order had not yet been restored. Transportation and fuel were extremely scarce because vehicles and gasoline had been commandeered by both US–Philippine and Japanese forces, and gunny sacks were also in short supply. The buying price of rice was set at P2.50 for all varieties of rice, slightly higher than before the war, but producers were required to sell their stocks exclusively to Naric. After many difficulties, most of the crop was eventually harvested and stockpiled. However, even this new grain did not obviate the problem of a potential rice shortage.[12]

In an attempt to reduce dependence on rice and stretch the available supply, Naric's head, Victor Buencamino, appealed to the public to eat bread, and asked bakeries to increase their output. This was only a temporary measure, however, because the flour and baking soda needed to bake bread were imported and supplies could not be replenished.[13]

THE JAPANESE REGIME

Establishing a Controlled Economy: Initial Phase

Japanese plans for the areas they occupied gave top priority to acquiring strategic materials for the war effort, and to achieving self-sufficiency for the occupying forces. 'Economic hardships imposed upon the native livelihood as a result of the acquisition of resources vital to the national defense and for the self-sufficiency of occupation troops must be endured', read the policy outline. Thus, rice harvested and available in the Philippines would have to feed, first, the Japanese occupation forces, and secondly, the Filipinos.[14]

The Japanese recognized that rice stocks were insufficient to feed both the civilian population and the Japanese army, and that production levels were low. Accordingly Japanese and Philippine administrative organizations drew up plans to increase food production, control prices and arrange for the distribution of food and other commodities. In addition, the 14th Army, the operational Japanese army in the Philippines, had its own supply arrangement, and began to operate farms and distribution networks. The solution to

the problems of distribution, price control and production appeared to be the enforcement of a controlled economy.[15]

As a stopgap measure, the Japanese imported rice from Saigon. Despite the Japanese plans for self-sufficiency, importation was still seen as being necessary and the first shipment was reported as having arrived in April 1942. Despite later claims of successful moves toward self-sufficiency in rice, the Japanese would continue to import rice until the very end – although much of the rice purchased in this way did not arrive due to submarine attacks on the transport ships.[16]

To control prices, the government issued an anti-profiteering proclamation in early February, threatening violators with severe punishments. The mayor of Manila issued the first list of controlled prices in March 1942, although it had to be adjusted within the month to cope with actual conditions. Policemen were ordered to ensure compliance. Later in 1942, a special body of price control agents from the Department of Agriculture and Commerce was formed, and in May 1943, an Economic Police Division was established in the Bureau of Constabulary. A further price control order was issued early in 1943.[17]

To centralize control of rice procurement and distribution, and to make sure the Japanese army got its share of rice, the Japanese placed Naric under direct army management, and gave it responsibility for all transactions involving rice, including milling, buying and selling, transportation, storage and distribution. Bringing rice to Manila was made illegal under threat of confiscation, unless approved by Naric. Naric attempted to fulfil its enlarged obligations, but encountered many difficulties, particularly owing to the lack of peace and order in the rice-producing provinces.[18]

Closely linked to the procurement of rice and other foods was the problem of transportation and fuels. With the outbreak of war, the US and Philippine armed forces took over much of the available transport, which they utilized in the defense campaign. This left Manila and the whole island of Luzon critically short of trucks and other forms of transport. The Japanese army, on entering Manila, seized many of the remaining vehicles for their own use; those which remained in private hands could only operate if granted special permission by the Japanese military administration.[19] The transport situation was aggravated by a chronic shortage of fuel. The Philippines had depended on imported stocks of oil, not having any oil resources of its own. Fuel stocks in Manila had been destroyed

under a denial scheme carried out by the US military, and when the Japanese entered Manila they found a severe shortage of all types of fuels. The Japanese took over fuel stocks and placed them under the Manila Liquid Fuel Distributing Union, which took an inventory of stocks and stopped the sale of gasoline and other fuels. Later on, the Japanese Military Administration allowed the sale of limited amounts of a gasoline–alcohol mixture to authorized parties under a strict rationing procedure. Vehicles permitted to operate had to have their engines altered to run on this mixture.[20]

All plans to solve the rice problem, however, remained tentative until active military operations ended and peace and order were restored throughout the archipelago. The last stronghold of US and Philippine forces at Corregidor yielded in May 1942. Prior to the surrender of Corregidor, the Japanese Military Administration only operated in certain towns and cities which the Japanese had occupied. With the end of organized military resistance, the Japanese could concentrate on re-establishing normal conditions throughout the islands, and on creating a nationwide administrative apparatus. The surrender of Corregidor also opened Manila Bay for use by the Japanese. By mid-May, a second shipment of rice from Saigon was unloaded, this time directly at Manila's piers.[21]

Consolidating the Controlled Economy

With the end of military operations, the Japanese turned their attention to long-range plans for the Philippine economy. One scheme called for a continuation of the pre-war CEA's food production and victory garden projects, and immediately after the fall of Corregidor the military administration launched an ambitious nationwide food production campaign. Under this plan, all idle lands were to be planted to food crops, and if land owners could not or would not grow food, the government was authorized to assign people to cultivate such lands.[22]

Rice rationing was systematized by the creation of neighbourhood associations, whose headmen took charge of distributing the rice to their members. In June 1942 the ration was 1.2 kg per day per family of four. This translated to 0.3 kg per person a day, which was supposed to be the average amount a Filipino consumed in a day. Larger families had to make special requests for additional amounts.[23]

In order to meet the rice shortage, the Japanese Military Administration (JMA) introduced a fast-maturing strain from Taiwan,

called *horai* rice, which was planted on experimental farms just outside Manila in March, 1942. The Japanese claimed that if the experiments succeeded, adoption of the *horai* strain would double or even triple rice production in the Philippines. Later in 1942, it was announced that the *horai* rice experiments had been successful, and that more widespread planting would be effected. The controlled media proclaimed that the Philippines could become self-sufficient in a year's time. Experimental farms directly under Japanese army control were developed to test the new grain, and after initial successes, certain regions were ordered to plant only *horai* rice.[24]

The military administration also sought to increase productivity by introducing new fertilizers (some imported from Japan), and improving irrigation systems. In November 1942, a Japanese irrigation expert arrived to study Philippine conditions and to recommend improvements. Pre-war irrigation and flood-control projects were continued, and new projects were implemented.[25]

As part of the effort to establish a controlled economy, the military administration organized rice and food producers and distributors into specialized associations to regulate supply and distribution, as was done in Japan. Filipino retail traders took part in a nationwide Federation of Filipino Retailers Associations, through which price controls were implemented, while the Naric, operating under Japanese army management, handled rice procurement and distribution. A Food Control Association, created in mid-1942, controlled the production, procurement and distribution of other foods, and the Philippine Prime Commodities Distribution Control Association took charge of other primary products. A Federation of Rice Growers Cooperative Associations was launched in early 1943 to stabilize production, and a Philippine Fertilizer Association promoted the use of fertilizers. Similar associations dominated the livestock and fish industries. Most of these bodies were headed by Japanese, although Filipinos held token positions on the various boards.[26]

To adapt Philippine agriculture to the needs of the Japanese war economy, the JMA planned to convert surplus sugar cane fields to cotton production. The output of sugar in the Philippines exceeded Japanese requirements, and sugar was readily available elsewhere in Japan's colonies and occupied areas. Cotton, however, was a strategic necessity, not only for making textiles, but also for manufacturing explosives. The military required explosives more than food, and rather than planting rice on excess sugar lands, the

Japanese deemed it more useful to use them to grow cotton, even though it was unclear whether cotton would thrive in Philippine conditions.[27]

In March 1943, the JMA announced a grandiose five-year plan to increase the production of staple foods in the Philippines. This plan marked the integration of the separate plans previously introduced, calling for increased use of fertilizers, propagation of *horai* rice, expansion of irrigated lands, and mobilization of the various producer and control associations to systematize production and distribution. The plan was ambitious, for it promised self-sufficiency for the Philippines by the end of the five year period.[28]

Transition

Portions of the plan were put into practice. However, it was framed at a time when Prime Minister Hideki Tojo had reiterated his promise to grant the Philippines independence if Filipinos recognized Japan's motives in fighting the war. With Philippine independence imminent, Japanese serving in the Military Administration's Department of Industries limited themselves to short-term projects. A civilian employee who arrived in the country in March found virtually no work to do: his senior colleagues told him that with independence coming, there was no need for any more new men. Some staff members were already planning their return to Japan.[29]

Against this background, the Philippines entered a period of transition. The various control agencies were unable to perform their functions, not only because they lacked transportation and fuel, which remained under the Japanese military, but also because the officers preferred to spend their time in Manila and other cities, where conditions were less dangerous than in the provinces. There was reduced emphasis on *horai* rice following setbacks to the programme: unexpectedly heavy rains had killed a portion of the experimental crop, and much that survived the rain had fallen victim to various pests. Cotton plants also fared poorly, succumbing to unfavourable weather and soil conditions, attacks by an abundance of pests, and the reluctance of Filipino farmers to plant a crop that was hard to tend, painful to harvest, and destined for use by Japanese war factories.[30]

Outside of Manila, the authorities could not achieve thorough control. The rice rationing system in Manila remained stable from late 1942 through 1943, but cases of hoarding and profiteering were

reported in the open market in the city,[31] and the price of meat rose alarmingly. Cows and water buffaloes were brought to slaughterhouses in such large numbers that it seemed farms would be depleted of work animals. The administration had to restrict the number of animals that could be killed, and later ordered that only those which had been certified to be no longer useful in the fields could be slaughtered.[32] The price-control system proved inadequate, and traders asked prices above those set by the government, despite frequent government raids.

Prices of other kinds of foods and of other commodities rose despite the ceilings set by the government, and a special price control branch was established in the Bureau of Commerce and Industry to enforce the regulations. In May 1943, the Philippine Constabulary established an Economic Police Division to go after hoarders and profiteers. Much publicity was given to these two agencies and the arrests they made, and profiteers were imprisoned in full public view in a special profiteers' cage next to the Manila City Hall.[33]

Despite these measures, however, prices continued to rise. While the Naric-controlled price was set at P7.50 per sack in August 1942 (although no one could buy such a large amount, since rice had to be purchased through the rationing system), by August 1943 the Naric price had gone up to P8.00 per sack, while the black-market price soared to P70.00.[34] By this time, the peace and order situation had deteriorated, and guerrilla attacks had become bolder, particularly in Manila where assassinations and kidnappings were taking place with increasing frequency. The shortages of fuel and transportation continued, and supply and distribution routes were threatened by guerrilla and bandit attacks. Furthermore, the rains came late, and planting of the new rice crop was delayed.[35]

THE LAUREL REPUBLIC

Problems and Policies

In mid-1943, preparations for independence went into high gear. A new constitution was drafted, and in late September Naric was transferred to the Executive Commission, supposedly to give time for the Filipinos to accustom themselves to handling its operations again. Subsequently, most of the members of the Department of

Industries of the JMA went back to Japan, as did the other Japanese connected with Naric.[36] For a time Naric operated under dual authority – the Japanese continued to give orders until the Philippine Republic was functioning and until specific rules and regulations were issued. Thus, although it had supposedly been transferred to Filipino hands, Naric continued to serve both Philippine and Japanese needs.[37]

The Philippines was granted nominal independence on 14 October 1943, and Jose P. Laurel became the new president. The Japanese Military Administration was dissolved, but Japanese military forces and bases remained in the country, and Japanese companies were accorded the same rights to exploit Philippine natural resources as Filipinos.

President Laurel faced a struggle to get the country moving. Among the major problems confronting him was a worsening peace and order situation. In the rice-producing provinces of Central Luzon, the peasant-based and left-leaning Hukbalahap made procurement of rice extremely difficult for the new administration because they viewed Naric and the Laurel government as tools of the Japanese. Guerrillas loyal to the US cause likewise opposed the Laurel administration, viewing it as a puppet government. Aside from these organized bodies, there were other guerrilla groups which remained independent and carried on the struggle on their own terms, and numerous bandits and armed goons who preyed on anyone carrying food. Under these conditions, the Laurel government faced great difficulty in purchasing the coming rice crop.[38] In fact, the main rice-producing provinces in Luzon were largely in the hands of anti-Japanese guerrillas, and government-appointed mayors and others were being assassinated. The situation became so grave that Laurel considered declaring martial law in Nueva Ecija, the rice granary of Luzon.[39]

The food shortage reached crisis proportions before the new republic had time to plant its feet on the ground. Laurel ordered the continuation of the food production campaign started in 1942 to try to increase the output of vegetables and rice substitutes; but rice was in extremely short supply.[40] In an attempt to win over the loyalty of farmers, Laurel declared 19 November of every year to be Farmers' Day, when farmers would be given due recognition and incentives. It was observed in 1943 (although the day had to be postponed due to a disastrous typhoon and flood), but without significant results.[41]

Transportation remained a problem, because the republic did not control any transport facilities or fuel. These were considered strategic resources, and the Japanese regulated access to them. The Laurel government had to request fuel from the Liquid Fuel Distribution Union, which seldom provided the amounts requested in full. All trains remained under the control of the Japanese Army, and only a few motor vehicles were allotted to the republic, with virtually no spare parts. The Japanese military and Japanese development companies cornered the few spare parts available by paying higher prices for them than the Laurel administration was able to afford. Laurel and his cabinet tried various means to get a greater share of vehicles and fuel, but to no avail.[42]

Naric itself was tainted by its past association with the Japanese Army; it was well known as an agency for providing food to the Japanese, with the leftovers rationed off to Filipinos. It was also shot through with corrupt individuals, a far cry from the pre-war situation. Corruption in Naric, in the price-control agencies and in the constabulary contributed to rising prices for rice and other foodstuffs in the open market, and caused the attempt to establish a controlled economy to fail. Innumerable bribes were necessary to ship rice outside Naric channels, and prices in the open market increased accordingly. Naric, on the other hand, had no rice left to distribute.[43]

When Naric returned to Filipino hands, it had enough rice to feed Manila for slightly more than one month. Most producers were unwilling to sell their rice at the low prices set by the JMA, while farmers who did sell to the government often had to wait several days for payment, and had to keep returning to Japanese army offices to ask for their money. Farmers who persisted and asked point blank when they would be paid risked being slapped or beaten. The JMA announced that the buying price of rice would be raised to P5.00 per cavan, but this announcement had barely been made when the Laurel government announced it would pay more. The rice producers naturally waited for the higher price to be announced but this only happened two months later, and by that time prices had risen drastically across the board.[44]

Manila thus suffered from rice shortages as early as November 1943 (see Table 4.2). Hopes for harvesting the early rice crop in November were dashed when a typhoon flooded the surrounding provinces. Transportation and communication links were out for days, and the flood caused prices to skyrocket. From just above

Table 4.2 Rice rations in Manila, 1942–4 (per capita consumption per day)

Date	*Amount*
Pre-war (ave.)	300–350 grams
January 1942	300 grams (Naric fixed ration)
November 1943	200 grams (actual Naric ration)
December 1943	rations stopped
January 1944	240 grams (Biba planned ration)
	120 grams + 120 grams sweet potato (actual Biba ration)
May 1944	60 grams + 60 grams sweet potato (actual Biba ration)
June 1944	rations became irregular, later stopping altogether
February 1945	450 grams (PCAU ration)

Sources: *Tribune*; Lichauco diary; Labrador diary; Hartendorp, *History of Industry and Trade*.

P30 a sack, the price of rice shot up to P150 a sack, and within a month had reached P200.[45]

With no rice coming in and stocks in Manila virtually zero, rations were first reduced and later stopped. To alleviate the plight of the poor, Laurel ordered the establishment of community kitchens, which gave cooked rice free to the destitute. Laurel also lifted the ban on bringing rice privately into Manila, subject to a limit of one sack (56 kg) per person.[46] Some black-marketeers took advantage of the opportunity to bring large quantities of rice into the city, and they sold this grain for prices far above the controlled level. The Laurel government hesitated to arrest the smugglers and suppress the illegal market which had sprouted in Manila's Tutuban railroad station, fearing such arrests might stop the entry of rice to Manila entirely. It was better to have rice for sale at high prices than to have no rice at all.[47]

New Control Organizations

The National Assembly investigated the rise in prices, and, after listening to testimony by dealers and producers, recommended the creation of a Food Administration to take direct charge of food supplies. Its task would be to centralize the activities of the multiplicity of agencies concerned with the production, distribution and pricing of food.[48] Laurel followed the recommendation of the National Assembly and established the Food Administration in December

1943, granting it immense powers to deal with the crisis. The Food Administrator was Jose Sanvictores, who had experience with government agricultural estates before the war, and because he was not tainted by the corruption within Naric, was seen as an ideal man for the post.

With the creation of the Food Administration, Naric's monopoly on rice was reimposed, and private individuals were again forbidden to bring rice into Manila.[49] Because of its blackened image, however, as well as continuing Japanese efforts to milk it dry, Naric was later dissolved by President Laurel. In its place he created an organization called the Bigasang Bayan (Biba, the National Rice Granary) in early January 1944, which operated under the Food Administration. The Biba was wholly Filipino run and catered exclusively to Filipinos, leaving the Japanese to procure rice on their own,[50] but it had almost no resources to start with, and faced many difficulties securing rice in Central Luzon. A trickle of rice reached Manila, partly through Biba, and by late January 1944 the government was able to resume rationing rice, but at a minuscule 120 grams per day per person, which was slightly more than the quantity required for a single normal meal. The ration later dropped still further to only 60 grams, with a supplement of 60 grams of sweet potato, and then disappeared altogether.[51]

Since the Japanese were left out of Biba, they bought rice on their own, at prices they could well afford since they controlled the issuance of currency. Biba's prices were too low, and many rice producers chose to sell to buyers who paid more, namely the Japanese Army and Japanese companies, or black-marketeers. Japanese companies in particular had a reputation for buying at whatever price they chose, usually two or three times the government price. Prices in the open market rose accordingly. Some rice producers who wanted to cooperate with Biba were unable to do so, because they lived in Manila and their farms were in Huk or guerrilla hands.[52]

In the first quarter of 1944, Laurel made personal appeals to the rice producers, and invited some of them to visit the presidential palace and discuss their problems. To encourage farmers to sell to the government rather than to the thriving black market, Biba raised its buying price and offered free transportation. Consumers' cooperative associations were introduced to replace the old Naric neighbourhood associations, but the cooperatives did not have to wait for Biba to give them rice, and could send their own representatives and buyers to the provinces to obtain rice.[53]

Laurel tried to tap experts in the economic field for advice. He created the Economic Planning Board to draft long-range economic plans for the republic, and chose Manuel Roxas, a pre-war economic planner and rising political leader, as its head. To give Biba the benefit of other experienced men, Laurel created a Board of Directors for the organization, but even with able minds, there was little that could be done in the short term to solve the problem of shortages and rising prices. Rice supplies were limited, transportation was almost impossible to obtain, the peace and order situation was deteriorating and there was little respect for the administration.[54]

Laurel created special courts exclusively to try cases involving profiteering and hoarding; serious cases could be punished by life imprisonment or even death. A few cases were filed, and in two cases the accused were found guilty and sentenced to long prison terms. But peacetime judicial procedures demanded reviews, appeals and possible retrial; other cases were dropped because of technical shortcomings or deficiencies in procedure.[55] In any event, court actions had little effect on the continually rising price (see Tables 4.3–4.7).

Another attempt at increasing food production was initiated on Laurel's birthday in March 1944. With much fanfare, quotas were set and governors and mayors made responsible for meeting them, and also for expanding areas planted with food crops. To mobilize manpower, Laurel decreed that all Filipinos between 16 and 60 had to contribute mandatory labour for food production activities for one eight-hour day every week. After much publicity, however, the hype died, overwhelmed by the realities of transportation shortages, thieves (planters were often beaten to the fruits of their labour by robbers or hungry animals) and increasing dangers of being molested by guerrillas or bandits posing as guerrillas, or by Japanese soldiers.[56]

Worsening Conditions in Manila

When none of the measures attempted proved effective, Laurel decided in May 1944, to resort to outright confiscation, and he ordered the Constabulary to seize hoarded rice in various locations. However, due to corruption and other causes, this move yielded poor results; furthermore, there were cases of non-hoarders being victimized, and some – or most – of the rice that was actually confiscated somehow disappeared.[57]

Table 4.3 Minimum government salaries

Date	*Minimum salaries (pesos per month)*
1941 (pre-war)	P 30.00
February 1942	P 25.00
September 1942	P 30.00*
July 1943	P 31.00
October 1943	P 40.00
January 1944	P 60.00
July 1944	P 60.00 + P 20.00 cost-of-living bonus
August 1944	P100.00
March 1945	P 30.00

* Provided recipient was supporting a family.

Sources: *Official Gazette*, 1942–1944; *Tribune*, 1942–1944; Jenkins, *United States Economic Policy Towards the Philippines*.

Table 4.4 Cost-of-living index (CLI), wage earner's family in Manila

Date	*Value of one 1941 peso in Japanese pesos*	
	CLI	*Ballantyne scale*
1941		
December	1.00	1.00
1942		
January	1.07	1.00
Februay	1.16	1.00
March	1.29	1.00
April	1.36	1.00
May	1.43	1.00
June	1.57	1.00
July	1.70	1.00
August	1.82	1.00
September	1.86	1.00
October	1.99	1.00
November	2.09	1.00
December	2.01	1.00
1943		
January	2.08	1.05
Februay	2.21	1.10
March	2.46	1.15
April	2.72	1.20
May	2.63	1.25
June	2.47	1.30

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Table 4.4 *continued*

Date	*Value of one 1941 peso in Japanese pesos*	
	CLI	*Ballantyne scale*
July	2.67	1.40
August	3.85	1.50
September	4.38	1.60
October	5.04	1.70
November	7.24	1.80
December	11.97	2.50 (flood)
1944		
January	16.09	4.00
Februay	18.91	5.00
March	19.75	6.00
April	25.67	9.00 (1st air-raid drill)
May	33.63	12.00
June	49.66	15.00 (rice confiscations)
July	70.86	20.00
August	81.55	25.00 (Manila defense drill)
September	153.87	30.00 (1st Manila air-raid)
October	215.71	40.00 (Leyte landing)
November	452.27	60.00
December	648.84	90.00
1945		
January	951.50	
February	N/A	
March	550 (Manila liberated)	
April	589	
May	680	
June	736	
July	742	
August	715	
September	699	

Note: Cost-of-Living Index, 1942–5 (calculated from 1938 survey of family budgets of wage earners in Manila with incomes of less than P50 a month, based on food, house, rent, clothing, fuel, light, water and miscellaneous (transportation, laundry, soap, starch, cigars/cigarettes, haircuts, medicine, recreation, and so on) expenses. Source: Romualdez, *Financial Problems*, 455, 461–63, based on Bureau of Census and Statistics (BCS) data; Hartendorp, *History*, pp. 223, 727, and *Tribune*, 3 Dec. 1942, all based on BCS data.

The Bank of Japan made its own estimates on the CLI in Manila during the occupation years, which were almost the same as the BCS figures until September 1944, when the Japanese figures were consistently much lower than the BCS data. Nihon Ginko Gaijikyoku [Bank of Japan Foreign

Affairs Bureau], *Nihon Kinyû Shi Shiryô, Shôwa Hen* [*Documents on the Financial History of Japan: Shôwa volume*], vol. 30, chart 57.

The so-called Ballantyne Scale calculated the worth of the Japanese peso *vis-á-vis* the 1941 peso. D.L. Ballantyne, of the Chase Bank, was Special Bank Adviser to President Sergio Osmena, and the chart was made in June 1945.

Table 4.5 Rice prices

Buying price in Central Luzon pesos per cavan	*Government-set price*		*Open-market price*
	Rice	*Palay*	*Rice*
1942			
January	5.10	2.50	
February	5.10	2.50	6.80–7.00
December	5.40–5.80	2.65–2.85	
1943			
October	10.20–10.80	5.00–6.30**	37.00–50.00
December	8.00		
1944			
January	17.00	8.00	
		16.00	
February	52.35	25.00	
April 1	70.00–80.00	25.00	75.00–200.00
May	200.00		
June	200.00		300.00
	200.00		300.00
December	200.00	100.00**	
1945			
February	7.20	3.00***	

Notes:
* 1 cavan = 44 kilos of *palay*, or unhusked rice; 1 cavan = 56 kilos of milled rice.
** plus prime commodities as an incentive to sell grain.
*** Commonwealth government price.

Sources: *Official Gazette*; *Tribune*; Lichauco diary; Laurel Cabinet meeting minutes.

Table 4.6 Selling price of rice in Manila (in pesos)

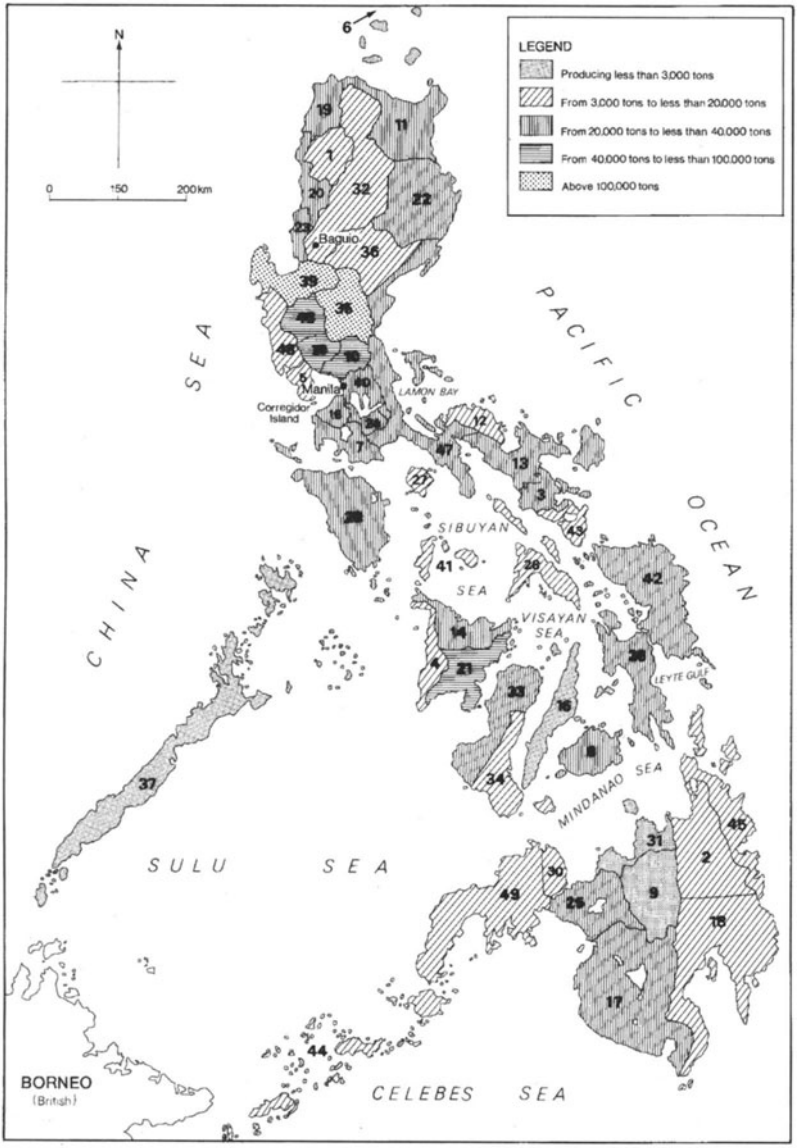
		Government price		*Open-market prices*	
		per sack	*per ganta*	*per sack*	*per ganta*
1940					0.31
1941	(pre-war)				0.29
1942	January		0.30		
		6.10–6.50	0.34	8.00–12.00	0.40–0.55
	March	8.00–9.00	0.37		
		7.50–8.00	0.34		
	April	7.50–8.00	0.34	6.50	
	May	7.50–8.00	0.34	8.00	0.70
	December	7.50–8.00	0.34	13.00	
1943	July	8.00	0.35	20.00	
	August	8.00	0.35	70.00	
	November		0.45	140.00	1.20
	December		0.45	180.00	
1944	January	19.88		200.00	5.10
	February	61.50		250.00	9.10
	April	61.50		255.00	
	May	200.00	10.00	250.00	
		200.00	10.00	300.00	
		200.00	10.00	450.00	
		200.00	10.00	550.00	
		200.00	10.00	800.00	
	June	200.00	10.00	1000.00	
	August	200.00	10.00	2400.00	54.00
		200.00	10.00	2500.00	
	September			3500.00	100.00
				4500.00	250.00
	October			5000.00	300.00
	November			8000.00	
				8500.00	
	December			11000.00	440.00
1945	February		0.32*		
	June			50.00	

Note:
One sack = 56 kg
One ganta = 2.4 kg
* Commonwealth government price

Sources: *Official Gazette*; *Tribune*; diaries of Labrador and Lichauco; guerrilla reports in Whitney papers.

Table 4.7 Rice production in the Philippines ('000 tons)

Province	*1939*	*1940*	*1942*	*Average*
1. Abra	5.12	5.57	6.46	5.72
2. Agusan	3.44	2.72	4.16	3.44
3. Albay	13.89	15.83	20.37	16.70
4. Antique	12.22	14.56	17.30	14.70
5. Bataan	8.80	9.07	7.10	8.33
6. Batanes	0.04	0.04	0.04	0.04
7. Batangas	17.68	15.47	17.74	16.96
8. Bohol	19.12	18.86	21.91	19.96
9. Bukidnon	1.36	1.24	1.56	1.39
10. Bulacan	45.04	50.16	45.99	47.07
11. Cagayan	24.21	30.83	38.36	31.13
12. Camarines Norte	4.48	4.17	3.74	4.13
13. Camarines Sur	25.05	25.51	40.34	30.30
14. Capiz	32.71	33.16	41.82	35.90
15. Cavite	16.15	18.36	19.95	18.15
16. Cebu	1.89	1.77	2.18	1.95
17. Cotabato	27.99	27.61	38.99	31.53
18. Davao	4.69	5.08	7.35	5.71
19. Ilocos Norte	22.40	23.80	20.24	22.15
20. Ilocos Sur	16.47	18.83	17.55	17.62
21. Iloilo	61.28	53.91	64.70	59.96
22. Isabela	24.23	23.80	29.64	25.89
23. La Union	15.36	17.70	16.96	16.67
24. Laguna	18.00	18.95	23.67	20.21
25. Lanao	27.04	21.75	30.04	26.28
26. Leyte	28.46	23.57	31.52	27.85
27. Marinduque	3.04	3.99	3.57	3.53
28. Masbate	3.36	2.96	4.94	3.75
29. Mindoro	13.80	11.26	14.68	13.25
30. Misamis Occidental	6.19	6.81	6.65	6.55
31. Misamis Oriental	1.85	2.93	2.76	2.51
32. Mountain Province	12.23	13.47	14.77	13.49
33. Negros Occidental	29.71	28.33	37.61	31.88
34. Negros Oriental	3.66	3.92	3.35	3.64
35. Nueva Ecija	156.24	165.02	121.62	147.63
36. Neuva Vizcaya	12.38	14.52	14.51	13.80
37. Palawan	1.79	1.71	2.70	2.07
38. Pampanga	42.29	49.52	41.70	44.50
39. Pangasinan	119.27	123.00	96.10	112.79
40. Rizal	14.20	16.89	15.41	15.50
41. Romblon	2.76	3.46	3.32	3.18
42. Samar	24.39	21.91	27.20	24.50
43. Sorsogon	10.19	11.41	11.80	11.14
44. Sulu	7.85	5.54	6.83	6.74
45. Surigao	13.77	13.84	16.14	14.58
46. Tarlac	45.51	46.87	42.43	44.94
47. Tayabas	19.10	20.20	21.20	20.17
48. Zambales	10.87	11.11	17.45	13.15
49. Zamboanga	12.29	12.99	18.03	14.44
Total	1043.87	1073.98	1114.48	1077.44



Map 5 The Philippines, showing rice production by province, 1939–42

The failures of Biba, of the price-control agencies, and of the various schemes for distribution were due in large part to the incapacity of the Laurel government to implement its plans effectively. The government lacked the means to do so (the Japanese controlled transportation, fuel, issuance of money and so on), but corruption in government made matters worse; for some in the administration, the lure of easy money superseded devotion to duty. Finally, the Laurel government was held in low esteem by most Filipinos, who recognized its weakness and on a daily basis saw only the arrogance of the Japanese.

The Japanese also sowed the seeds of confusion by using the controlled media to report endless Japanese victories and rosy news of big rice harvests and price ceilings. Behind these stories, the Japanese were buying rice with sheaves of newly printed money, much of it without serial numbers. The rice shortage was real, and the Japanese were buying whatever grain was available at exorbitant rates, thus escalating price inflation.[58]

In June 1944, Laurel tried to ease the rice situation by again lifting the ban that prohibited people from bringing rice into Manila – but most of the grain that flowed in wound up in the hands of black marketeers. Eventually, the administration re-imposed the ban on bringing rice into Manila, trying to re-establish a complete monopoly of the rice industry by the Biba, but there were too many loopholes. Bribery was rampant and this new ban had little effect on the black market.[59]

A special meeting of rice growers was called in Manila in July, and Laurel, Roxas and other leaders appealed to them to sell their rice to the government. The rice growers promised to give what they could, but there was no concrete action – in some instances because the rice growers themselves no longer had control of their farms, which were in the hands of guerrillas or lawless elements.[60]

Conditions became increasingly dangerous in the provinces, and as a consequence of Japanese brutalities and banditry and depredations by rogue guerrillas, more and more people streamed into Manila. By the end of 1943, the population of the city exceeded one million, compared with a pre-war population of around 600 000. The Laurel government tried to reduce the numbers in Manila, but there was no transportation out of the city except at exorbitant prices, and the Japanese military discouraged depopulation because it needed labourers to build defensive works and airfields, and to unload and move military cargoes.[61]

To make the situation worse, the war was going against Japan. Despite continuing press reports of Japanese victories, air raid precautions and defense drills held in Manila and other key cities caused the price of rice and other foodstuffs to jump still higher. In August, 1944, US planes returned to Philippine skies, and in September Manila experienced its first air raid since 1942.[62] Starting in June 1944, the Japanese sent additional troops to defend the Philippines. The arriving forces needed to be sheltered and fed, and this meant more mouths competing for the already precarious rice supply in Manila.[63]

While the Laurel government thought up new plans, the Kempeitai took action on its own, and began seizing rice hoarded in Manila without informing the Filipino administration. Homes of hoarders and non-hoarders alike were broken into, and rice was forcibly taken. Laurel demanded that all the seized rice be handed over to the government, and the Kempeitai reluctantly complied, but only after humiliating the Filipino representatives. Laurel then ordered all people to turn over any excess stocks to the government within a week, threatening more confiscations. Some rice came in, but prices remained high and supplies were inadequate.[64] Opportunists, hoarders, speculators, cheaters and the corrupt – many of them aliens – had a field day, victimizing the people. Some were prosecuted after the war, but many more escaped justice.[65]

Laurel finally abandoned his attempt to solve the food crisis independently from the Japanese, and replaced Biba with a joint Filipino–Japanese Rice and Corn Administration, which was called Ricoa for short. Ricoa combined the facilities and personnel of the Biba and the Japanese Army rice procurement agency, but as had been foreseen, most of the rice harvested and procured by Ricoa went to the Japanese Army.[66]

Even though they were hungry, people joked about the situation, saying the Philippines was no longer 'Pilipinas', but was now 'Pilapinas' (*pila* means queue in Tagalog). While the Spaniards had brought *relihyon* (religion), and the Americans *edukasyon* (education), the Japanese had brought *rasyon* (ration). Prices were controlled only in the controlled newspapers; when buyers showed the price lists in the *Tribune*, vendors sarcastically told them to buy at the newspaper offices. Ricoa, since it did not provide any solution to the rice problem, was referred to as 'Lokoa' (from *loko*, fool).[67]

But people had to get food, regardless of the government plans,

and they resorted to smuggling, stealing, and bribery; some even argued that these activities were patriotic because they indirectly hurt the Japanese and their Filipino collaborators. 'So that we won't die of hunger, let's steal the rice of the Japanese and the Filipino collaborators!' cried one guerrilla leaflet in Manila. People walked long distances to the provinces just to buy rice, and when inflation became so bad that the Japanese-printed money had lost most of its value, people bartered furniture, jewellery, clothes and anything of value to get rice. Smugglers stole rides aboard the few trains that continue to run, and jumped off with their rice sacks before reaching Tutuban station, where checkpoints were maintained, or smuggled rice up the Pasig river, bribing inspectors and the police. The more daring jumped into the oily waters of Manila Bay and the Pasig River to recover rice in sunken Japanese vessels, although it had a bad smell and terrible taste. All these efforts sometimes went for nought, when bandits or self-proclaimed guerrillas or even children robbed people of their food.[68] The government found no solution to the rice problem and in the end total chaos reigned. The Japanese forced Laurel and several members of his cabinet to move to Baguio, and the people in Manila were left to fend for themselves. The better off found ways to obtain food, but the indigent began to starve, and by December 1944, the dead and dying were becoming common sights in Manila's streets.[69]

THE RETURN OF THE AMERICANS AND POST-WAR POLICIES

The Americans eventually returned, landing on the island of Leyte in October 1944, and on Luzon in January 1945. Towns and cities were freed from Japanese rule one by one, and the occupation at last came to an end. Only then was there again food to ration out or buy. Initially the Americans fed liberated areas under a rationing system, using Army stocks. To facilitate distribution, rationing and sales, General MacArthur created Philippine Civil Affairs Units (PCAUs) which followed US combat troops and began civil relief operations in liberated territories. The PCAUs were only temporary, and ceased operations with the re-establishment of the Commonwealth government. PCAU rations were much higher than at any time during the Japanese occupation, averaging 450 grams of rice per day, although sometimes bread or corn meal were served instead of rice.[70]

The Commonwealth government, which was restored on Philippine soil a few days after the American landing on the island of Leyte, quickly issued a list of maximum prices, based on pre-war levels, and this list applied to Manila and other liberated areas as soon as the Commonwealth government resumed control there. The Emergency Control Administration was reconstituted, but it lacked the capacity to enforce limits on prices, which remained high. Even the Americans could not eradicate the black market, which survived from the Japanese period.[71] The Department of Agriculture and Commerce, the Bureau of Plant Industry, and Naric were reconstituted in mid-1945, and played an active part in rehabilitating rice and other farms, but agriculture had been severely affected by the fighting at the end of the war, and imports through the US Army and the United Nations Relief and Rehabilitation Administration were critical in the first months after the war.[72]

The Philippines became independent on 4 July 1946, and Manuel Roxas was the republic's first president. Roxas had served with Naric before the war, and was chairman of the Economic Planning Board, and of the Bigasang Bayan board, under Laurel. Several other government officials and advisers in agriculture and food had also served in the Laurel government, and put to use some of the lessons learned from the Japanese food programmes.[73]

To help the republic rebuild its war-torn agricultural lands, and to move toward self-sufficiency in food, Roxas created food production campaigns similar to those carried out during the war and occupation. The government recommended development of irrigation systems, application of fertilizers, and use of more modern methods of farming, echoing similar suggestions before and during the occupation.[74] However, nothing as severe as the controlled economy of the occupation period was ever attempted.

The difficulties of the Japanese occupation are still remembered in the Philippines, particularly the shortage of food. Less well remembered are the efforts taken to forestall the shortage, which were already underway even before the Second World War started. Under more peaceful conditions, some of the expedients people adopted may have worked, but under wartime conditions, with the Philippines becoming a major battlefield at the beginning and at the end of the war, with Japanese military forces competing with Filipinos for the consumption of an already limited supply of rice, and with an active guerrilla movement throughout the country, it proved impossible to set up a controlled and rationalized food production and distribution scheme.

Notes

1 Republic of the Philippines, Bureau of Agriculture, *A Half-Century of Philippine Agriculture* (Manila: Graphic House, 1952), p. xii; United States High Commissioner to the Philippines, *5th Annual Report of the United States High Commissioner to the Philippines* (henceforth *PHCAR*) (Washington, DC: Government Printing Office, 1943), p. 55; Benedict J. Kerkvliet, 'Withdrawal and Resistance: The Political Significance of Food, Agriculture and How People Lived During the Japanese Occupation of the Philippines', in Laurie Sears (ed.), *Autonomous Histories, Particular Truths: Essays in Honor of John Smail* (Madison: University of Wisconsin Center for Southeast Asian Studies, 1993), pp. 177–8.

2 Benedict J. Kerkvliet, *The Huk Rebellion: A Study of Peasant Revolt in the Philippines* (Berkeley: University of California Press, 1977), pp. 16–17, 36–45; *A Half-Century of Philippine Agriculture*, pp. xi–xii; Commonwealth of the Philippines, Bureau of Census and Statistics, *Yearbook of Philippine Statistics: 1940* (Manila: Bureau of Printing, 1941), p. 137; *5th PHCAR*, p. 60; Jose G. Sanvictores, Summarized Report of the Philippine Agricultural Survey Commission to Taiwan (30 Oct. 1944), UP People's Court Papers (hereafter UPPC). Also Yomiuri Shimbun interview with Michizô Yamagoshi, in Yomiuri Shimbun (ed.), *Shôwa Shi no Tennô* [*The Emperor in Showa History*] (Tokyo: Yomiuri Shimbun, 1980), vol. 11. p. 14; Hitô Chôsa Iinkai (Research Commission on the Philippines), *Hitô Chôsa Hôkoku* [*Report of the Research Commission on the Philippines*] (1943; photo offset publication: Tokyo: Ryûkei Shosha, 1993), ch. 2. The Japanese were well aware of the unbalanced nature of Philippine agriculture and criticized this state of affairs, saying it was the consequence of a US scheme.

   Yields in central Luzon were usually higher than the national average; Nueva Ecija, the main rice-producing province, could go as high as 40 cavans (2240 kg) per hectare. Still, this figure was low compared to, say, Taiwan's average of 62 cavans (3472 kg) per hectare. Hitô Gunseikanbu, Sangyôbu (Japanese Military Administration, Department of Industries), *Sangyô Kankei Yôko Sôran* [*General Plans for Economic Control*] (28 Apr. 1943) (hereafter *Sangyô Kankei*), in the library of the Institute for Developing Economies, p. 161.

3 Victor Buencamino, *Memoirs of Victor Buencamino* (Mandaluyong: Jorge B. Vargas Filipiniana Foundation, 1977), pp. 237–9, 242–3; Kerkvliet, *Huk*, p. 17.

4 *5th PHCAR*, pp. 34–5; Sekijiro Takagaki (ed.), *The South Seas Handbook 1942–3* (Tokyo: Foreign Affairs Association of Japan, 1943), p. 40. See also Michael J. Connolly, *Church Lands and Peasant Unrest in the Philippines: Agrarian Conflict in 20th Century Luzon* (Quezon City: Ateneo de Manila University Press, 1992), pp. 111–24 for the situation in one such estate, the Buenavista Estate.

5 Commonwealth Act 600 granted Quezon emergency powers; Commonwealth Executive Order No. 233 established the Emergency Control Board; Executive Order 335, 1 April 1941, created the CEA. A.V.H.

Hartendorp, *History of Industry and Trade of the Philippines* (Manila: American Chamber of Commerce of the Philippines, 1958), pp. 630–1.

6 Executive Orders 301, 333, 334; *5th PHCAR*, p. 32; Buencamino, *Memoirs*, pp. 259–63.

7 Buencamino, *Memoirs*, pp. 260–3; *5th PHCAR*, p. 14; Teodoro A. Agoncillo, *The Fateful Years: Japan's Adventure in the Philippines* (Quezon City: R.P. Garcia, 1965), vol. 1, pp. 56–7.

8 Marcial P. Lichauco, *Dear Mother Putnam: A Diary of the War in the Philippines* (Privately published, n.d. but ca. 1949), entries for 12 and 16 Dec. 1941; *Philippines Free Press* issues for Dec. 1941; Juan Labrador, *A Diary of the Japanese Occupation* (Manila: Santo Tomas University Press, 1989), pp. 18–24; Faustino Aguilar, *Nang Magdaan ang Daluyong* [*When the Tempest Passed*] (Manila: privately published, n.d. but ca. 1945), pp. 8, 11, 16–17, 20–6, 29, 62; author's interviews with Armando J. Malay, 17 Aug. 1983, and with Hernando Abaya, 15 Feb. 1991. Malay and Abaya were journalists during the occupation.

9 For the situation in Manila in December 1941 and the Japanese entry into the city, see 'The Past, the Present, the Future', *City Gazette* (1 Jan. 1943); Lichauco, *Dear Mother Putnam*, pp. 1–12. On the crowds at the Naric warehouses, see Victor Buencamino, 'Manila Under the Japanese Occupation (Fragments of Wartime Memoirs)', *Bulletin of the American Historical Collection* (hereafter *BAHC*), 7, 3 (1979): 7–8.

10 *Tribune*, 5–8 Jan. 1942; Buencamino, 'Manila Under the Japanese', *BAHC*, 7, 3: 10–11; A.V.H. Hartendorp, *The Japanese Occupation of the Philippines* (Manila: Bookmark, 1967), vol. 1, p. 82; *Tribune*, 9, 10, 11, 14, 16 Jan. 1942. Some people managed to obtain more than one residence certificate.

11 Buencamino, 'Manila Under the Japanese', *BAHC*, 7, 3: 11–15; *6th PHCAR*, p. 102; Yomiuri Shimbun interview with Taichi Uzaki, *Shôwa Shi no Tennô*, vol. 11, p. 30; *Tribune*, 10–14, 15, 23 Jan. 1942.

12 Some Naric men were robbed or killed by bandits, and some bandits posed as Naric agents to steal rice. Buencamino, 'Manila Under the Japanese', *BAHC*, 7, 3, *passim*, describes the various problems involved in the harvest and buying up of rice. See also Yomiuri Shimbun interviews with Yamagoshi, Uzaki, Itsuto Takahara, Shôzo Yasuda and Shigeru Ôtsuka, in *Shôwa Shi no Tennô*, vol. 11, pp. 14, 30, 45, 89–94; Michizô Yamagoshi, *Gunseika ni okeru Hitô Sangyô no Suii* [*Transformation of the Philippine Economy under Military Administration*] (Dec. 1943) (microfilm copy in the library of the Institute for Developing Economies), pp. 27–8.

13 *Tribune*, 8, 9, 10, 13 Jan. 1942; Buencamino, 'Manila under the Japanese', *BAHC*, 7, 3, p. 14.

14 'Nampô Senryôchi Gyôsei Jisshi' ['Essentials of Policy Regarding the Administration of Occupied Areas in the Southern Regions'], 20 Nov. 1941, in Bôeichô Bôei Kenkyûjo Senshibu [Defense Agency, National Institute for Defense Studies, War History Office], *Shiryôshû Nampô no Gunsei* [*Compilation of Documents on Military Administration in the Southern Region*] (Tokyo: Asagumo Shimbun Sha, 1985), pp. 93–5; *Official Journal of the Japanese Military Administration* [hereafter *OJJMA*], 2: 29–30.

15 The Japanese Military Administration's Department of Industries supervised economic matters; under it was the Bureau of Agriculture Section and the Bureau of Foods. The Philippine Executive Commission retained virtually unchanged from the Commonwealth government the Department of Agriculture and Commerce, under which was the Bureau of Plant Industry. The 14th Army had an Intendance Department responsible for supplying and paying its officers and men, as well as transients.

16 Buencamino, 'Manila under the Japanese', entry for 3 Feb. 1942, *BAHC*, 7, 4: 8; *Tribune*, 8 Apr. 1942; Dai Jûyon Gun Shireibu (Fourteenth Army Military Administration Department), *Gunsei Jisshi Gaikyô Hôkoku* [*Report on Execution of Military Administration*] (hereafter *Gunsei Jisshi*), no. 9, p. 3; 'Beikoku Shûbai Kinkyu Taisaku Yôko' ['General Plan for the Purchase of Rice'], *Sangyô Kankei*, p. 145; Yomiuri Shimbun interview with Uzaki, *Shôwa Shi no Tennô*, vol. 11, p. 31; Hartendorp, *The Japanese Occupation*, 1: 82. *Sangyô Kankei*, pp. 150, 158–9, gives amounts imported in 1942.

17 *OJJMA*, I: 50–1; *Sangyô Kankei*, p. 403; Lichauco, *Dear Mother Putnam*, entry for 7 Feb. 1942; Executive Order 157, in *OJJMA*, 12, pp. 35–43; Bureau of Constabulary (BC) Circular No. 45, Philippine Executive Commission, *Official Gazette* (hereafter *OG*), 2, 6 (June 1943): 567; 'Diary of a City', *City Gazette*, 1, 5 (1 Dec. 1942): 59; *Tribune*, Feb., Mar. and Apr., 1942, *passim*, 8, 9, 10, 16, 17 Nov. 1942; 18, 20, 22 May 1943.

18 Buencamino, 'Manila under the Japanese', entries for 23 Jan., 1 Feb., 23 Mar. 1942, *BAHC*, 7, 3: 24–5; 7, 4: 7; 8, 1: 23; Yamagoshi, *Gunseika ni okeru Hitô Sangyô no Suii*, pp. 32–3; *Tribune*, 7, 16 Mar. 1942.

19 *OJJMA*, 1: 53–6; interviews with Armando J. Malay.

20 *OJJMA*, 1: 17–18, 21; interviews with Armando J. Malay.

21 Yamagoshi, *Gunseika ni okeru Hitô Sangyô no Suii*, pp. 6–7; *Tribune*, 20 May 1942.

22 Executive Order No. 40, in *OJJMA*, 4: 31–32; 'Shôwa 17 Nendo Hitô Shokuryô Taisaku Gaiyô', *Sangyô Kankei*, p. 154; Yamagoshi, *Gunseika ni okeru Hitô Sangyô no Suii*, p. 43.

23 'Beikoku Shûbai Haikyû Tôsei Kiko', *Sangyô Kankei*, p. 146; *Tribune* 19, 23 June, 3 July, 27 Sept. 1942; Buencamino, 'Manila under the Japanese', entries for 18, 23 June 1942, *BAHC*, 8, 3: 64–5; Manuel Buenafe, *Wartime Philippines* (Manila: Philippine Educational Foundation, 1950), p. 155; Agoncillo, *The Fateful Years*, p. 543.

24 'Shôwa 17 Nendo Hitô Shokuryô Taisaku Gaiyô', *Sangyô Kankei*, p. 155; 'Bahai Pare Gun Kanri Nôjo ni kan suru ken' ['Matters relating to the Army Management of Bahay Pare Agricultural Estate'] (11 May 1942) and 'Montaruban Gun Kanri Nôjo ni kan suru ken' ['Matters relating to the Army Management of Montalban Agricultural Estate'] (9 July 1942), *Sangyô Kankei*, pp. 10–11; Yamagoshi, Gunseika ni okeru Hitô Sangyô no Suii, pp. 36, 44–5, 71; Yomiuri Shimbun interviews with Takahara and Uzaki, *Shôwa Shi no Tennô*, vol. 11, pp. 25, 28; Zensaku Shishido, *Watashi to Rusontô* (Tokyo: Zenbon sha, 1990), pp. 43–5; Mutsuo Sumeragi, *Mô Hitotsu no Firipin Sen*

(Yamato City: privately printed, 1985), p. 107; *Tribune*, 16 June, 18 Nov. 1942.

25 *OG*, 2, no. 2 (Feb. 1943), p. 243; Sanvictores Summarized report; 'Shôwa 18 Nendo ni tai suru Hitô Hiryô Taisaku Yôko' ['1943 General Plan for Philippine Fertilizer'], *Sangyo Kankei*, pp. 131–4; *Tribune*, 30 Oct., 18 Dec. 1942.

26 Shishido, *Watashi to Rusontô*, pp. 48–50; *OG*, vol. 1, pp. 360, 374, vol. 2, pp. 740, 825; Agoncillo, *The Fateful Years*, pp. 541, 543–4. See also Bureau of Information and Public Security, *Get the Most Benefit Out of Controlled Economy* (Manila: Government Printing Office, 1943). Articles of the Philippine Fertilizer Distribution Association, *OJJMA*, 11: 13–17; *Gunsei Jisshi*, no. 21, p. 3, no. 22, p. 3; Shishido, pp. 48– 50; *Tribune*, 4, 9, 19, 26 July, 19, 23 Aug., 11 Nov., 22 Dec. 1942. The FFRA was later broken into two sections: the Federation of Filipino Retailers of Manila (FFRM) and the Federation of Filipino Retailers Associations (which operated outside Manila). Federation of Filipino Retailers of Manila, *Taunang Ulat sa Taong Natatapos ng 31 ng Marzo 1943* [Annual Report for the Year Ending 31 March 1943] (Manila: FFRM, 1943), pp. 1–2; Ludovico Labao, 'For the Record', in *The National Rice Growers Cooperative Association, Second National Conference, July 19–21, 1944 Souvenir Program* (Manila: NRGCA, 1944), p. 15.

27 For cotton plans and their execution, see Sadakichi Takaoka (ed.), *Hitô Mensaku Shi* (Osaka: privately printed, 1988); Yomiuri Shimbun and Osaka Shakaibu (ed.), *Hitô Mensaku Butai* (Osaka: Shimpu Shobo, 1991); *OJJMA*, VI, pp. 30–1; Masato Watanabe, 'Ruson Sen to Shokuryô Busoku', *Shûroku Ruson* no. 48 (Aug., 1992), pp. 231–2.

28 *OJJMA*, 6, pp. 30–1; Outline of the Five-Year Plan of the Increased Production of Foodstuffs in the Philippines by the Department of Industries, JMA, *OJJMA*, 11: 8–11; Yamagoshi, *Gunseika ni okeru Hitô Sangyô no Suii*, pp. 73–80.

29 Mutsuo Sumeragi, *Ruson Sen to Firipinjin* (Tokyo: Rakuyu Shobo, 1981), pp. 48–50; interview with Sumeragi, 21 May 1993.

30 Minutes of the Meeting of Cabinet, 11 May 1944, in Mauro Garcia (ed.), *Documents of the Japanese Occupation of the Philippines* (Manila: Philippine Historical Association, 1965), p. 84; *A Half-Century of Philippine Agriculture*, p. xii; *Tribune*, 20, 27 Jan., 5, 13, 19, 20, 23, 28 Feb., 4, 9, 10, 13 Mar. 1943. Some of the destruction of the cotton crop was deliberate, as an act of sabotage or non-cooperation. Interview with Honesto Vitug, who was a photographer for one of the cotton companies in Pampanga; Yamagoshi, *Gunseika ni okeru Hitô Sangyô no Suii*, p. 15.

31 'Beikoku Shûbai Haikyû Tôsei Kiko', *Sangyô Kankei*, p. 147; *Tribune*, 2, 23, 27 Sept. 1942, 12, 13 Mar. 5, 14, 30 Apr. 1943. Interviews with Edgar J. Krohn and Armando J. Malay confirm that there was no appreciable difficulty in getting rice at this time. Uzaki, in *Shôwa Shi no Tennô*, vol. 11, p. 33, states that rationing kept prices in check in Manila.

32 Executive Order No. 32, *OJJMA*, 3: 219; Executive Order No. 183, *OG*, 2: 662–3; DAC Department Order No. 11, *OG*, 2: 854–5.

33 *OG*, 2: 564–7; *Tribune*, 8, 25–6 Nov. 1942, 9, 14, 29 Jan., 22 May 1943.

34 Official rice prices were often announced in the *Tribune*; occasionally black-market prices were reported in letters to the editor. Price summaries are also found in Hartendorp, *The Japanese Occupation*, 1: 103, 106, 269 and 2: 269–70 and Sumeragi, *Mô Hitotsu no Firipin Sen*, p. 93.

35 *Tribune* for June–July 1943; Lichauco, *Dear Mother Putnam*, 100–10; Labrador, *A Diary of the Japanese Occupation*, pp. 161–5.

36 'The Case of Dr. V. Buencamino'; Meeting held at Malacanang Palace at the Office of the President (Jan. 1944) in Mauro Garcia (ed.), 'More Documents on the Japanese Occupation of the Philippines, III', *Historical Bulletin*, 11, 2 (June 1967): 198–9, 203–4. A typescript copy of this record is also located in the Jose P. Laurel Library. See also Yamagoshi, *Gunseika ni okeru Hitô Sangyô no Suii*, p. 91; *Tribune*, 25, 26 Sept. 1943.

37 'The Case of Dr. V. Buencamino', pp. 204–5; Buencamino, *Memoirs*, p. 330; JMA Announcement Fixing New Purchase Price of Palay, *OG*, 2: 934; *Tribune*, 5 Oct. 1943.

38 In addition, Laurel faced numerous demands from the Japanese Army, the Japanese Navy and the Japanese Embassy. Pedro Sabido, Memorandum for President Jose P. Laurel [*c.* mid-1945], in Garcia, *Documents*, p. 185; 'The Case of Dr. V. Buencamino', p. 199; see also the minutes of the Laurel cabinet meetings in Garcia, *Documents* and in the University of the Philippines Japanese Occupation papers (hereafter UP). On the character of Japanese independence, see Lichauco, *Dear Mother Putnam*, pp. 150–3. See also Hartendorp, *The Japanese Occupation*, vol. 2, p. 130.

39 Proclamation 11, Republic of the Philippines *Official Gazette* (henceforth *RPOG*) 1,4 (Jan. 1944); *Tribune*, 16 Dec. 1943; Cable sent to Philippine Embassy, Tokyo, 12 Mar. 1944, Mauro P. Garcia Papers, Sophia University, Tokyo (hereafter MPG); Minutes of the Cabinet meeting on 29 Nov. 1943, UP.

40 *RPOG*, 1, 2 (Nov. 1943), pp. 115–16; *Tribune*, 26 Nov. 1943.

41 Proclamation No. 2, *RPOG*, 1, 1 (14–31 Oct. 1943), p. 7; *Tribune*, 2, 4, 6, 11, 12, 13, 14 Nov. 1943.

42 Problems with fuel and transportation were repeatedly raised in the Laurel Cabinet Meetings, for example in Minutes of the 25 November and 16 December 1943 Cabinet meetings, UP.

43 Minutes of the 25 and 29 Nov. 1943 Cabinet meetings, UP; *RPOG*, 1, 3 (Dec. 1943), p. 224, 1, no. 4 (Jan. 1944), pp. 491–4; 'The Case of Dr. V. Buencamino', pp. 198–9, 202; *Tribune*, 20, 27 Nov., 2 Dec. 1943, 1, 4 Jan. 1944; Buencamino, *Memoirs*, p. 328; Agoncillo, *The Fateful Years*, pp. 560–1.

44 'The Case of Dr. V. Buencamino', pp. 203–4; Letter of Candido Cabusao, in Allied Translator and Interpreter Section (ATIS) Enemy Publication No. 167, Discipline of Imperial Troops in the Philippines and Army Propaganda Measures, pp. 2–3; Buencamino, *Memoirs*, p. 329; JMA Announcement Fixing New Purchase Price of Palay, *OG*, 2, 10 (Oct. 1943), p. 934; *Tribune*, 5, 14 Oct. 1943.

45 November 15 to 17 marked the worst of the flooding. Marcial Lichauco stated that the flood was the worst in 40 years, although Edwin Andrews, an intelligence agent in Negros, reported it as the worst in 16 years. Lichauco, *Dear Mother Putnam*, pp. 139–41; Andrews to Douglas, Radio NR 246, 13 Feb. 1944, Whitney Papers, MacArthur Memorial (hereafter WP); Yomiuri Shimbun interview with Uzaki, *Shôwa Shi no Tennô*, vol. 11, p. 33.

46 Yamagoshi, *Gunseika ni okeru Hitô Sangyô no Suii*, p. 90; Minutes of the 2 and 21 Dec. 1943 Cabinet meeting, UP; Lichauco, *Dear Mother Putnam*, pp. 141, 147–8; ISRM (Phillips) to MacArthur, NR 11, 5 Dec. 1943, NR 31, 21 Dec. 1943, WP; Wendell Fertig to MacArthur, NR 473, 13 Dec. 1943, WP; *Tribune*, 14, 24, 25, Nov., 1, 23, 28, 29, 30 Dec. 1943.

47 Minutes of the Meeting of the Cabinet, Dec. 2, 1943; *Tribune*, 1, 4, 11 Dec. 1943; Agoncillo, *The Fateful Years*, p. 539.

48 *Tribune*, 23, 28 Oct., 2, 11, 12, 28 Nov., 3–5 Dec. 1943, 6 Jan. 1944; *RPOG*, 1, 1 (14–31 Oct. 1943), p. 55; Act 9, in *RPOG*, 1, 3 (Dec. 1943), pp. 225–30.

49 'The Case of Dr. V. Buencamino', p. 204; Buencamino, *Memoirs*, pp. 330–1; Food Administration Order (hereafter FAO) No. 1, MPG; *Tribune*, 11, 15 Dec. 1943

50 FAO No. 8, MPG; *RPOG* 1, 4 (Jan. 1944), pp. 382–3; also Laurel, 5 Jan. 1944 speech before Neighbourhood Association heads, *RPOG*, 1, 4 (Jan. 1944), pp. 401–4; *Tribune*, 1, 6 Jan. 1944; Lichauco, *Dear Mother Putnam*, pp. 147–8.

51 Labrador, *A Diary of the Japanese Occupation*, pp. 185–6; Lichauco, *Dear Mother Putnam*, p. 153; *Tribune*, 11, 12 Jan. 1944.

52 Minutes of the Meeting of the Cabinet, 9, 16 and 21 Dec. 1943, 13 and 25 Jan., 3 Feb. 1944, UP; Labrador, *A Diary of the Japanese Occupation*, p. 198; *Tribune*, 1 and 6 Jan. 1944.

53 Minutes of a cabinet meeting on 29 Feb. 1944, UP; Ordinance No. 8, *RPOG*, 1, 6 (Mar. 1944): 620–5; *Tribune*, 1, 6 Jan., 1, 4 Mar. 1944. Concrete rules and regulations on the structure of the Manila Consumers' Cooperative Associations (MCCAs) was embodied in FAO No. 29, *RPOG*, 1, 7 (Apr. 1944): 790–2.

54 Roxas to Laurel, 11 Apr. 1944, Jose P. Laurel Memorial Library (hereafter JPLL); Executive Order No. 46, *RPOG*, 1, 7 (Apr. 1944): 750–1; Roxas statement, *RPOG*, 1, 7 (Apr. 1944): 796; Executive Order No. 48, *RPOG*, 1, 7 (Apr. 1944): 751; *Tribune*, 9, 12, 15, 27 Apr., 9 May 1944.

55 Act 65, *RPOG*, 1, 6 (Mar. 1944): 642–6; Ordinance No. 7, *RPOG*, 1, 6 (Mar. 1944): 619–20; *Tribune*, Mar. to July 1944, *passim*.

56 *Food Production Series*, No. 1 (Manila: Bureau of Printing, 1944) explains the whole campaign. See also Minutes of the 16 and 30 Mar. 1944 Cabinet meetings, in Garcia, *Documents*, p. 69; Executive Order No. 37, *RPOG*, 1, 5 (Feb. 1944): 458–9; *Tribune*, Feb. and Mar. 1944, *passim*. Detailed rules and regulations concerning compulsory labour were issued by the Ministry of Agriculture and Natural Resources (MANR) in MANR Ministry Order No. 42, *RPOG*, 1, 5 (Feb. 1944): 560–1. Also Andrews to MacArthur, NR266, 17 Apr., NR 4, 8 July

1944; NR 8, 25 July 1944, WP. Interview with a barrio captain in Pampanga.

57 Minutes of the 12, 15 and 18 May, 22 June 1944 Cabinet meetings, in Garcia, *Documents*, pp. 89–92, 97–8; *Tribune*, 13 May 1944; *RPOG*, 1, 8 (May 1944): 915; Executive Order No. 55, *RPOG*, 1, 8 (May 1944): 856–7; FAO No. 35 *RPOG* 1, 8 (May 1944): 899; FAO No. 43, MPG; Sabido Memorandum, *Documents*, p. 195; *Tribune*, 13, 17, 18, 23, 25, 28 May, 6 June, 11 July 1944.

58 Lists of amounts of money issued by the Japanese and the resultant inflation are in Eduardo Z. Romualdez, 'Financial Problems Created by the War', *Journal of the Philippine National Historical Society*, 10,4 (Dec. 1962): 450–2, and Sumeragi, *Mô Hitotsu*, p. 44. Laurel himself knew how alienated from the people the government had become, and tried to improve its standing, but time and means were lacking. Laurel to Rafael Alunan, 5 May 1944, JPLL.

59 *RPOG*, 1, 3 (Dec. 1943): 216–17; *Tribune*, 22, 23 June 1944.

60 *Tribune*, 21, 22 July 1944; Brief Summary of Activities of Roxas, in Garcia, *Documents*, p. 251; Minutes of the Cabinet meeting of 13 July 1944, in ibid., p. 101.

61 The Laurel cabinet continually discussed measures for depopulating Manila; the *Tribune* stressed almost daily the advantages of going back to the provinces – but readers responded that it was difficult to book passage on any vehicle out of Manila. The 14th Army Field Freight Depot noted that the move to depopulate Manila made it difficult to recruit stevedores. Allied Translator and Interpreter Service, (ATIS) Southwest Pacific Area Command, Enemy Publication No. 311: 14th Army Field Freight Depot (PI) Duty Report for January 1944 (mimeographed, 1944), p. 19.

62 After every defense drill and air raid practice, prices shot up. Although the newspapers urged calm, the building of air-raid shelters by the Japanese belied these claims that all was well. Later, prices jumped after every US raid. Labrador, *A Diary of the Japanese Occupation*, p. 184; see also letters in the *Tribune*, especially in Apr., Aug. and Sept.–Oct. 1944.

63 Japan, Defense Agency War History Office, *Senshi Sosho: Sho-go Rikugun Sakusen (1) Reite Kessen* [*War History Series: Army Victory Operation: The Decisive Battle of Leyte*] (Tokyo: Asagumo Shimbunsha, 1970), pp. 114–72 gives details of Japanese plans and reinforcements. The civilian view of the arrivals is seen in Lichauco, *Dear Mother Putnam*, pp. 167–9 and Labrador, *A Diary of the Japanese Occupation*, pp. 203, 208–10.

64 Proclamation No. 31, published in full in *Tribune*, 3 Oct. 1944; Sabido Memorandum, in Garcia, *Documents*, p. 198.

65 See, for example, F.C. de la Rama, *I Made Millions and Lost Them* (Manila: National-Ad Philippines, 1957) and Sergio Osmena, Jr., 'Dear Dad' (unpublished manuscript) for accounts of these events from the perspective of the economic collaborators.

66 Executive Order No. 104, MPG; Ordinance No. 44, MPG; Sabido Memorandum, *Documents*, p. 187; *Tribune*, 16, 17 November 1944.

Interestingly, Laurel's executive order was issued after specifics of the organization and its operation had been published in the *Tribune*; Testimony of Arturo V. Tanco, in USA v. Yamashita, pp. 3716–28, US National Archives, RG 331; Agoncillo, *The Fateful Years*, p. 561.

67 Agoncillo, *The Fateful Years*, pp. 539, 542–3; interviews with various wartime residents of Manila.

68 Interviews with Amelia Carunungan, Armando J. Malay and others, Manila, June 1984 and subsequent dates; Report on Peace and Order . . . in Manila, 31 Dec. 1944, in Garcia, *Documents*, p. 149; Laurel to Alunan, 5 May 1944 and Alberto Ramos to Sabido, 11 Dec. 1944, both in JPLL; HQ, Kalayaan Command, USFIP, Intelligence Summary NR-14, 31 Aug. 1944, WP; Agoncillo, *The Fateful Years*, pp. 545–7; V.W. Salud to Ramon Macasaet, 7 June 1944, JPLL; interview with Lamberto Avellana, 6 Aug. 1990. Avellana, a stage director, received half of his pay in rice. Labrador, *A Diary of the Japanese Occupation*, entry for 12 May 1944; 'Hunger in Manila', WP. The quote is from a typewritten leaflet found pasted on a post at the corner of San Andres and Daitoa Avenue: 'Mga Kababayan, dinarambong ang ating pagkain ng mga tulisang Hapones na katulong ang mga taksil na Pilipino; ginugutom tayo! Upang huwag tayong mamatay ng gutom, agawin natin ito!', by Liga Ukol sa Pambansang Pagsasarili (League for National Liberation), cited in Report on Peace and Order, in Garcia, *Documents*, p. 148.

69 See Reports of Peace and Order of the Military Governor of the City of Manila, 3 Dec. 1944 and 1 Jan. 1945, in Garcia, *Documents*, pp. 144–62, for typical death statistics. Note especially figures for Bagumbuhay (Tondo), where the poor were concentrated. Also Lichauco, *Dear Mother Putnam*, pp. 193–8.

70 On PCAUs, see Annex 6 (Basic Plan for Philippine Civil Administration) to Basic Plan for Musketeer, 10 July 1944; Annex 5c (Special Plan for Philippine Civil Administration and Relief) to Staff Study Operation Mike One, 7 Oct. 1944; and Civil Affairs Section, General Headquarters (GHQ), Army Forces in the Pacific (AFPAC), Philippine Civil Affairs, 25 Aug. 1945, pp. 2–7, 31–2, 55–7, and related appendices. All three documents are found in MacArthur Memorial; the latter was Gen. Whitney's official report to MacArthur on the operation of the PCAUs and overall civil affairs conditions in the Philippines. Also, interview with Col. Ricardo Galang, 2 Oct. 1992, who worked side-by-side with the PCAUs in Manila, and Pedro Changco, 28 July 1995, who was with PCAU 24 in Cebu and Bohol. See also Hartendorp, *History of Industry and Trade*, pp. 181–2, 221–3; George E. Jones, 'Army Trucks Ease Manila Food Crisis', *New York Times*, 11 Feb. 1945; George E. Jones, 'Hungry Filipinos Fed by Americans', *New York Times*, 22 Feb. 1945. There was no PCAU counterpart in the invading Japanese army in 1941.

71 Commonwealth Executive Orders 24, 26, 28 and 382, *OG*, 41, 1 (Apr. 1945): 45–7, 51, 53, 80; Hartendorp, *History*, pp. 181–3, 222–3, 635; Sergio Osmena, 'Draft of the Unpublished 1945 Annual Report of President Osmena to the President of the United States', *BAHC*, 1, 3

(May 1973): 21–2; Headquarters, USAFFE, Circular No. 22, WP; Jones, 'Hungry Filipinos'; *7th PHCAR*, p. 22.

72 Osmena, 'Draft Report', *BAHC*, 1, 3 (May 1973): 21–2; Food and Agriculture Organization of the United Nations, Philippine Committee, *Special Report* (Manila: Bureau of Printing, 1947), pp. 30–1. Henceforth, Philippine Committee, *Special Report*.

73 Hartendorp, *History*, p. 236; *7th PHCAR*, p. 92; Administrative Order No. 41; Philippine Committee, *Special Report*, Introduction.

74 Philippine Committee, *Special Report*, pp. 1, 4, 26–7, 33; *7th PHCAR*, p. 90.

5 Malayan Food Shortages and the Kedah Rice Industry during the Japanese Occupation

Paul H. Kratoska

Malaya's export economy took shape during the late nineteenth and early twentieth centuries, and was closely linked with the expansion of commercial rice cultivation in mainland South-East Asia. Mining and plantation agriculture brought large numbers of workers to Malaya from China and India, greatly increasing the demand for rice. Conventional wisdom suggested that food for workers in the export sector should be produced locally, but Malaya's rice industry was small, and with cheap grain readily available in mainland South-East Asia it made economic sense to import rice; by the 1920s, around two-thirds of Malaya's rice supply was purchased outside the country. As early as 1893,[1] critics of this arrangement called attention to three sets of circumstances which could cut off the supply of imported rice: crops in the rice-producing countries that supplied Malaya might fail, international trade might be disrupted by political disputes or military action, and the prices for Malayan exports might collapse. At the time, it was easy to discount these concerns. Burma, the largest single rice exporter in the world, was a near neighbour and like Malaya part of the British Empire. The British Navy dominated the seas of the region. And when Malaya experienced a rubber boom shortly after 1900, the likelihood that the country would be unable to afford to purchase rice seemed increasingly remote, even though the rubber industry itself caused rice imports to increase.

After the First World War, Malaya faced each of the potential threats identified in 1893 in quick succession. The Siamese rice crop failed in 1919, and for a time it appeared as though Malaya might be unable to import sufficient rice. In the end, Burma provided

the necessary supplies, but at an extremely high price. This crisis was followed early in the 1920s by a collapse in the market for rubber that caused the government to restrict production, and a few years later by the Depression, which pushed prices for all Malayan exports sharply downward. However, rice prices fell in tandem with prices of non-food products, and Malaya continued to sell enough rubber and tin to cover the cost of importing rice.

With the Japanese Occupation, the third scenario was realized, and it proved the most serious of all. Rice imports came to an abrupt stop after the invasion, and for nearly four years Malaya received only small quantities of smuggled grain and a limited amount of rice shipped legally into Singapore. The country was thrown back on its internal resources, and these were far from adequate to overcome the sudden loss of nearly two-thirds of its food supply.

RICE IN MALAYA DURING THE 1930s

With the onset of the Depression, the Malayan administration formed a committee to examine the rice situation. The resulting report, submitted in 1931,[2] recommended that the government promote the domestic rice industry by developing large-scale irrigation works, and suggested possible locations for these projects along the west coast of the peninsula in Kedah, Lower Perak and Selangor, and on the east coast at Endau, in northeastern Johor (see Map 6). Similar proposals had been under consideration more than 30 years, but had not been pursued owing to a number of well-founded objections. The sites consisted for the most part of unpopulated swampland with no existing infrastructure, and in Selangor the clay soils needed to grow rice were covered with a deep layer of peat. Lacking amenities, these areas had little appeal for prospective settlers, and it was not certain that people would move there even if the government invested the substantial sums required to construct the roads, schools, markets and rice mills needed by a rural community. Moreover, the varieties of rice normally grown in Malaya had little commercial appeal; they did not mill well as white rice, and local grain was consumed by farmers or else made into parboiled rice for sale to Indian estate labourers.

The Depression reduced returns for rubber and other crops grown by smallholders and led to some planting of foodcrops on marginal lands for subsistence. However, it also brought down the cost

Map 6 Rice-growing areas of Malaya, 1940s

of imported rice, and so failed to provide an incentive for cultivation of rice as a commercial crop. For commercial rice farming to be an attractive proposition, farmers had to earn better returns, but Malaya's competitive advantage as an exporter of primary products depended on the ability of employers to supply cheap rice to their workforces, and for this reason the government was unwilling to impose tariffs on imported grain to support the domestic rice industry. The solution appeared to lie in increasing farmers' incomes by improving yields, and toward this end the British administration promoted selected strains of rice, encouraged the use of fertilizers and better cultivation techniques, offered small loans to farmers, and built government rice mills. To support these programmes, a Rural Lecture Caravan toured the countryside showing films to gatherings of farmers, with officials from government departments in attendance to deliver talks on techniques for growing and processing agricultural produce, and on the virtues of saving money and joining cooperative societies. Similar information was dispensed through adult schools, pamphlets and agricultural journals, although officials involved in these efforts considered them ineffective. Another innovation of the 1930s was a policy restricting grants of rice land to Malays, but Chinese and Indian demand for such land was minimal and the measure had symbolic rather than practical importance. In support of the new emphasis on food cultivation, the Department of Agriculture was re-organized, and in January 1932 a separate Drainage and Irrigation Department took over the functions of the Hydraulic Branch of the Public Works Department.

These measures boosted the output of rice, but had little impact on the overall food situation. Malaya produced an average of 197 000 tons of rice annually between 1918 and 1929, and imported 408 000 tons of rice each year during the same period. By 1939 production was 315 000 tons per year, but the increase had not even kept pace with population growth, and imports averaged 570 000 tons between 1935 and 1939.[3]

During the 1920s the Oversea Defence Committee of Britain's Committee of Imperial Defence had identified Japan as the country most likely to threaten British colonial territories in East and South-East Asia, and had singled out Singapore's dependence on imports to feed the civilian population as a particular liability. The Committee recommended that Singapore stockpile enough rice to last for six weeks, the period the British fleet would require to

reach the area and relieve a siege of the island. A new supply scheme developed in 1937 adopted the same premises but set the period before relief at 90 days to cover contingencies. The interval was subsequently raised to 180 days (and still later to an indefinite period), and the scheme was extended to cover all of Malaya. At the time of the Japanese invasion sufficient rice had been stockpiled to meet Malaya's needs for six months on reduced rations, but much of this grain was held in the north of the country, and was lost to the British early in the conflict.[4]

Japan invaded Malaya on 8 December 1941, and within 70 days had conquered the peninsula and the island of Singapore. Together with Sumatra, Malaya was placed under a Military Administration run by Japan's 25th Army. In April 1943, the 25th Army relinquished control of Malaya to the Southern Army Military Headquarters, and in October 1943 the four northern Malay states (Kedah, Perlis, Kelantan and Trengganu) were transferred to Thailand. A newly formed 29th Army with its headquarters in the town of Taiping, in northern Perak, took over the Malayan administration in January 1944. A few months later, on 13 April 1944, the 29th Army was placed under a new 7th Area Army.

During the transition from British to Japanese rule, part of Malaya's rice stockpile fell into the hands of looters. The Japanese military took control of what was left, and sold some of this rice to the public through a government Food Control Department, which issued supplies to private traders. Until August 1942 control over rice was far from strict. Anticipating that dealers might hoard stocks, the Military Administration said they were to sell rice to anyone who asked for it, subject to a limit of five katties (6.5 pounds – about 3 kg) per person per week, and required them to keep a register showing buyers' names. Ration cards were introduced in August, and a Ward System created in April 1943 allowed tighter control of rice purchases. By that time the ration had fallen to just 17 katties of rice per month (about $\frac{3}{4}$ pound per day), and bread made out of tapioca and soy bean flour was being distributed as a dietary supplement. On the face of it the rations look acceptable, but announced quantities were often not available, and officials in some locations were able to distribute only one-third of the official ration, while farmers were declared to be 'self-supporters' and could not draw rations at all so long as they had stocks of food. The government subsequently limited the quantities of rice which farmers could retain for personal use, and urged them to supplement their

diets by growing and eating tapioca and sweet potatoes. The reserves that farmers were permitted to keep varied from state to state, but were less than they were accustomed to eat. As the amount of food available for distribution on the ration dwindled, the number of people designated as self-supporters increased, and toward the end of 1943 all those living outside of town areas were excluded from the rationing system altogether, whether or not they grew any food. This measure caused many people to move into towns and cities to gain access to the rations available there, meagre though they were.

Japanese administrations throughout South-East Asia promoted self-sufficiency in the territories they governed, and within Malaya the Japanese called on each state, and even individual districts within states, to become self-supporting. Efforts to overcome the food shortage thus concentrated on increasing local production. A 'Grow More Food' campaign exhorted people in both urban and rural areas to grow vegetables, and those who did not plant food crops faced threats that their land would be confiscated. The Japanese also lifted restrictions on the use of forest land for food cultivation, and authorized the clearing of rubber from estates and smallholdings near towns or along main roads for the same purpose. The work was not carried out systematically. For example, in southern Kedah the District Officer for Bandar Bahru 'thought fit' to convert nearly 10 000 acres of rubber land into rice fields.

> The felling of the trees in European owned and private holdings was all done without much help from the Government, but when the land was cleared the work came to a stand still. Now the rayats [farmers] do not know what to do without a proper irrigation scheme.[5]

In some places, land designated for farming was too steep or poorly drained, and the clearing of such areas caused serious erosion.

People living in the southern part of the peninsula were not allowed to migrate to the rice producing areas of the north, but were expected to increase food production in their own states. Toward the end of 1943 the Japanese began transferring people from cities in the south to agricultural colonies. The best-known of these settlements were at Endau, in north-eastern Johor, and Bahau, in Negri Sembilan, but more than 30 additional schemes were sited elsewhere in the peninsula and in the Riau archipelago. Many col-

onists lacked farming experience, and while they could cope to some extent with growing green vegetables and root crops, relatively few made use of the wet rice fields assigned to them.

Crops such as tapioca (cassava) and sweet potatoes became the staple food of the population. Before the war some 63 000 acres of land in the Malay Peninsula (excluding Singapore) had been planted with root crops. By the end of December, 1945, the area had grown to 245 000 acres, nearly four times the pre-war figure, but production had little more than doubled, increasing from 185 500 to 396 000 tons,[6] because tapioca and other root crops, while they grew readily from cuttings and could tolerate a wide range of soil conditions, depleted soil fertility when cultivated repeatedly in the same location.

The area planted with bananas increased from 45 000 to 82 000 acres during the occupation, and other foodcrops such as sago, groundnuts, maize, yams, colocasia (the taro of the South Pacific, known in Malaya as 'keladi'), ragi (Eleusine coracana, a grain that before the war was consumed only by Tamil labourers) and soy beans recorded comparable increases. However, the area under coconuts fell from 600 882 to 500 410 acres, despite heavy demand for coconut oil.[7]

The Japanese used a variety of methods to promote rice cultivation, sending 'soldier-farmers' into rural areas to advise on cultivation and harvesting techniques, conducting training courses on various aspects of rice production, providing assistance to people who colonized rice lands, and introducing short-term varieties of rice from Taiwan that allowed for two crops per year. In some districts the Japanese insisted that farmers be in their fields throughout the entire working day. Despite these efforts, the area planted with wet rice in Malaya diminished, as did total production. Dry rice cultivation increased, but yields of dry rice were poor, and fields planted continuously with dry rice became less productive over time (see Table 5.1).

One reason for the decline in wet rice cultivation was that irrigation works were not properly maintained. In the Sungei Manik area of southern Perak there was heavy silting of the main canal, while in Kuala Selangor and in the Krian District of Perak damage to bunds allowed sea water to get onto rice lands near the coast. In Kedah a group made up of just 36 workers was assigned the task of maintaining more than 100 miles of water courses associated with the Wan Mohamed Saman canal, and the State Head of

Table 5.1 Malayan rice production

	Wet rice (acres)	*Dry rice (acres)*	*Wet and dry rice (acres)*	*Total production (tons)*
1940/1	753 730	66 750	820 480	324 210
1945/6	690 328	105 809	796 137	225 044

Sources: F.W. South, 'Report on Padi Areas . . . 1945–46', 16 January 1946, Drainage and Irrigation Dept, MP 18/1946; *Malayan Agricultural Statistics, 1949*, Table 30.

the Drainage and Irrigation Department described the results of their efforts as 'negligible to the naked eye'.[8] Also in Kedah, the British had supplied 12 excavators to Kubang Pasu, one of the state's major rice growing areas, to develop irrigation facilities. Following the Japanese takeover, local authorities attempted to continue the work, but three of the excavators were taken away by the Japanese military, and only four of the remaining nine could be put in working order. To compensate for the lack of machinery, the state government prepared facilities for 1500 coolies to work in the area, setting up 32 sheds as living quarters, and equipping shop-houses and a dispensary. Subsequent developments were eloquently recorded in the Annual Report of the state Drainage and Irrigation Department for 1943:

> It must be stated with regret that when everything was just coming to a form the Nippon Military Authorities took away all the Tamil Coolies to Thailand leaving the newly constructed sheds empty. All the 9 excavators and all available materials including planks and hard wood scantlings were removed to Shonan [Singapore] by the Nippon Military. Minor items like nails and bolts were also removed. All the fuel enough for running the excavators for one year was taken away by the Military. Among other things taken away were two lorries. There were left about 15 to 20% of the necessary tools which of course are very useful for carrying out the scheme.[9]

By the end of the occupation there was widespread malnutrition in Malaya, and poor diets left people susceptible to a variety of diseases. Many medicines were unavailable, and death rates had risen sharply. (See Table 5.2.)

Table 5.2 Deaths recorded in the Malay States and Singapore

	1940	*1941**	*1942*	*1943*	*1944*	*1945**	*1946*
Malay States	92 491	63 436	99 257	123 282	146 476	110 112	105 040
Singapore	15 705	15 978	29 833	21 936	42 751	35 330	15 287

Note:
* Records for 1941 and 1945 were incomplete in some states.

Sources: Malayan Union, Report on the Registration of Births and Deaths for the Years 1941 to 1946; Colony of Singapore, Annual Report on the Registration of Births and Deaths for the Years 1940–1947, Appendix I: Principal Causes of Deaths Registered in Singapore.

THE KEDAH RICE INDUSTRY, 1942–5[10]

The balance of this chapter will be devoted to a case-study of the rice industry in the state of Kedah during the war years. Kedah is of special interest for three reasons. It was one of the few states in Malaya which produced a rice surplus. It was the centre of Japan's defenses against a possible Allied invasion. And, under Thai rule, the affairs of Kedah were handled by Malay officials, so the state provides an example of dealings between the Japanese and an indigenous administration.

Kedah and Perlis were under the Japanese Military Administration of Malaya from December 1941 until 18 October 1943, when the transfer to Thailand took place under the terms of a treaty between Japan and Thailand that was signed on 20 August 1943. On 17 December 1943 Thailand handed over responsibility for the northern states to their respective rulers. From that date until the end of the war, Kedah was administered by its Sultan and the civil service that had been in place before the war, subject to overall supervision by a Thai Military Commissioner, and the introduction of certain Thai laws. The Japanese 29th Army, which had its headquarters in the city of Taiping, in northern Perak State, retained military responsibility over Kedah, and Japan's Malayan Military Administration operated a liaison office in Alor Star.

Before the Occupation, Kedah together with the small neighbouring state of Perlis accounted for more than 40 per cent of Malaya's wet rice land (303 000 out of 727 500 acres), and for 45 per cent of its rice crop. The people of the state consumed on average about

one pound of rice per person per day. Based on an estimated population of 516 000, Kedah needed about 84 000 tons of rice for local consumption. An additional 13 000 tons had to be kept in reserve as seed for the next crop, leaving a surplus of 34 000 tons.[11] This surplus was sold elsewhere in Malaya, but made only a small contribution to Malaya's rice requirements, which amounted to nearly 900 000 tons in the late 1930s. Within Kedah the largest surpluses came from Kota Star District, while Kubang Pasu, Yang, and Sik produced slightly more than subsistence levels, as did the state of Perlis[12] (see Map 7). The other six districts in Kedah (Baling, Kuala Muda, Padang Terap, Langkawi, Kulim, and Bandar Baru) were all rice-deficit areas where many people derived their livelihood from rubber, which was planted on 375 260 acres of land in Kedah. The only other commercial crop of any significance was coconuts, grown on 30 698 acres, while various sorts of fruits and vegetables (sweet potatoes, tapioca, maize, bananas, watermelon, pineapples, and so on) occupied an additional 25 218 acres.[13] There were 93 rice mills in the state, most of them small operations. However, many rice farmers processed paddy manually for their own consumption, pounding it in mortars (*lesong*) to remove the husks; the *lesong tumbok* involved pounding the grain with a pole held in the hands, while the *lesong hindek* used a long beam operated by foot.[14]

In addition to growing rice, people caught and dried fresh water fish, made palm sugar, plaited mats and the wickerwork used in house walls, and did carpentry.[15] The Occupation initially caused few hardships for subsistence farmers, and it created opportunities because demand increased for locally made alternatives to imported manufactured goods. However, while the Malays proved adept at devising substitutes for imported goods that were no longer available, they found it difficult to cope with the intricacies of evading Japanese regulations in order to trade on the black market. The Chief Police Officer for Kuala Nerang offered this assessment of the rural population in his area:

> [The people] have money, but they cannot buy and they do not know even the proper channel to obtain clothings from Black Market as you know what kind of people they are. They cannot go down to Alor Star and buy those second hand clothings which will be very expensive to them. These people as you know are in the habit of buying their clothings once a year, that is after the harvesting season and will use them for that complete one year

Map 7 Kedah State, showing rice-surplus districts, 1940s

> and buy again the next harvesting season. But that system becomes a hard blow to them as they cannot continue that system during this period.[16]

On 21 July 1943 the Japanese administration eased restrictions on the movement of commodities within Malaya, Java and Sumatra, and by August prices in Kedah had risen 10–20 per cent.[17] Rice, which cost 18¢ per gantang[18] before the war and 28¢ per gantang late in 1942, now sold for 48¢ per gantang. The Japanese issued a Price Control Ordinance in September 1943 which specified that no articles should be sold at an 'excessive profit' and declared it illegal to hoard goods or attempt to corner the market. Some items could only be purchased in limited amounts, and maximum prices were set for paddy and rice and rice by-products, but prices of other commodities were not controlled for fear that such action would drive already scarce goods from the market altogether.[19]

Under Thai rule, the body which had handled paddy and rice under the Japanese regime, the Kedah Beikoku Kobai Kumiai, was reconstituted as the Kedah Beikoku Goshi Kaisha (the Kedah Beikoku Limited Partnership), a private firm established 'by order of the Commander of the Military Administration Department, Shonan' in order to 'monopolise the padi and the rice business and to supply the surplus rice of Kedah and Perlis for Mali [sic; "Malai" was the Japanese name for Malaya] Military use'. The Thai government promised to cooperate with this company, and the company agreed to supply rice to the people of Kedah and Perlis in addition to meeting military requirements. The Kedah Beikoku Goshi Kaisha controlled the major rice mills in the two states, 21 of them altogether with a capacity of 7244 tons per month, and some of smaller mills, although the combined capacity of the small mills was only slightly more than 2000 tons per month.[20] The firm had five limited partners, with shares distributed as shown in Table 5.3.

The Representative of the Company was an Unlimited Partner who managed all of its business. This position was filled by Sumio Majima, Manager of the Shonan Branch of the Mitsubishi Shoji Kaisha Ltd.[21]

After the transfer of authority took place, the Thais lifted restrictions on the retail price of rice, which promptly jumped to $2.80 per gantang, equivalent to $66.15 per bag.[22] When this situation was called to the attention of the Thai Military Commissioner, he said that matters should be left alone for the time being.

Table 5.3 Partners in the Kedah Beikoku Goshi Kaisha

Firm	*Share Value ($)*
Mitsubishi Shoji Kaisha Ltd	$200 000
Toyo Takushyoku Kaisha Ltd	$100 000
Taiwan Takushyoku Kaisha Ltd	$100 000
Daimaru Co. Ltd	$100 000
24 Chinese rice mills	$300 000

Source: Outline of the organization of the Kedah Beikoku Goshi Kaisha, 15 August 2603 [1943], SUK Kedah 103/2488 [1945].

> As to the question of whether or not to control prices of padi & rice, I am of opinion that we should better leave them to the market. If there is demand for them to a certain extent which I expect so, the price will automatically rise. By the word 'leave to the market' I only mean that we shall not ignore the probability of controlling the prices entirely. I mean to ponder and see how the market really presents itself before any necessary action is taken.[23]

Licensed rice mills remained subject to price controls, and a group of rice millers wrote to complain that while the government limited the price at which they could sell milled rice to $10.50 per bag, rice processed by manual pounding in the villages was selling on the black market for $71.50 per bag. The controlled price for paddy delivered at the rice mills was $3.50 per picul, but farmers were demanding as much as $20 per picul, and one bag of rice required two and one-half piculs of paddy.[24] Labour and maintenance costs were also rising, and the millers asked what price the government intended to fix for milled rice under these circumstances. The Military Commissioner responded angrily, saying that millers would make some profit by buying paddy and selling rice at controlled prices, and 'I only expect their cooperation in this time of crisis':

> I also hope that these millers will cooperate with our Ally – Japan – by not raising the price of rice ridiculously so as to make our Ally pay too high for rice to feed their army and people in other Malai States.
>
> In war time profiteering is considered as an act of unpatriotism and shall be suppressed at any cost.[25]

The harvest that took place early in 1944 (2487 BE) was exceptionally poor. One reason was that the worst floods in more than 30 years struck Kedah in November 1943.[26] Coming just as the rice plants were flowering and ripening, when they were highly susceptible, the flooding caused serious damage to the crop in certain areas. In other places, for example on the lands south of Alor Star served by the Wan Mohamed Saman canal, there was little flood damage, but 'meddling with the established planting system' hurt production.[27] Because Japanese requisitioning during the preceding year had exceeded expectations, state officials faced the prospect of rice shortages, although they could not prepare reliable estimates because the Japanese would not reveal how many soldiers they had stationed in the state.[28] The Kedah administration urged people to plant alternative crops, particularly in the central and southern districts where relatively little rice was grown, and issued a reminder that rice requisitioned by the Military Administration was 'being utilized as food for the Armed Forces who are fighting on the battle fields at the various fronts; and it should be borne in mind that this epochal War is a war of liberation, of existence and of perpetual prosperity of every nation in Greater East Asia'.[29]

The Japanese placed their requirements for the last ten months of the year at 38 600 tons of milled rice, while the rice-buying public in Kedah needed 35 000 tons during the same period. The normal crop surplus of 34–36 000 tons was not even sufficient to satisfy Japanese demands, and yields were expected to be unusually low because of the flooding.[30] To handle purchases and distribution, the Kedah government arranged for the Japanese to obtain paddy by applying to the Principal Agricultural Officer, Tunku Yaacob,[31] who would issue an order requiring farmers to sell their surplus grain to the state. Six rice mills, including two very large facilities at Arau and Anak Bukit, were reserved to process grain exclusively for the Japanese armed forces, although by the end of 1944 the Anak Bukit mill was no longer operational, and the Arau mill could only operate at 50 per cent of full capacity.[32]

The Japanese firms responsible for supplying rice to the Japanese military, Daimaru and the Mitsubishi Shoji Kaisha, soon demanded the right to appoint local agents and make direct purchases. Tunku Yaacob argued that this procedure would create competition between the buyers acting on behalf of the state and agents working for the Japanese, and make it impossible to supervise paddy

purchases, but the Japanese ignored his objections and reached an understanding with the Thai military authorities which allowed them to proceed. The arrangements were embodied in a Padi Dealings Enactment published on 3 May 1944, and three days later the Chief Liaison Officer for the Japanese Military Administration sent his Thai counterpart a list of 313 agents, asking that they be issued permits as soon as possible.[33]

Tunku Yaacob's fears proved justified. After the Japanese began using buying agents, the amount of paddy sent to the Government Mills fell sharply. Between April and June they received over 70 000 piculs, but during the next quarter the figure dropped to just 10 000 piculs. The April–June period was immediately after the harvest, when stocks were at their peak, but the decline during the following quarter was nonetheless remarkable, and Tunku Yaacob remarked with a certain degree of understatement, 'There must have been leakages somewhere'.[34] Moreover, some of the paddy collected by government agents was later requisitioned by the Japanese. In July 1944 Tunku Yaacob wrote to the Secretary to Government to say that the Manager of the Mitsubishi Shoji Kaisha had asked him to hand over 40 per cent of the paddy he had purchased in Yen District. The Thai Military Commissioner summoned the Manager to discuss this demand, but wrote on the file afterwards, 'He only asks for and nothing can be done'.[35]

Rice farmers and buying agents alike freely exploited loopholes in the agreement. Tunku Yaacob offered the following examples, which are notable for their lack of sophistication and suggest the ease with which regulations were evaded.

> (i) The Nippon authorities can at any time be played away by any of their agents, if the agent wheels to crooked-going. For example: An agent buys 1000 tons of padi from Mukim Naga declaring to be for the Anak Bukit Rice Mill; he sends up 500 tons to the mill and hoards the other 500 somewhere in Jitra. On his return he puts this 500 tons to black-market sales.
> (ii) My staff is liable to a bluff by any padi-owner. Example: A Padi Supply Officer looking up his census list finds a certain man in possession of 10 kunchas of surplus padi; he then orders this man to sell his surplus to a Government Mill but the man says, 'I have now only 5 kunchas, for last week a Nippon agent bought 5 kunchas from me.' In reality this man has secretly sold the 5 kunchas to a black-market dealer.[36]

Moreover, some of the paddy middlemen, 'business men of doubtful character', were said to have approached Japanese buyers to stop their padi from being taken by state officials at government prices.[37]

The Japanese believed that people in Kedah were pounding large amounts of paddy by hand and selling it on the black market. In an attempt to prevent this practice, the government added a provision to the Food Control Enactment making it necessary to obtain a licence before operating household rice-processing equipment (mortars worked by hand or foot, and grindstones). People living in rural areas throughout the state routinely used such equipment to prepare rice for their daily meals, and one official said he hoped he would be excused for saying the amendment looked 'rather childish'. It was certainly impossible to enforce, but was passed in the hope that it would inhibit people from milling rice by hand for sale, and it provided the government with a means of acting against those who did.

> It may be difficult to supervise . . . but when there is a provision in the law, government agents can always do so, when there is reason to doubt a person's honesty. I think each person can pound several gantangs of rice per day if allowed to, at which rate he or she will exhaust his or her stock of rice in no time, which is against the spirit of cooperation which the Govt has pledged to give to the mills both military and public. The daily preparation by all the kampong [village] people may exceed the daily demand. The surplus of which may go to feed the 'Black Market', outside Kedah, which will be a loss to the people here.[38]

In Kuala Muda officials attempted to implement the regulation by affixing pieces of paper to the inside of mortars, and threatening people with death if the papers were destroyed.[39]

Padi Supply Officers discussed the difficulties they were facing at a meeting held in October 1944, and concluded that the previous arrangements for collection were superior 'if the Nippon-Jins would abide by the method agreed upon', but in view of the fact that the Japanese side 'does not seem to incline to the system' and seemed 'bent upon holding on to their chosen method', the officers felt that 'it would not be unwise to abandon the question of going back'. Comment by officers taking part in this meeting sheds some light on relations between the Japanese and authorities in Kedah:

(i) A.A.O. [Assistant Agricultural Officer] Salim: He is sorry to notice that the Nippon side has somewhat failed to grasp the well-meant purpose of the Government. It seems to him that they very often look with suspicion upon any step taken by the Government. For example, when they see us issuing our [padi] Census Forms they too improvise one to suit their purpose and, to outdo us, order the Penghulus [Subdistrict Headmen] and Ketua Kampongs [Village Headmen] to finish theirs first. And when they come to know that the Government allows loans to planters, they too take a similar step, but with a surer way of winning the planters over to their side, by advancing loans not only in the forms of money but also of cloths, sugar and other commodities now much needed by the people. He is afraid that for this coming season we shall not be able to get our supplies.
(ii) A.A.O. Mohd. b. Jamil: There are employees of the M.S.K. [Mitsubishi Shoji Kaisha] and the Daimaru stationed in many places acting as their padi-officers to check, or stop, or arrest or seize hold of people conveying padi even with permits issued by us. Over-ruling our permit they would decide as to whether any padi or what amount of it could be removed anywhere or whether it should be taken and sold to them.[40]

Some Thai rice was imported for use in Ḳedah and the Malay states further to the south, but when the Mitsubishi Shoji Kaisha asked for particulars of the quantities involved, the Military Commissioner responded that the information was '*strictly confidential*' and could not be revealed.[41] Investigations by Kedah authorities in 1945 indicated that a 'comparatively large part' of such imports were consumed within the state.[42]

For 1945 the Kedah authorities negotiated a fresh agreement concerning procedures for buying paddy. In his discussions with Japanese military authorities, the Food Controller, Tunku Ismail bin Tunku Yahaya, invoked Japanese propaganda slogans by asking the representative of the Alor Star Nippon Liaison Office, a Mr Maruku, to 'forget that we were only discharging our official responsibilities', and to think of the Japanese and the Malays as 'blood brothers living under the same roof striving for the common task to upkeep our dear home'. He pointed out that if the two sides purchased rice independently of each other, 'natural elements of competition would arise' and when this occurred, the 'stronger part gets the advantage and the weaker one loses his

chance'. In the present situation, 'I am sure the weaker side would be my side.' Tunku Ismail also told Maruku:

> that the State looked upon it as its sacred duty to assist the Nippon side at any prize [sic] to get their required quantity but at the same time the State is anxious to provide minimum supply of food to its people. I asked Mr. Maruku to bear this point clearly in his mind. If this State could achieve its dual objects i.e. supply the needs of its Allies and its people the credit of which would reflect on the Nippon Statesmanship in guiding the State to pass successfully through difficult times.[43]

Harvest estimates indicated that there would be enough surplus paddy to produce 41 253 tons of milled rice; the Japanese military authorities placed their requirements at 30 000 tons, and the Kedah government estimated that they too would need 30 000 tons to supply people drawing rations in the state. To free more grain for distribution, the Japanese authorities told state officials to cut the amount of rice that farmers could retain for their own use by one gantang per month. The change meant reducing the quantity of paddy retained by farmers from 160 gantangs of paddy per head for adults, and 120 gantangs for minors under eight years of age, to 130 gantangs of paddy for adults, and 90 gantangs for children under eight. The new adult allowance was equivalent to 32 pounds of rice per month, which was in fact generous compared with the ration in urban areas, or in rice-producing regions elsewhere in Malaya. However, at least 10 per cent of this amount would have to be kept for seed, and farmers also needed grain to feed their poultry. Tunku Ismail objected to the change, pointing out that many farmers had little to eat apart from rice. 'If their rations are reduced to a meagre supply the poultry industry of the State would be affected and also farmers would be discouraged and discontented with the consequent result that future crops might be affected.' Maruku responded that the previous ration was too high, and that the Thai Military Commissioner had already agreed to the reduction. This was not entirely true, for while the Thai Military Commissioner had agreed to some reduction in the ration, the quantity had not been specified. However, after further discussion, the Japanese proposal was accepted. Commenting on the new arrangement, Tunku Yaacob said, 'I am truly sorry for the people', but he added that 'the people here must regard themselves as being very lucky that they have been allowed a higher ration than elsewhere'.[44]

The Japanese agreed to a buying arrangement under which the Kedah government and the Japanese would make their purchases 'jointly on the cooperative basis. One side cannot buy independent of the other.' Asked to explain the 'Nippon version' of the Joint Padi Purchase System, Maruku said (as reported in Tunku Ismail's notes) that:

> the Thai Authorities [that is, Kedah officials] and the Nippon Authorities would buy padi jointly but each side makes his own arrangement and purchase independent of each other. Both sides will not hinder each other in the execution of One's work in relation to padi purchase. Spheres of activity in regard to padi purchasing areas shall not be defined, restricted or limited but each side shall have equal rights of entry and purchase. The officers of each side will meet weekly and exchange their purchase records for verification.

The Japanese also agreed to limit their purchases to 65 per cent of the paddy available at any given location, and to allow the Kedah government to buy the remaining 35 per cent.

These points were then discussed at a meeting attended by officials from Mitsubishi and Daimaru, and a 'frank talk' produced an understanding that buyers would arrange purchases of paddy 'conjointly' and would 'not resort to the previous practice of buying independent of each other as this practice had not been satisfactory and had caused certain disappointment'. The government wanted to arrange purchases through state officials, but Mitsubishi and Daimaru said they would again need to employ agents. As before, the Kedah authorities objected that agents could not be monitored, and were likely to sell rice into the black market, but the Japanese were adamant, although they agreed to a proposal that agents should obtain licenses through the Principal Agricultural Officer. They also promised to look into supplying their agents with badges, although it was pointed out that a cloth shortage made this hard to do.

In 1944 the official buying price for paddy had been $6 per picul ($60 per kuncha), up from $3.50 in 1943 but still very low. Commenting on this issue early in 1945, the District Officer for Yen said that even a recent announcement that the price paid for paddy would be trebled was unlikely to satisfy farmers. 'I would like to point out that unless the price be raised to a proportionate amount as to other commodities dealings in black-market would be inevitable.'[45] In the end, the officially authorized maximum price for

paddy sales in 1945 was set at \$30 per picul (133$\frac{1}{3}$ pounds) 'ex-seller's door', and millers were authorized to sell wholegrain white, parboiled or glutinous rice to wholesalers for \$100.50 per bag, a tenfold increase over 1943. Even at this level the Japanese acknowledged that the price was 'on the lower side', but the figure had been set by military headquarters in Taiping and could not be raised. At Kota Star the wholesale price was fixed at \$120.00 per bag, and the retail price at \$4.60 per gantang (compared with 18¢ per gantang before the war, and \$2.80 in October 1943). Millers working for the Japanese received extra benefits such as cheap fuel; to compensate the millers working for the government, the Japanese agreed to a bonus payment of \$10 per bag, with the stipulation that 'for certain reasons the bonus should not be published'.[46]

The Kedah government did publish a statement explaining that in 1945 purchases would be made 'on a co-operative basis' by government officers, and by accredited agents representing the Japanese Military, with both parties 'simultaneously present at each purchase'. The statement also called attention to a number of 'subsidiary terms', including provisions reducing the amount of paddy that farmers could retain for their own consumption, and barring the use of manual rice pounding equipment.[47] Publication of this information seems to have been an attempt to hold the Japanese to the terms of the agreement, and prior to its appearance, the Military Commissioner sent a copy to the Japanese Chief Liaison Officer in Alor Star along with a letter which said:

> Before this communique is published . . . I should like to give you the assurance, on behalf of this State, that the conditions agreed upon as therein stated will be strictly observed on our part. May I have a similar assurance on your part please?

The Liaison Officer replied simply that he had pleasure 'in confirming to the publication of the said communique'.[48]

If this was the government's tactic, it proved unsuccessful. By late February Kedah officials were complaining that Paddy Officers employed by Mitsubishi and Daimaru had failed to adhere to the agreement.

> They adopt an upper-hand system by allocating to our officers certain kampongs or bendangs [rice fields] where we can buy paddy. They say that from the places allocated by them we can

> buy all, not necessary to make the split of the 65/35% share, and that the quantity obtainable in those allocated places will cover 35% of the total aggregate amount collectable in all the kampongs in that mukim.
>
> But our officer find that the kampongs allowed to them are mostly in remote places and produce small quantities.[49]

Complaints to Mitsubishi's Supervisor Paddy Officer, a Mr Nishiwaki, elicited the response that he was responsible only for office work, and that paddy officers in the field were free to adopt whatever system they wished. As the season progressed, additional complaints poured in that Japanese Paddy Officers were not making use of the system of conjoint purchase, and in some places had taken over stocks of paddy already acquired by the Kedah authorities, even in instances when the Japanese officials had previously approved the purchases.[50]

Moreover, after having bought a substantial proportion of the surplus rice in the state, the Japanese demanded more. They claimed that the original round of collections, which already violated the agreement reached with Kedah officials, had failed to provide enough paddy to meet the quota of 30 000 tons of rice, and sent their buyers back to villages a second and even a third time to make additional collections. In April the government received reports that Mitsubishi buyers were allowing farmers to retain only 100 gantangs of paddy per person, rather than the 130 specified in the agreement. The order was given by a Mr Taniguchi who, upon being asked why, said that the year had already entered its fourth month, so the allowance of paddy for consumption should be based on eight or nine months. The officer responsible for the Kedah Government's paddy scheme reported:

> I argued that the year means the paddy seasonal year and I added that the period of one year between paddy cultivation and its harvest does not correspond with the calendar year. I also mentioned to him that even if his reasons may be sound or logical he should first consult the Nantakusho Officer who will then make a conjoint decision with the Government of Syburi and insert another clause in the mutual agreement of the Paddy Dealings to run in line with his action. He replied that he is determined to carry on what he thinks is correct for him to do and is not inclined to withdraw the instruction.[51]

Tunku Yaacob asked the Thai Military Commissioner to intervene, pointing out that the collections violated state law and were likely to leave farmers with insufficient rice to survive until the next harvest. The Military Commissioner responded that he had spoken with a Japanese official who 'agreed that he will go and examine and make the necessary adjustments'.[52] However, the requisitioning continued unabated.

On 6 May 1945 an official from Daimaru informed the District Officer for Kota Star that although he had already bought paddy from the farmers twice, he was still 4500 kunchas [1880 tons] short of his quota and intended to make a third round of collections. Also, if there was no objection, he intended to take over stocks of government paddy. The District Officer told him permission should be sought from the Principal Agricultural Officer, who would need to obtain approval from the Thai Military Governor, but Daimaru responded that it was up to the Kedah authorities to arrange the matter. In the course of a discussion of this issue, a Japanese representative contended that farmers were hiding paddy 'everywhere even underneath their beds' (a curious observation, since most Malay farmers would have slept on mats placed on the floor, although it is likely that farmers were in fact hiding paddy) and selling it on the black market. Local officials responded that farmers had barely enough rice left for their own consumption.[53]

On 9 May 1945 the Penghulu of Kuala Kedah reported that further paddy collections had taken place in his area:

> With reference to the collecting of paddy by the M.S.K. [Mitsubishi Shoji Kaisha] from the kampong people, I have to inform you that this Company had already bought all the paddy since the recent harvest leaving only the balance just enough for consumption. On 14.4.88 the M.S.K. representative and his broker visited and examined all the houses in the kampongs and took 4 to 5 bags of paddy from each house, leaving insufficient quantity for consumption of the families of farmers.
> 2. Again from 5.5.88 to 7.5.88 they visited and examined all the houses in the kampongs where the paddy were previously taken and took by force from every house some more 4 to 5 bags. From some houses of bendang owners who have a family of 15 people to be fed, they even took up to 15 bags. So in this way the bendang people are not self-sufficient to live on their paddy left.[54]

Tunku Yaacob continued to complain to the Thai Military Commissioner about these collections, saying that his paddy officers were attempting to 'stop or put a check to this irregular action but all to no avail'. In one case, where the Agents were 'courteous enough to notify the Department of their intention', the Military Commissioner 'felt urged' to meet their wishes. This case was 'an only exception', because in other cases 'no reference was made [to the Department] even when they were taking possession of paddy already bought and paid for by this Department'.[55]

In their dealings with Japanese buyers during this period, Kedah State Paddy Supply Officers complained of being harassed and sometimes humiliated:

> In two or three sectors . . . not only have the Paddy Supply Officers to wait for word from the Nippon Paddy Officers before he can commence his purchase in any one place, but even the paddy that has been bought from the places allocated to him at the beginning by the Nippon Paddy Officer is now being stopped. . . . In Guar Kepayang the Penghulu had even to collect back the money he had paid to paddy owners and the paddy that had thereby been marked for the Government had to be abandoned and given over to the Nippon Agent.[56]

Relations between Kedah officials and the Japanese were severely strained. At the end of April the Assistant Paddy Supply Officer responsible for the *mukims* (sub-districts) of Jabi and Guar Kepayang reported the following exchange with a Japanese paddy buyer:

> Tuesday 24.4.88. I went to Tajar and called all the Ketua Kampong's and the villagers to pay them for their paddy, in the presence of the Penghulu. At this same time Kaiso San of the Daimaru was also paying for his purchases. After he had finished his part, I began mine.
>
> While I was engaged in issuing the payments, I noticed there came Taniguchi San of the M.S.K. with his Chinese clerk. He was attired in Malay fashion wearing a black cap, an old white shirt with long Malay trousers and a 'pelikat' sarong as an outer covering skirt and a pair of khaki sand shoes; while his Chinese clerk wore short Malay trousers with shirt grey in colour, having neither shoes or cap. He (Tanaguchi San) went up and sat at Kaiso San's table and talked with him for about half an hour,

after which he and his clerk left the place.

When they had gone away Kaiso San called me, and I went and sat at his table. Kaiso San then said to me, apparently in a temper, 'You very bad, collected very much for the Gamen Thai (Thai Government). Tunku Akob [Yaacob] and Tunku Semai [Ismail] very tricky, very clever, not following the agreement. By agreement Nippon Military 65% Gomen Thai 35% to collect padi. Nippon give to the fighting forces, Gomen Thai give to the people who can't plant padi. Now Tunku Akob has collected 70% not 35%. Paddy collected and stored in the kampong is 35% and this is sparingly sent to the mills for the non-planter's consumption, releasing only one or two chupak [one chupak = approx. one quart] per month, and this certainly is not sufficient and so these people come themselves into the kampongs to buy the other 35%, totalling 70%. Now what do you want to say? Just calculate; if a person carries away 6 gantangs of rice from the kampongs (i.e. one naleh [16 gantangs] paddy), and if there are 1000 people in a mukim, you will see that 100 kunchas of paddy is being taken away in a month. From the beginning of the harvest up to now it is already 4 months and therefore each mukim has already sent out 400 kunchas; there are 40 mukims under Kota Star and so 16 000 kunchas, have escaped the books. To whom should this be given? Is it not for the Nippon Military? The Thai Government paddy is stored in the various kampongs and only very little is milled. This is not right. That is why the paddy for the Nippon Military is found to be below the estimated quantity. The fighting forces will of course not be able to get sufficient to eat and will lose the war. This is Tunku Akob's clever but tricky way. I want to inform the Renrakusho and you will know the result. I'll take all the paddy you have stored.'

Then I replied, 'Why do you say I am bad and have collected very much for the Thai Government? Just look into your books: from Jabi you collected 700 kunchas, but I only 290 kunchas, whose is more? And from Tualang you took about 1400 kunchas, while I had only 500 kunchas. Can this be very much?'

To this he said, 'I am not referring to that. Don't speak. I have said that the people themselves have taken.'

Then I again said, 'Regarding what you said just now that the people who don't plant paddy i.e. shopmen from the town, have themselves come and carried away rice from the kampongs, I don't think that is true. Moreover, the Ketua Kampongs together

with and in presence of your paddy agents measured the paddy allowed for consumption to the planters, 130 gts. and 90 gts, for adult and minor respectively and the surplus was sold to the Nippon Military and Thai Government. So when is there to be any more surplus over your or my share?'

Then he replied angrily, 'What do you know? The Ketua Kampongs and the villagers have stealthily hidden away certain quantity of paddy pounding it into rice for black-market. The Police too are not working honestly. They have secret mutual arrangements made and are taking bribes.'

I replied, 'Regarding this, I don't think it is so.'

He was then more angry with me, but I said, 'Tuan, Tunku Ismail's idea of releasing one or two chupak of rationed rice per month to town dwellers is to get the people to be accustomed to eat less and so there can be another surplus that can be derived from the stored quantity and this can then be transferred over for the consumption of the fighting forces. If he releases 4 or 5 gts. per month to each person the 35% spoken of will certainly be soon exhausted.'

On hearing this he said smilingly, 'You can talk much and well, but I don't think so.' So saying he got up and I went back to do my work.[57]

Commenting on this episode, Tunku Yaacob said that the accusation of trickiness was 'as fantastic as it is ridiculous beyond description and it reflects the state of mind of the accuser'. He suggested that the Japanese had failed to meet their quota and were raising such issues 'to enable them to carry out what they wanted to collect unrestricted'. At the same time, however, he appeared to concede that significant amounts of rice had been sold in the black market.

The smuggling and private sale alluded to in their accusation were the results of their own making. If they had truly co-operated with this Department as they had originally promised this Department could at least have completed the [paddy] census and prevented illicit removal and sale to a greater extent. But they were not keen to do so and were desirous of buying independently and in advance of this Department. While they bought their portion this Department had to stand by and was not allowed to negotiate with the people. This had the disastrous result of delaying purchase and supply to the public. But this was

> accused of being a tricky move on the part [of] myself and the Food Controller.
>
> As regards the black market and smuggling I am inclined to think that these were also due to our inability to complete the census for had we done so there would have been no opportunity for the people to remove paddy without being detected.[58]

Some of the rice collected by Daimaru and Mitsubishi was sent out of the state, and these exports were subject to payment of duties. The Superintendent of Monopolies and Customs reported in June 1945 that neither the export duty nor deposits due on gunny bags had been paid on rice exported by the Mitsubishi Shoji Kaisha between 22 February 1944 and 27 March 1945, and the firm owed the state $100 857 and $112 150 under these two heads.[59]

However, despite their feelings of frustration, Kedah officials could do little. Overt confrontations were dangerous, and in their dealings with the Japanese and with local agents who were openly flouting agreements reached with the state government, the state instructed Paddy Supply Officers 'to passively and patiently persist whenever and where ever possible to come into arranging with the Nippon Officers'. Similarly, state officials cautioned farmers 'only to plead with these [Japanese] agents for fair and just calculation or action when any of their padi was to be taken by them (Agents)'.[60]

Because of heavy buying by the Japanese, state authorities found it difficult to purchase enough paddy to meet the needs of government officials. The State eventually managed to purchase 79 254 piculs of paddy, which after milling would have yielded just 3100 tons of rice. This figure suggests that the government acquired less than 8 per cent of the available surplus, in which case the Japanese may have secured 38 000 tons or even more. Almost no rice rations could be supplied to the general public, and only small quantities were available for distribution to civil servants. The Food Controller estimated at the end of July that rice stored in government warehouses and in the villages 'could not last longer than about one month or at the most with luck two', and the next harvest was still five months away.[61]

The intense pressure applied by the Japanese to obtain rice was almost certainly connected with a military build-up taking place in north-western Malaya during this period. In 1944 the Allies had overcome Japanese forces along the western border of Burma and restored links with China. Early in 1945 they began moving down

the Irrawaddy Valley, and on 21 March re-occupied Mandalay. The Japanese anticipated that an invasion of Malaya would take place in the vicinity of Phuket or Kedah, and moved troops up from garrison posts in the southern part of the peninsula to concentrate their forces in this area. In particular they fortified hilly terrain around Gurun, Kedah, and hoped to use their experience in jungle warfare to halt an Allied advance. The invasion was actually planned for a stretch of coast to the south of Kuala Lumpur, and in the event the Japanese surrender on 15 August 1945 spared Malaya the ordeal of further fighting.

While these developments were taking place, prices rose to alarming levels owing to food shortages and rampant inflation, (see Table 5.4). A Kedah official commented in February:

> The market has been and is in a hysterical state of excitement & prices leap upward at the slightest tickling.
>
> The various items of cost that make up the price of paddy as given some time ago . . . are now things of the past: they have risen in harmony with other things almost beyond recognition hence the price of paddy fixed at $180 per kuncha [approximately 160 gantangs] is now found to be quite inadequate. . . .
>
> The black market price of paddy per kuncha in Alorstar now is between $350–480, in Tanjong Dawai $1200 and in Kulim, I believe, it is as high as $1600.[62]

Staggering as these figures must have been to the men who recorded them, they were soon eclipsed. By the end of June rice prices reached $40 per gantang (making the rice milled from a kuncha of paddy worth $2560), and they jumped to $150 per gantang ($10 240 per kuncha) by mid-July. Despite these high prices, Tunku Yaacob reported hearing

> unpleasant rumours that many paddy planters have made up their mind to plant only sufficient padi for their own consumption and no more and that in the district of Kubang Pasu large areas of tenanted bendangs have been returned to the owners because cultivators have lost interest and are unwilling to continue the cultivation of the land'.[63]

Table 5.4 Prices in Kota Star, Kedah ($ per kati of 1 1/3 pounds unless otherwise indicated)

	Pre-war	*1 February 1945*
Sarong (each)	1.80	1000.00
Silk (per yard)	0.75	300.00
Chintz (per yard)	0.24	250.00
Trousers (pair)	4.00	700.00
Rice (per gantang)	0.18	24.00
Salt	0.02	6.00
Sugar	0.08	28.00
Chillies	0.16	50.00
Onions	0.08	12.00
Coconut (each)	0.02	2.30
Coconut Oil (per tin)	2.40	315.00
Bean Sprouts	0.02	2.00
Aubergine (brinjal)	0.03	3.50
Fish		
Siakap (sea perch)	0.30	18.00
Bawal (pomfret)	0.26	18.00
Temenong (horse-mackerel)	0.05	5.00
Tamban (sardine)	0.02	3.00
Beef	0.26	10.00
Mutton	0.32	15.00

Source: District Office Kota Star, *Annual Report for the Year 2487*, 28.2.2488 [28 February 1945], Kedah Sec 208/2488.

CONCLUSION

During the Occupation the area planted with rice in Kedah increased by 10 per cent, but production fell by 25 per cent compared with pre-war figures, despite intense Japanese pressure to increase production (see Table 5.5). Similar declines were recorded by rice-growing areas elsewhere in the peninsula. The forced sale of rice was probably the main cause, but other factors contributed to this fall in production, including poor maintenance of irrigation works, a reduction in the number of draught animals, recruitment of agricultural labour for military projects and low prices paid for rice requisitioned by the government. Agricultural tools were scarce and of poor quality. Pest damage (destroying as much as 50 per cent of the crops in some areas) affected production, and farmers were not allowed to keep firearms to deal with animals such as

Table 5.5 Rice production in Kedah during the Occupation

	Wet paddy ('000 gantangs)	*Dry paddy ('000 gantangs)*	*Total paddy ('000 gantangs)*	*Tons of milled rice**
1937/8	82 491	218	82 709	118 155
1938/9	100 072	411	100 483	143 547
1939/40	88 287	469	88 756	126 794
1940/1	100 852	568	101 420	144 886
1941/2	91 451	579	92 030	131 471
1942/3	88 381	974	89 355	127 650
1943/4	71 353	1260	72 613	103 733
1944/5**	97 080			

Note:
* When local paddy was milled, it yielded approximately one ton of rice for every 700 gantangs of paddy, and this rate of conversion is used here. See Padi and Rice Conversion, SUK Kedah 204/2602.
** The 1944/5 figure was a preliminary estimate.

Source: Untitled table in SUK Kedah 443/2487.

wild pigs and monkeys, which caused considerable damage. Despite the pressing need for food in Malaya, large numbers of agricultural labourers were recruited to work on military projects, and health problems, in part a consequence of poor diets, in part due to the absence of anti-malarial work which greatly increased the incidence of malaria, reduced the capacity of the rural population to till their fields. In addition, many farmers suffered from skin diseases such as yaws and tropical ulcers, and there were no medicines available to treat these ailments. The slaughter of livestock for meat reduced the number of water buffalo and cattle to a point that farmers found it difficult to carry out agricultural activities. In Baling, for example, the livestock population in 1944 was down some 30–40 per cent compared with previous years. Finally, production figures were affected by leakage of unknown quantities of grain into the black market.[64]

Much of the population of Malaya emerged from the occupation in a debilitated condition. The growth of a generation of children had been stunted owing to inadequate diets, and signs of malnutrition were common among adults, particularly in rural areas and on estates. A diet based on tapioca and sweet potatoes, with inadequate quantities of fish, meat and vegetables, had provided sufficient bulk but left people physically weak and susceptible to disease.

For people in Malaya, food shortages were one of the most enduring memories of the Japanese occupation, along with the humiliations and pain inflicted by Japanese sentries, the brutalities of kempeitai interrogators, massacres and forced donations. The Japanese regime became less harsh and made attempts to win popular support as the Occupation continued, but the food situation grew progressively worse. Japanese propagandists in effect conceded this point, shifting from an emphasis on co-prosperity to co-endurance for the duration of the war, but the struggle to obtain food affected the entire population, and was a constant reproach to the occupying power.

Notes

1 See, for example, Reports upon the Best Means of Encouraging Cultivation of Rice in the Malay Peninsula (Singapore, 1893).
2 *Report of the Rice Cultivation Committee*, 1931.
3 R.G. Heath, *Malayan Agricultural Statistics, 1949* (Kuala Lumpur: Dept. of Agriculture, Federation of Malaya, 1951), Table 33.
4 Oversea Defence Committee, Committee of Imperial Defence, 'Food Supplies for the Civil Population in the Event of War', 30 Apr. 1926, CO537/937; 'Revised Report on Singapore Food Supplies, 1938', 21 Dec. 1938, and Thomas to MacDonald, 27 Apr. 1939, CO852/264/13; Thomas to MacDonald, 3 Aug. 1939, CO852/264/14; 'History of the First Three Months of the War', section 16 (Food Supply), enclosed in Gov. to CO, 15 Feb. 1940 (Secret), CO852/327/9; see also FO371/13446.
5 Report of the Drainage and Irrigation Department, Syburi, for period 19.10.2486 to 31.12.2486 [1943], Setia Usaha Kerajaan (Government Secretariat, henceforth SUK) Kedah 271/2487 [1944].
6 'Colonial Office Food and Nutrition Survey', p. 9, BMA DEPT 9/4.
7 Appendix II to Proceedings and Notes of a Meeting on Nutrition, 15 Jan. 1946, BMA DEPT/1/3 Pt I.
8 Report of the Drainage and Irrigation Department, Syburi, for period 19.10.2486 to 31.12.2486, SUK Kedah 271/2487.
9 Ibid.
10 The pathfinding study on wartime rice production in Kedah is by Azahar Raswan Dan b. Wan Din. See his 'Pengeluaran dan Perdagangan Padi dan Beras di Negeri Kedah dari Pendudukan Jepun hingga Pentadbiran Tentera Thai, 1942–1945' ['Production and Trade in Paddy and Milled Rice in the State of Kedah from the Japanese Occupation through the Thai Military Administration, 1942–1945'], in *Kajian Malaysia* 5 (1987): 40–62.
11 Tungku Yacob, 'Production, Consumption and Exportable Surplus from

1360 (2601–2602) Crop', 16 May 2602 [1942], SUK Kedah 155/2602.

12 'Production Consumption and Surplus 2602–03 Crop', Norin Ka, 18 Sept. 2604, SUK Kedah 88/2487. This typed table carries a handwritten note indicating that the form was prepared during the Japanese regime to indicate which districts within the state had a surplus or a deficit of rice, and was 'not meant to show surplus rice'.

13 'Areas under Major and Minor Crops in Kedah as at end of 1942', SUK Kedah 87/2486.

14 Tunku Md. Jewa, Superintendent, Monopolies and Customs, to Zaimubucho, Kedah and Perlis, 18.7.2602, SUK Kedah 324/2602.

15 Principal Agricultural Officer (henceforth, PAO) Kedah to Under-Sec. to Govt. (SG) 24.11.2486 [26.11.1362/24 Nov. 1943], SUK Kedah 87/2486.

16 Che Merican, O.C.P.D. Kuala Nerang to O.S.P.C. Alor Star, 6.8.2487 [6 Aug. 1944], SUK Kedah 234/2486.

17 Departmental Order No. 4/2603, and Comparative Price of Goods, SUK Kedah 109/2486.

18 A gantang is a unit of measure approximately equal to one gallon. See Padi and Rice Conversion, SUK Kedah 204/2602.

19 Government Notifications, Price Control Ordinance, Kedah Shu Ko Ho, 21 Sept. 2603 [21 Sept. 1943], SUK Kedah 120/2486; Report on Food Control for the Year Ending 31.12.2487 [31 Dec. 1944], SUK Kedah 241/2488.

20 List of Small Rice Mills in Kedah, SUK Kedah 43/2486; Food Controller Syburi to SG Syburi, 11 Nov. 2486 and 13 Nov. 2486, SUK Kedah 103/2488.

21 Outline of the organization of the Kedah Beikoku Goshi Kaisha, 15 Aug. 2603, SUK Kedah 103/2488. The stated objects of the company were:
(a) To purchase paddy and its products and to distribute same in Kedah and Perlis and also to export same throughout Malai.
(b) To further the enterprise of rice mills and the manufacturing of rice products.
(c) To carry out all business concerning (a) and (b) efficiently.

22 Military Order No. 5/2486, 2.11.2486, SUK Kedah 37/2486; Keizai Tosei Kacho Departmental Order No. 4 of 2603, 21 July 2603, SUK Kedah 109/2486; Food Control Office for Kedah, Report on Food Control from 19.10.2486 to 31.12.2486, SUK Kedah 1099/2487.

23 Minute from Military Commissioner to Sec. to Govt., 15 Nov. 2486, SUK Kedah 103/2488.

24 Food Controller, Kedah to Sec. to Govt., Kedah, 11 Nov. 2486, SUK Kedah 103/2488. Bags of rice in Kedah normally weighed 225 pounds, but the bags specified in this case weighed 142 katties, which is just 185 pounds. See also Padi and Rice Conversion, SUK Kedah 204/2602. In addition to making money by selling rice, millers sold the bran collected when the rice was processed.

25 Kedah Rice Millers, writing from the address of the Oversea Chinese Association, to the Food Controller, Kedah, 22 Nov. 1943, and Minute to Sec. to Govt., 5.12.86 [15 Dec. 1943], SUK Kedah 168/2486.

26 Interim and Final Reports of the Flood Relief Fund Committee, SUK Kedah 135/2486.
27 Report of the Drainage and Irrigation Department, Syburi, for period 19.10.2486 to 31.12.2486, SUK Kedah 271/2487.
28 Note to Sec. to Govt., 12.12.86, SUK Kedah 172/2486.
29 Under Sec., Syburi [Kedah] to The Secretariat, nd, SUK Kedah 88/2487.
30 Food Controller, Syburi (Kedah) to Sec. to Govt., Syburi, 28.3.2487, SUK Kedah 326/2487; PAO Syburi to Under-Sec. to Govt., Syburi, 16 Tula Khom 2487 [16 Oct. 1944], SUK Kedah 418/2487.
31 Tunku Yaacob was a son of Sultan Abdul Hamid, the ruler of Kedah, and a half-brother of Tunku Abdul Rahman, who later became Malaysia's first Prime Minister.
32 Tunku Ismail, Food Controller, Syburi, Notes on Padi Discussion, SUK Kedah 9/2488. Throughout Malaya it was extremely difficult for rice mills to acquire spare parts or lubricants.
33 'Main Points of Discussion, Fixed Thai–Japanese Sub-Committee, Re Purchase of Kedah and Perlis Paddy by Japanese'; PAO, Syburi to Under-Sec. to Govt., Syburi, 4.5.2487 [1944]; Chief Liaison Officer Malai Gunsei Kanbu Alor Star to The Thai Chief Liaison Officer Syburi, 6 May 2604 (forwarding a list of the agents employed by the Japanese Government Controlled Rice Mills), SUK Kedah 418/2487; SUK Kedah 296/2487; Food Controller, Syburi, 'Report on Food Control for the Year ending 31.12.2487', SUK Kedah 241/2488; Military Commissioner, Syburi, to The Nippon Chief Liaison Officer, Malai Gunsei Kanbu, Alor Star Renraku Sho, 3 Sept. 2487, SUK Kedah 810/2487.
34 PAO, Syburi to Under Sec. to Govt., Syburi, 16 Tula Khom 2487 [17 Oct. 1944], SUK Kedah 418/2487.
35 Minute dated 15 Aug. 2487, SUK Kedah 699/2487.
36 PAO, Syburi to Under Sec. to Govt., Syburi, 16 Tula Khom 2487 [16 May 1944], SUK Kedah 418/2487.
37 Minute to Sec. to Govt., 29.4.2487 [29 Apr. 1944], SUK Kedah 146/2487.
38 Minute to SG, 21.6.2487 [21 June 1944], SUK Kedah 146/2487.
39 Abd. Hamid bin Md Isa, 'Pendudukan Jepun dan Kesannya di Kawasan Bukit Selambau Daerah Kuala Muda, Kedah', course essay prepared for Dr Abu Talib Ahmad, History Section, School of Humanities, Universiti Sains Malaysia, session 1988/89.
40 Minutes of Padi Meeting, 28 Oct. 2487, SUK Kedah 418/2487.
41 Military Commissioner, Syburi, Minute 21.6.87 and Military Commissioner to Mitsubishi Shoji Kaisha, 27.6.87, SUK Kedah 603/2487 [1944].
42 Food, Controller, Syburi to SG, Syburi, 15 Apr. 2488, SUK Kedah 366/2488 [1945].
43 Tunki Ismail, 'Notes on Padi Discussion' (nd, but the typescript was initialled by Tunku Yaacob on 7 Jan. 2488 [1945]), SUK Kedah 9/2488. See also Tunku Ismail's 'Diary on Padi Discussioin' in the same file.
44 PAO to Under Sec. Syburi, 17.1.2488 [17 Jan. 1945], SUK Kedah 1152/2487.

45 District Officer, Yen, 'Annual Report and Comments, 2487 [1944]', nd, SUK Kedah 51/2488.
46 Notes on Padi Discussion, Diary on Padi Discussion, SUK Kedah 9/2488.
47 Printed Communiqué in English and Malay issued by Ismail bin Haji Puteh, Under Sec. to Govt., Syburi, 10 Mokera Khom 2468 [10 Jan. 1945], SUK Kedah 9/2488.
48 Military Commissioner, Syburi, to Nippon Chief Liaison Officer, 10.1.2488 [10 Jan. 1945] and Chief Liaison Officer to The Military Commissioner, Syburi, dated 16 December 2605 in error for 16 January 2605, SUK Kedah 9/2488.
49 Officer-in-Charge, Paddy Supply, Memorandum, 26 Feb. 2488, SUK Kedah 326/2487.
50 Officer-in-Charge, Paddy Supply, 'Summary of Paddy Purchase Work Return up to 30.4.'88', encl. in Principal Agricultural Officer, Syburi to Sec. to Govt., Syburi, 16 Prusspa Khom 2488 [16 May 1945], SUK Kedah 9/2488.
51 Officer-in-Charge, Paddy Supply, 'Complaint by a planter, named Haji Ahmad bin Haji Abdullah living in Jalan Pegawai, Seberang Perak', n.d. but *c.* April 1945, SUK Kedah 9/2488. See also Acting District Officer, Kota Star, to Under Sec. to Govt., Syburi, 5.5.88 [5 May 1945] and Principal Agricultural Officer, Syburi to Sec. General, Syburi, 16 Prusspa Khom 2488 [16 May 1945], in ibid.
52 Principal Agricultural Officer, Syburi, to HE the Military Commissioner, Syburi, 14 Maysa Yon [April] 2488, and Military Commissioner to PAO, 22.4.88, SUK Kedah 9/2488.
53 District Officer, Kota Star, Memorandum, 13 May 2488 [1945], SUK Kedah 9/2488.
54 Haji Md. Noor, Penghulu Kuala Kedah, to DO Kota Star, 9 May 2488, SUK Kedah 9/2488.
55 PAO, Syburi, to Sec. General, Syburi, 23.6.2488, and PAO Syburi, Memorandum, nd but *c.* late June 1945, SUK Kedah 9/2488.
56 Paddy Purchase Work Return up to 30/4/2488, nd, SUK Kedah 9/2488.
57 This document, marked 'Translation', appears in SUK Kedah 9/2488. The file also includes the Jawi original, and indicates that the piece was translated and typed by a senior officer of the Agricultural Department named Samsudin, according to Tunku Yaacob, 'to ensure increased secrecy'.
58 Tunku Yaacob to Che Yit, 7 Prusspa Khom 2488 [7 May 1945], enclosing Che Man's report. SUK Kedah 9/2488.
59 Superintendent of Monopolies and Customs, Syburi, to Under Sec. to Govt., Syburi, 14.6.2488, SUK Kedah 240/2486.
60 Paddy Purchase Work Return up to 30.4.88, and Memorandum by the Principal Agricultural Officer, Syburi, n.d., SUK Kedah 9/2488.
61 Principal Agricultural Officer, Syburi to Sec. to Govt., Syburi, 12 Karakda Khom 2488 [12 July 1945], and Minutes of Meeting on the Subject of Storage of Important Rice Substitutes for Use during the Emergency Time, 28 Karakda Khom (July) 2488, SUK Kedah 550/2488.

62 Note dated 18.2.2688 [18 Feb. 1945], SUK Kedah 443/2487.
63 Military Commissioner, Syburi, to The Nippon Chief Liaison Officer, Malai Gunsei Kambu, Alor Star Renraku Sho, July 2488, SUK Kedah 542/2488.
64 Minutes of a Conference of District Officers held at Ipoh, 4 Oct. 2604, PT Larut 161/2602; ADO Ipoh to ADO Batang Padang, 8 June 2602, Land Office Batu Gajah 82/2602; Annual Report, District of Yen, 2487 [1944], SUK Kedah 51/2488B; Annual Report, District of Baling, 2487 [1944], SUK Kedah 200/2488B.

6 Agriculture and Food Supplies in Sarawak during the Japanese Occupation

R.A. Cramb

This chapter examines the economic impact of the 1941–5 Japanese occupation on agriculture in Sarawak, with particular reference to food production. Sarawak, which up to 1941 was an independent state in British Borneo, was not a major target for Japanese economic expansionism. Japanese policy documents from the years immediately preceding the occupation indicate that, relative to Luzon, Malaya or Sumatra, Borneo was not considered to have high potential for agricultural or industrial development but, along with Mindanao and New Guinea, was regarded as an 'undeveloped region'.[1] At the same time, its valuable forest resources were clearly recognized and targeted for immediate exploitation, as were the productive oilfields at Miri and Seria (the latter in Brunei territory). Regardless of the low priority initially accorded Sarawak's agriculture, the exigencies of war meant that increasing attention had to be paid to food production, to sustain both the occupying forces and the local population.[2] Before the occupation, perhaps half the country's rice requirements were imported. Hence the Japanese administration faced the major challenge of rapidly boosting domestic food production and supplies.

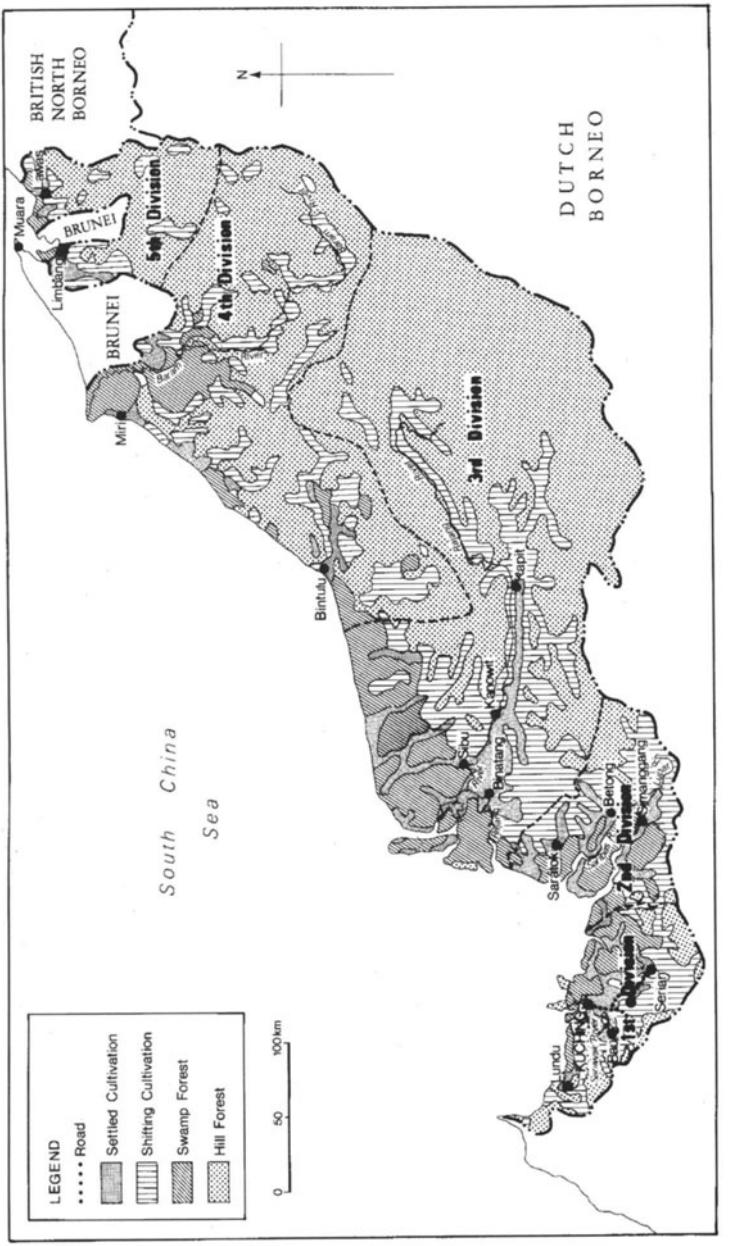
Sarawak had been ruled for one hundred years as the private colony of a succession of English rajahs of the Brooke family.[3] In 1941 its economy, though dependent on primary exports (the principal exports were rubber, oil, guttas, sago, cutch and pepper), was still a semi-subsistence one.[4] Along the coast Malay and Melanau villagers cultivated swamp paddy,[5] coconut and sago and engaged in inshore fishing. In the hills behind, the numerically dominant, longhouse-dwelling Dayak population (Iban, Bidayuh and others)

grew dry paddy and other food crops by shifting cultivation, hunted and collected forest produce and had, in the preceding 30 years, taken to small-scale rubber planting. There were also significant concentrations of rural Chinese engaged primarily in small-scale pepper and rubber planting and, as elsewhere in South-East Asia, Chinese dominated trade and commerce. There were few large capitalist concerns, partly because the Brookes had been ambivalent about encouraging such investment in Sarawak and partly because the country was not particularly attractive to foreign investors.[6] The Borneo Company had established two rubber estates and had interests in mining, timber and trade. There were several other foreign-owned plantation companies, including a Japanese company, Nissa Shokai, which had a rubber estate at Samarahan, inland from the capital, Kuching. The Sarawak Oil Company, a Shell subsidiary, had been successfully exploiting the oilfield at Miri since 1910. Infrastructure was poorly developed. There was only one major road, optimistically called the Simanggang Road, which stretched 65 kilometres south-east from Kuching to Serian, still well short of its destination. Coastal and riverine vessels were the major form of transportation. The airstrip 11 kilometres from Kuching was little more than a clearing in the forest (see Map 8).

The chapter considers the impact of Japan's sudden military and economic intrusion into this quiet, agrarian backwater of the British colonial domain. It is organized as follows. First the occupation of Sarawak is described, with particular reference to economic and administrative structures affecting agriculture. Then the impact of the occupation on agriculture is considered, by examining in turn pre-war food production programmes, food production programmes during the occupation, the overall situation with regard to food production and supply, the livestock sector, and the cash crop sector. A concluding section places the agricultural impact of the occupation in broader perspective.

THE OCCUPATION OF SARAWAK

The Japanese invasion of Sarawak began, after some preliminary bombing, when a force of 10 000 to 15 000 men under General Kawaguchi arrived off Miri on 16 December 1941.[7] The capital, Kuching, was in Japanese hands by 25 December. Rajah Vyner Brooke and his family were absent from Sarawak at the time of



Map 8 Sarawak, showing cultivation patterns, 1930s

the invasion, but Cyril Le Gros Clark, the Officer Administering the Government, and other European administrative officers remained in Kuching to meet the Japanese and were interned at Batu Lintang.[8] A number of European officers and other civilians escaped overland to Netherlands Borneo; some were subsequently captured and killed by the Japanese. Other groups sought refuge in the interior of Sarawak, and one such party in the Fifth Division did not give itself up until September 1942. However, the military phase of the occupation was virtually complete by March 1942, when almost all the remaining Europeans still at large were brought in.[9]

The Military Administration

Because Sarawak was taken with almost no opposition, there was relatively little damage to infrastructure. Some looting and disruption occurred in the brief period of uncertainty after many of the Europeans had fled but before the Japanese had taken full control. However, the transition to Japanese rule took place relatively smoothly.[10]

Sarawak, along with Brunei and North Borneo, constituted one military region, controlled by the 37th Army. The headquarters of the Military Administration for Borneo was at Kuching until April 1944, when it was moved to Jessleton. The region was divided into five prefectures: *Kuching-shu*, *Sibu-shu*, *Miri-shu*, *Seikai-shu* (Jessleton), and *Tokai-shu* (Sandakan). Limbang and Lawas districts were administered from Brunei, which was presumably part of *Miri-shu*. The prefectures were governed by military personnel; for example, in 1942 *Kuching-shu* was administered by an army major named Nozoki.[11]

Under the military authorities were various civilian departments, such as the Department of Industries (*Sangyo Ka*), which eventually absorbed the pre-war Department of Agriculture (see below).[12] The staff of these departments also included some military personnel. Soon after the occupation, the *Sarawak Gazette* remarked that 'in some departments of state, notably, it is understood, the Land Office, the Japanese displayed a zeal and efficiency not commonly expected of a military administration'.[13]

Initially, government administration in the districts continued as it had before the occupation, with Native Officers simply taking over from the departed European officials. According to L. Edwards,

'the Lawas–Trusan area received no Japanese replacements for officials; instead the administrative staff in Lawas town remained the same'.[14] Some of the pre-war Native Officers were appointed as District Officers (*guncho*). For example, at Betong in the Saribas District this position was held by Malay Native Officers and, later, by an Iban, Empenit Adam. At Simanggang, the Second Division headquarters, Eliab Bay, a mission-educated Iban who had been a clerk in the Brooke administration, was appointed as effective Resident from January 1942, advising the Japanese administration on Iban affairs.[15]

The Japanese also introduced new political structures. The *jikeidan* vigilante system was instituted in March 1943, based on neighbourhood groups of approximately 30 households. In rural areas each longhouse constituted a *jikeidan* unit. A local militia (*kyodohei*) was also set up. A military decree of 1 October 1943 ordered the establishment of a prefectural advisory council (*ken sanjikai*) in each prefecture, with councillors (*ken sanji*) drawn from the local Malay, Chinese and Iban elites. The task of the *ken sanji* was to assist with economic projects.[16]

Apart from occasional military patrols, the Japanese presence was largely confined to the major towns. For example, no Japanese soldier was stationed at Kanowit in the middle Rejang, and the three at Kapit in the upper Rejang were reluctant to venture further inland. There was no Japanese stationed at Lawas until late in 1943, after the Chinese uprising in Jessleton in October of that year.[17] With regard to the rest of Lawas District, Edwards writes: 'In the small villages and remote areas, the effect of the Japanese rule was not significant. Rarely did a Japanese official visit the smaller villages so that the people's daily lives continued much as before'.[18]

In general, apart from the European internees at Batu Lintang, the Sarawak population did not suffer at the hands of the military as much as populations elsewhere in South-East Asia. Soldiers demanded deference from people in the streets, and numbers of citizens, particularly Chinese, were jailed and tortured, or in some cases executed, but no large-scale massacre of Chinese occurred as in Singapore and Malaya, nor was there the brutal suppression of revolts which took place in neighbouring Jessleton and Pontianak.[19]

As in Malaya, the Chinese community in Sarawak was required to contribute a lump sum to the Japanese in 1942 to atone for the assistance they had given before the occupation to the Nationalist Government in China. The amount for Sarawak was $1 900 000

(compared with $50 000 000 in Malaya). This caused considerable economic hardship and helped fan the antagonism of many Chinese to Japanese rule. However, there was little organized resistance and some Chinese businessmen successfully exploited the conditions of scarcity prevailing in the later years of the occupation to enrich themselves.[20]

At first the Malays and Dayaks cautiously accepted the new government, and some openly welcomed it. However, once economic conditions declined and the demands of the military administration became more pressing, resentment towards the Japanese was widespread. Most people in the countryside had enough to eat, though for many urban dwellers the situation was precarious. The worst affected area was around Miri where an estimated 3000 Chinese and Javanese (presumably most of them forced labourers from outside Sarawak) died of starvation during the final months of the occupation.[21]

Of the Iban, Vinson Sutlive writes that confiscation of guns (used for hunting), requisitioning of food, forced labour (such as for the construction of airfields at Sibu and Bintulu), and use of torture for petty crimes resulted in 'universal resentment and near-unanimous hatred of the occupying forces'.[22] From early 1945, when a detachment of the Australian Services Reconnaissance Department (SRD) was dropped into the interior and began to organize guerilla activity, there was a series of attacks by upriver Dayaks in several divisions on Japanese military and civilian personnel, and in the last weeks of the war a force of mainly Iban recruits proceeded down the Rejang, taking control of the major towns in quick succession.[23]

Economic Organization

The military administration sought to control the economy to further its immediate aims of extracting raw materials for export to Japan and provisioning the occupying forces. Banking was placed exclusively in Japanese hands and Japanese currency, at par with the Sarawak and Straits dollars, was issued. Chinese businesses were severely curtailed, those shops which remained open being merged into a few centralized stores subject to Japanese control. The Overseas Chinese Association was established to help control Chinese business activities. Its initial task was to collect the monetary contribution from the Chinese business community. It was also enlisted for

such tasks as securing supplies of meat for the military from Chinese producers and attempting to eradicate black-market trading.[24]

In addition to restricting Chinese business activity, the military administration opened up Sarawak's economy to Japanese companies (*kaisha*), many of them part of the large family conglomerates (*zaibatsu*), such as Mitsui and Mitsubishi, which dominated the Japanese economy and strongly influenced political and military affairs.[25] The administration gave some of these *kaisha* monopoly rights over important sectors of the economy. As far as agriculture was concerned, the important *kaisha* included Mitsui Norin and Mitsui Bussan, which had control over food production and trade, Mitsubishi (operating in Borneo as Tawao Sangyo), which took over the sago industry, Nissan Norin, which sought to control the production of coconut oil, Nissa Shokai, an agricultural firm which was already active in Sarawak and now expanded its activities throughout the British Borneo territories, and Nanri, a Brunei-based agricultural firm.[26]

Of Borneo's natural resources, the oilfields at Miri and Seria were of major interest to the Japanese, as indicated by the decision to land there first. The British plan to destroy the oilfields prior to occupation was anticipated in Japan but was not considered a major obstacle. Koichiro Ishihara, a businessman and right-wing activist with first-hand knowledge of South-East Asia, had written in January 1941 that the Borneo fields were the shallowest in the world, so that new wells could be bored in about two or three months, or a year at the most.[27] In fact, the Japanese drilled sixteen new wells, but only managed to restore the Miri and Seria fields to half of pre-war production levels by the end of the war.[28] Total wartime production for the two fields was over 11 million barrels. In addition, coal was mined at Silantek in the Second Division during the occupation, though production figures are not known.[29]

Sutlive reports that the Japanese also exploited the timber resources of the Rejang and elsewhere, mainly for boat-building.[30] Timber-hulled boats and coastal launches were needed to load raw materials onto larger Japanese ships. Logging operations under Japanese management were established in both swamp and hill forests, and some local Chinese businessmen were involved. William Tan, a Teochew businessman from Kuching, oversaw timber cutting along the Balleh, a tributary of the Rejang, for the Japanese, while in 1943 Ling Beng Siew, a Foochow from Sibu, became the

manager of Japanese logging operations near Bawang Assan, downriver from Sibu along the Lassa River, thus gaining a foothold in the industry which was to make him a wealthy man after the war.[31]

The Japanese also took control of all the sawmills in Sibu and Bintulu, requiring their owners to run the mills on their behalf. In Bintulu alone more than 4000 tons of sawn timber were milled. In Lawas District, the military managed a sawmill at Tagai, employing 20–30 Japanese and 30–50 local men; the timber was for the construction of a fort at Muara (in Brunei) and the repair of the Seria oilfields.[32]

The military administration conscripted labour to work on projects of strategic importance. Forced labour was used for the construction of airfields at Sibu and Bintulu. According to Sutlive, 'each longhouse in the Bintulu area was required in turn to send all adult males to work for one month'.[33] The workers had to provide their own rice but were paid with kerosene and sugar. The removal of male labour from the longhouse would have had adverse consequences for agricultural production in the longhouses concerned, particularly if the workers were conscripted at a critical stage of the farming cycle. In addition to Dayak labour, hundreds of Chinese and Javanese forced labourers were brought into Sarawak to work on ship-building and other projects.[34] Notwithstanding the administration's ability to mobilize labour, there was little or no effort to improve or even maintain basic infrastructure. Immediately after the war, many roads in rural areas and around the smaller towns were found to be overgrown and in disrepair, requiring considerable investment before they could be used again, even by bicycles.[35] Health and education facilities also suffered neglect.[36] Edwards' comment for Lawas appears to be true generally: 'The Japanese attempted no improvements of existing facilities such as schools and dispensaries nor did they begin any new projects such as the construction of roads or new buildings. What time and men they did have were devoted to helping out on military projects and to growing food.'[37]

The Department of Agriculture

At the time of the invasion, the Department of Agriculture, though possessing modest resources, was the main government agency concerned with agricultural development.[38] From December 1941 to

March 1942 the Department remained a separate entity and was administered by pre-war staff with no change in established policies. From March 1942 to September 1943 it became part of the Department of Industries (*Sangyo Ka*) and was administered by a Japanese soldier named Katsura, who was said to have been an agriculturalist before the war. However, in September 1943 Katsura was arrested by the military police (*kempeitai*) and tried for misappropriation of government funds. The Department was then reduced to the status of a Bureau of Information and stopped carrying out field extension work. All agricultural programmes and agricultural stations, apart from a newly established Agricultural Training Centre at Tarat, became the responsibility of the Japanese agricultural company Mitsui Norin. The Tarat station remained under the Department of Agriculture and was run by a resident Japanese agricultural officer.[39]

In the course of the occupation, the Department suffered substantial losses, both of personnel and facilities. In December 1941, immediately before the occupation, the Department included three European officers, 27 Asian staff on the regular establishment and a temporary staff of 40 Agricultural Inspectors. The occupation obviously meant the loss of the European officers. Early in the occupation, the Japanese administration asked Ong Kee Hui, the most senior remaining officer, to reduce the number of staff still further. A few months later, when the administration became concerned with the supply of food and began to place pressure on the few remaining staff, Ong (who had left the Department) suggested that if the administration offered to buy all the food produced, the population would respond without any further guidance from the Department. This approach was adopted and, at least initially, proved successful.[40]

The Department's resources were also depleted during the Occupation. Almost all books and files in the Department's headquarters in Kuching were removed and taken to the military administration's Research Department, never to be returned. The Central Agricultural Station, occupying 38 hectares at Semongok, 12th Mile, Penrissen Road, was looted by local people in December 1941. The Japanese military arrived only in time to prevent the buildings themselves being dismantled. One year later, most of the buildings were removed to a new station at Tarat, 34th Mile, Simanggang Road, and the Semongok station was abandoned. The Kanowit Agricultural Station (14 hectares) and the Rantau Panjang Padi Station

(12 hectares) near Sibu were similarly neglected. The Department's dairy farms were also allowed to run down; the Kuching farm lost considerable stock but continued to function; the outstation farms ceased to exist.[41]

THE IMPACT OF THE OCCUPATION ON AGRICULTURE

Pre-war Food Production Programmes

Food production in Sarawak was almost entirely in the hands of small-scale, subsistence-oriented producers. Malays, Melanaus and those Dayaks occupying lowland areas cultivated swamp paddy.[42] Typically this involved discontinuous cultivation on unbunded land, without the aid of draught animals. Most of the Dayak population occupied sloping uplands where they grew hill paddy by shifting cultivation. Though expansion into primary forest was still occurring, even by this stage it is likely that most shifting cultivation involved the reutilization of secondary forest in a forest–fallow rotation. Total paddy production was insufficient to meet Sarawak's requirements. Indeed, many paddy producers were also involved in the cultivation of cash crops – coconut and sago in the coastal districts and rubber elsewhere – and when the returns to these commodities were high, paddy production declined, to the extent that many paddy producers were purchasing a significant proportion of their requirements.[43]

The Brooke government had been giving increasing attention to food production, particularly paddy production, in the years immediately preceding the Occupation, partly due to the escalating imports of rice in the late 1930s. C.L. Newman, an officer in the Malayan Agricultural Service, visited Sarawak at the invitation of the government in 1938 and made a detailed report on the prospects for wet paddy production. He found a number of areas suitable for intensive (that is, annual) bunded paddy cultivation, particularly in the Second and Third Divisions, and considered that local paddy planters, mainly Dayaks, could be gradually encouraged to utilize such areas more effectively through strategically placed demonstration plots. This he considered preferable to encouraging the immigration of paddy planters such as the Banjarese, as in the Federated Malay States. While he did not consider that major irrigation works were necessary, he advocated the development of improved water control in existing paddy areas to achieve controlled drainage.[44]

After the outbreak of war in Europe the government became even more concerned to increase paddy production and obtained Newman's secondment from the Malayan Agricultural Service, appointing him Director of Agriculture in January 1940.[45] Newman's main emphasis was on encouraging more intensive methods of wet paddy cultivation. The paddy demonstration and test plots at Kanowit (commenced in 1937) and Rantau Panjang (commenced in 1939) were continued, with the Rantau Panjang station being expanded to include an area where Iban from neighbouring longhouses farmed under the supervision of the station staff.[46]

Much of Newman's time was taken up with planning three controlled drainage schemes for wet paddy – at Sungei Pasir near Lundu, Tanjong Bijat near Simanggang and Pujut-Lopeng near Miri. The Sungai Pasir scheme did not materialize but considerable work had been completed at both Bijat and Pujut-Lopeng by the time of the Japanese invasion.[47]

In addition to these schemes, there were renewed efforts to identify and open up potential wet paddy areas for planned 'colonization'. Such areas were declared 'paddy reserves' and colonists had to undertake to 'practise improved farming methods'.[48] One such area, which had been under consideration for a decade, was Tanjong Beluku, near Simunjan, where 100 paddy lots were laid out and provision made for planned villages. In July 1941 it was reported that 78 local Dayak and Malay households had joined the scheme and prepared their land for planting.[49]

Interestingly, the best example of intensive, irrigated paddy cultivation was at the Nissa Shokai Estate in the upper Samarahan. Permission was first obtained to settle 25 Japanese families in this location in 1929. The first settlers did not arrive until 1932 and, apart from ten families, all proved unsuitable and were repatriated within a few months. Replacements were obtained, however, and by 1935 they had about 300 acres of swamp land under paddy, much of it worked with the aid of buffaloes. In 1936 an expert on paddy cultivation was brought from Japan and paddy varieties from Java and Formosa were planted out experimentally.[50] When Newman inspected the area in 1938 it had been completely cleared, de-stumped and levelled and was irrigated by two streams, with a reservoir to supply additional water when needed. Drains and irrigation channels alternated at 20-metre intervals. Wet nurseries were used and the fields were cultivated under water. A wide range of Japanese farming implements was in use.[51] There is no evidence, however, of a demonstration effect on surrounding farmers.

Other steps to increase paddy production included the rationing of imported rice, introduced in 1941 partly to discourage Dayaks and Malays from relying on income from rubber to purchase rice. In some places (for example, Kanowit) a complete embargo was enforced.[52] Reports from other districts indicate that the rationing was having the desired effect. For example: 'The District Officer, Kalaka, reports that the introduction of rationing appears to have had a good effect in persuading both Dayaks and Malays to plant paddy this year.'[53]

A further measure was a general campaign to promote the production of non-rice foodcrops. The District Officer, Kuching, reported in February 1941 that 'the drive to promote the planting of foodstuffs in the kampongs is meeting with success, and there has been considerable activity in this respect'.[54] In fact, in some places the drive was too successful. In Mukah District, for example, the markets were 'glutted with vegetables for which there is little or no sale'.[55]

Thus by the time of the Japanese invasion there was already considerable impetus towards increased production of paddy and other foodcrops. The preceding few seasons had been generally favourable for paddy cultivation, hence it is likely that many farmers had been able to build up reserves. The encouragement given to paddy cultivation, particularly for the intensification of wet paddy areas, had resulted in an increase in the area planted, if not yet in yields. The capacity to increase the production of secondary food crops had been demonstrated. Nevertheless, the favourable returns to rubber, especially after the outbreak of war in Europe in 1939, meant that, until the occupation, the incentive to achieve self-sufficiency in food was lacking. In 1940 rice imports were over 38 000 tons, valued at more than $3 650 000, an all-time high.

Food Production Programmes during the Occupation

The Japanese administration soon became concerned with increasing food production and implemented a number of programmes and policies to this end. During the first six months of the occupation, when Kuching was administered by Major Nozoki, the Department of Agriculture in *Kuching-shu* implemented what Ong Kee Hui describes as a 'more or less liberal policy'.[56] This involved two programmes, both intended to stimulate the cultivation of food crops: (i) government run agricultural stations and (ii) government subsidized settlement schemes, or 'agricultural concentrations'.

The agricultural stations included the Central Agricultural Station at Semongok which, as mentioned above, was maintained until the end of 1942 and then abandoned. In March 1942, the Japanese opened a new Agricultural Training Centre (known after the war as Tarat Agricultural Station) at the 34th Mile, Simanggang Road. The new station comprised about 40 hectares of gently undulating, relatively fertile land and was used as a demonstration farm for the cultivation of a range of foodcrops. The only permanent crop established was kapok. A farm school was also started at Tarat, similar to the school which had been initiated at Semongok in August 1941, before the occupation.[57] However, the course was of three months' duration, compared to a year for the Semongok course, and much of the course was taken up with instruction in the Japanese language. It is not recorded how many trainees went through the Tarat course. In the last months of the occupation, when food supplies were increasingly scarce, the farm school was closed and the station was converted to a food production centre, almost the whole area being planted with cassava and sweet potato. There was also a small irrigated rice field. Immediately after the war it was reported that the land showed clear signs of overcropping, being badly eroded and infested with *Imperata* grass.[58] A third station, the Sekama Vegetable Garden, was started in April 1944. It was an area of just over one hectare, planted with a range of vegetable crops. The garden was cultivated and maintained by prison labour and was used to supply the officers of the Japanese civil administration. The garden was abandoned in July 1945, when the Japanese evacuated to Bau. As mentioned above, existing agricultural stations in other divisions were largely abandoned, though it appears that centres for food production along the lines of the Sekama Vegetable Garden were established in various locations. For example, in Lawas District the Japanese organized the operation of three large vegetable gardens, the produce from which helped supply local needs.[59]

The government-subsidized settlement schemes or 'agricultural concentrations' were organized as follows. The administration selected a suitable area and demarcated it into lots. It then chose a leader who undertook to recruit other settlers. The settlers, who were required to plant specified food crops, such as rice, sweet potato and maize, erected their own houses using timber and other materials supplied free of charge by the administration. Tools, rations and cash payments of up to $18 per person per month were supplied for a maximum of one year, but these were treated as

loans, to be repaid in instalments through the sale of produce to the administration. The administration guaranteed to buy all the produce from the concentration at prices which were fixed in advance. The leader was held accountable for all loans advanced to his settlers and had to provide security in the form of land titles or other assets. He also had to keep a record of all transactions relating to the concentration. In return he received 25 per cent of the concentration's earnings. The administration also undertook to indemnify him against any losses due to factors beyond his control. Termination of the agreement between the administration and the leader required eight months' notice on either side.[60]

The establishment of agricultural concentrations proceeded smoothly under the Nozoki Administration. Almost 1000 hectares were brought under cultivation, mainly along the Simanggang Road. The wet paddy development at Bijat, which had been started before the war, was completed during the occupation, presumably under a similar arrangement. Eliab Bay, the Iban 'liaison officer' at Simanggang, supervised Iban and Chinese paddy-planting teams at Bijat and helped achieve record yields.[61] In 1946, B.J.C. Spurway (a pre-war agricultural officer) remarked that Bijat had kept Kuching supplied with paddy during the years of food shortage; it had been the 'salvation of Kuching' and had 'saved this district from starvation'.[62] Even one year after the occupation, more than 10 000 gantangs (36 tons) of rice per month were being shipped from Simanggang to Kuching,[63] presumably reflecting in part the continuing role of the Bijat scheme.

However, for most schemes, things changed for the worse after the Nozoki administration was replaced in mid-1942. Production appears to have exceeded requirements, there was no provision for storing the perishable crops such as sweet potato and cassava, and funds for providing farm-to-market transportation were scarce. The administration attempted to cut its losses at the expense of the settlers. The price of sweet potatoes, which had been fixed by agreement at $3.00 per picul, was unilaterally reduced to $2.50 and then to $2.00.[64] The administration also reneged on its agreement to provide transport and to buy all the settlers' crops, with the result that sweet potatoes were left to rot by the roadside or in the ground. The settlers were some distance from Kuching and did not have access to river transport, so could not easily get their produce to market themselves. In addition, in those concentrations which had been started later, advances of cash and food were terminated before

the agreed period. All these actions resulted in financial hardship for the settlers and reduced their incentive to produce surplus food for sale to the administration. Thereafter they tended to produce only enough food to meet their own requirements, with the result that Kuching became increasingly short of food.[65]

When Mitsui Norin replaced the Department of Agriculture late in 1943, it took over the management of the agricultural concentrations. In addition, the company started three new projects: (i) the 27th Mile Cassava Plantation, an area of about 125 hectares along the Simanggang Road cleared from old forest and planted exclusively with cassava; (ii) the Gunong Sta'at Cassava Plantation, an area of about 25 hectares near Bau planted with cassava, pineapples, papaya and bananas; (iii) the Lubok Nibong Agricultural Concentration, an area of over 800 hectares near Saratok developed for wet paddy cultivation (though only a portion of the area was actually planted).[66]

Little is known about food production projects in other divisions. It appears that the other major pre-war paddy scheme, the Pujut-Lopeng scheme near Miri, was abandoned and had to be rehabilitated and further developed after the war. In January, 1944, the Nanri Company, a Japanese firm in Brunei, asked Wong Tsap En, a Limbang planter, to estimate the cost of opening up land sufficient to supply food for 10 000 men at Muara in Brunei, apparently with a view to involving Wong in the venture. Wong worked on a detailed proposal but nothing came of it.[67]

Overall Food Production and Supply

Apart from its own food schemes, the Japanese administration urged all farmers to increase food production – not only rice but sweet potato, cassava and other crops. This was, in effect, a continuation of the Brooke government's pre-war campaign to boost food output, but with a stronger element of coercion. Those who did not cooperate were liable to be conscripted for work projects elsewhere.[68] The administration authorized agents in each prefecture to requisition 'surplus' food at controlled prices for distribution to the urban population and the military.

In *Kuching-shu*, and probably elsewhere, Mitsui's trading arm, Mitsui Bussan, was given a monopoly over the purchase and distribution of all foodstuffs, including rice, maize, sweet potato and cassava. Mitsui's aim was to maximize the production of foodcrops.

However, it was primarily profit-oriented and its approach antagonized local farmers. The Japanese employees of the company, backed by the authority of the administration, acquired paddy indiscriminately from local farmers for the Kuching Rice Mill, to the extent that many farmers in the vicinity of Kuching had insufficient paddy for their own requirements and had to resort to eating sago six months or more before the next paddy harvest.[69]

The Japanese did not help matters by continuing to change their policies. In August 1942, just before the 1942–3 paddy planting season, the administration announced in the local newspaper that everyone who planted paddy could harvest the crop for their own consumption. However, in March 1943, people from Kuching who had gone out to the countryside to plant paddy found they had to obtain a permit in order to bring paddy back into Kuching. In the process of applying for a permit, a calculation was made of the amount of paddy required by the cultivator's family, and any surplus production had to be sold to Mitsui Bussan at the government-controlled price of $8 per picul ($134 per ton), roughly corresponding to the pre-occupation price.[70] Ong Kee Hui, who was himself cultivating paddy at this time (see below), estimated the cost of production at $150 to $200 per picul ($2520 to 3360 per ton) due to the scarcity of labour and the rapid inflation which had set in. Thus there was little incentive to produce surplus food for the administration. In addition, Mitsui's monopoly over the distribution of foodstuffs interfered with the existing distributive system, aggravating the food shortage. An extensive black market emerged which the Japanese could not control.[71]

Notwithstanding the unfavourable marketing arrangements, the urgent need to grow more food due to the shortage of imported rice meant that the area under paddy cultivation increased yearly from 1941 to 1945. By mid-1943 the disruption to Japanese shipping meant that self-sufficiency was essential. After April, 1944, when the Japanese Army Headquarters for Borneo was moved from Kuching to Jessleton, rice imports to Kuching were negligible and, in any case, were mostly consumed by the Japanese Army. The civilian populations's rice ration was all locally produced rice which had been milled at the Kuching Rice Mill. The black-market price of rice in Kuching rose throughout the occupation and was over $400 per picul by mid-1945. Local paddy-growers experienced a 'minor boom', though there was little in the way of consumer goods on which the income could be spent.[72]

Dayak and Malay paddy farmers found it relatively easy to increase production. As mentioned, the years immediately preceding the occupation had been favourable for paddy cultivation and it appears that suitable conditions continued during the Japanese period. In Iban terms, the occupation period is remembered as one of 'cool' or 'stable' years (*taun celap*) in which good crops were obtained (*bulih padi*). Given the lack of demand for rubber, their major cash crop, the Dayaks concentrated their efforts on paddy production and, as imported consumer goods became increasingly scarce, on other traditional subsistence activities such as the manufacture of cloth from locally grown cotton. All available swamp paddy lands were brought into cultivation, in some places using the techniques which the Department of Agriculture had been urging on farmers before the war. For hill paddy farmers there was sufficient land under forest–fallow to permit an increase in the annual area cultivated without any reduction in per hectare yield. Given a favourable season, hill paddy farmers could readily meet their own requirements with a small surplus to spare. Those who failed to produce enough from their own farms worked for their neighbours in exchange for paddy, though there was some resort to the usual famine foods, cassava and sago. In some districts (notably the Kanowit and Bintulu districts) Dayak farmers took the opportunity of a change in regime to occupy additional, more fertile land, including virgin forest, to which they had previously been denied access.[73]

The requirement to sell paddy to the Japanese was irksome to the Dayaks but the severity of the imposition varied from place to place. In Saribas District it is reported that those households with surplus paddy were required to sell three piculs (180 kg) of paddy in exchange for Japanese currency and consumer goods such as cloth or clothing; this probably represented 10–15 per cent of the typical harvest.[74] The Japanese also purchased cassava which the Dayaks planted extensively as an intercrop with hill paddy. In more accessible longhouses almost every household supplied from two to three piculs (120 to 180 kg) of paddy per year. In more remote longhouses only a few households actually sold any paddy. Those longhouses with a surplus also sold paddy to other longhouses and to Chinese and Malays.[75] In Lawas District, the Japanese initially confined the acquisition of foodstuffs to areas close to the town, but from 1943, they

also began to purchase rice from the interior. Local people would

> walk to Long Semado, for instance, buy rice from the village, and then carry it back to Lawas. The Japanese permitted each carrier to keep one half of his load, the other half being given to the government agent, Soon Teck Kongsi, for distribution or export.[76]

The threat of force was always present. Traders often acted as informers and on several occasions farmers in Lawas found to be keeping extra supplies of rice for their own consumption were beaten or jailed.

The rural Chinese also turned to food production on a large scale. Those with suitable land cultivated food crops on their existing holdings. Most of the good swamp land in the Chinese settlements along the Simanggang Road was taken up and developed for wet paddy cultivation.[77] Foochow rubber farmers in the Rejang delta also turned to paddy planting and other forms of foodcrop production.[78] Wong Tsap En, a Limbang rubber planter, had begun to stockpile paddy, plant sweet potato, and ready himself for subsistence activities such as fishing as early as mid-1939. He and his family remained on their land and survived through vegetable gardening and fishing, as well as such ventures as tobacco growing and cigarette manufacture and selling soap made from mangrove ash. In November 1942 he wrote to his mother-in-law in Kuching: 'There is no work here, no rubber tapping or other work, but there is plenty of rice, fish and vegetables.'[79]

Where their existing holdings were not so readily converted to food crop production, Chinese farmers moved downriver to cultivate wet paddy, particularly Hakka farmers in the Sarawak delta and Foochow farmers in the Rejang delta.[80] The Foochow had been brought to Sarawak as paddy-planters at the turn of the century, and though they had turned to rubber planting after 1910, they had successfully opened up land for paddy cultivation in the Rejang delta below Sibu when rubber prices fell during the depression, barely a decade before the occupation.[81] C.D. Adams, a Sibu-based officer in the British Military Administration which governed Sarawak in the months following the Japanese surrender, estimated that during the occupation the Japanese requisitioned about a third of the paddy crop, presumably basing his estimate on the experience of the productive Foochow farmers in the lower Rejang.[82] The Lands Department actively encouraged the movement downriver, issuing temporary leases to Chinese farmers for paddy planting. This gave

rise to conflict between Chinese and Dayaks immediately after the war. A 1946 report stated:

> As in the case of many other districts, particularly in the First Division, a number of land disputes have arisen in the Binatang District between Dayaks and Chinese over paddy planting rights. It appears that during the occupation the Chinese were given permits to plant certain areas, which the Dayaks now claim as theirs, for a specified number of years.[83]

Obtaining an adequate food supply was most difficult for the urban population. All available pockets of land in urban areas were given over to food production. In Kuching, for example, 'the grass verges alongside roads in the Malay Kampong . . . were planted with tapioca'.[84] John Chin, a civil servant in Kuching, recalls that

> all were encouraged to grow supplementary food crops on any empty land available, and in the town area such food crops consisted of sweet potatoes, tapioca and different varieties of vegetables. Most civil servants needed little urging since they found that rice and other foodstuffs were getting progressively scarcer as the war wore on.[85]

However, over half the population of Kuching, particularly the Chinese whose livelihood had depended on trade, moved to the countryside to grow paddy and other food crops. As with the rural Chinese, many went to the coastal region downriver from the town; the Nonok Peninsula (now called Asajaya) was a particularly productive area. Frequently they had to hire labour to assist in the heavier work, such as clearing and land preparation. In 1942 the cost of clearing was about $25 per acre ($60 per ha) but rose to many times that figure by 1945.[86] Ong Kee Hui opened up about 20 hectares along Sungai Kuap, near Kuching. Using Iban labourers, he cleared the whole area and planted two successive crops of hill paddy with a relay crop of cassava in between. This enabled him to feed his family and his workers.[87] Many Chinese from Sibu and other towns also moved into the country. The urban Chinese were not always successful, however, for most lacked experience in agriculture. Those who remained in the towns were often in an even more precarious position.[88]

Livestock Production

At the time of the Japanese invasion, livestock production occurred in two main sectors – the subsistence and commercial. Within the subsistence sector, Dayak farmers reared mainly free-range pigs and poultry, and in some cases cattle or buffaloes.[89] Goats and cattle were also kept by coastal Muslim communities. There is no evidence concerning production trends in this sector, but it is possible that the increasing demand for food crops for human consumption (including maize, cassava and sweet potato) may have led to a reduction in the feed supply for non-ruminant livestock.

The commercial sector consisted mainly of Chinese pig and poultry producers in peri-urban areas. There was also some small-scale commercial cattle production, including dairy cattle. Heavy demands were made on the pig producers in the vicinity of Kuching. Through the Overseas Chinese Association, they were required to supply meat daily to the Japanese military. The demand soon exceeded the supply and pigs were being slaughtered before they reached their maximum weight. The scarcity and high cost of feed, coupled with the comparatively low government-controlled price, meant that producers suffered losses and gradually gave up production. Those who could moved to the coastal areas, where most of the country's stock of pigs was located at the end of the war. However, the total pig population was considerably reduced during the occupation. Poultry producers encountered similar difficulties.[90]

Cattle breeders fared somewhat better. Not being dependent on purchased feed, they did not face the same problem of escalating costs, though they were affected by the general scarcity of labour, mainly for cutting grass. The number of bullocks for use in transportation increased significantly, partly due to imports from the Natuna Islands.[91] Though milk production was peripheral to the overall food economy, the Department of Agriculture had operated a number of dairy farms before the war, with perhaps 500 head of milch cows;[92] by the end of the occupation the remaining stock numbered only 40 or so and were in poor condition. A number of small, mainly Indian-owned dairy herds were in existence near Kuching at the end of the war, though they totalled less than 100 head.[93]

Cash Crops

Rubber

The dramatic growth of the rubber industry in Sarawak in the four decades preceding the occupation had transformed the rural economy, particularly in the First, Second and Third Divisions. In contrast with the situation in Malaya, there were only five large foreign-owned estates in Sarawak (including the Nissa Shokai estate in the Samarahan), accounting for 5 per cent of the total area. The remaining area was divided almost equally between Chinese holdings on the one hand and Dayak and Malay holdings on the other. By 1940 there was a total of 97 000 hectares under rubber and exports had reached an all-time high of almost 35 500 tons, worth over $26 million.[94]

Rubber was one of the strategic commodities which Japan sought in South-East Asia, but the occupation of Malaya meant that the Japanese economy was now oversupplied. Hence there was a collapse in the market for Sarawak rubber, quite apart from the subsequent disruption to trade brought about by the Allied blockade. In the first few months of the occupation the Japanese purchased some rubber to ship to Japan,[95] but the scarcity of shipping meant that this practice was soon abandoned. Later in the occupation small quantities of rubber were bought for the distillation of rubber oil, which the Japanese tried unsuccessfully to use as automobile fuel. Again, small quantities of rubber were purchased from gardens between the 3rd and 6th Miles, Simanggang Road, to use as a substitute for asphalt on the runway of the airstrip at 7th Mile. However, for most of the period rubber gardens went out of production as labour was diverted to food crop production. Some were cleared in order to plant food crops,[96] but most were simply allowed to become overgrown. This, of course, did not necessarily damage their long-term productivity, as the post-war rubber boom testifies.[97]

Pepper

The pepper industry, almost entirely in the hands of Chinese smallholders, was already in a depressed state immediately before the occupation. Low prices had brought the quantity exported in 1940 (1305 tons) to the lowest point in more than a decade, and export earnings ($362 569) were at their lowest level since 1896.

Though the low level of exports partly reflected increased stockpiling, the Department of Agriculture also reported a considerable reduction in the area under pepper, and many pepper vines were diseased or otherwise in poor condition.[98] The war accelerated the industry's decline. There was no demand for pepper during the first two years of the occupation. In addition, the inputs commonly used at the time, such as prawn refuse for fertilizer and nicotine spray for insecticide, were unobtainable. Pepper gardeners were not in a strong financial position, being dependent on advances from their business patrons (*towkay*) in the bazaar, and so could not continue to maintain their gardens in the absence of any market for their output. Most turned to the production of food crops such as sweet potato and vegetables, and still later turned to the cultivation of tobacco, which was fetching about $2000 per picul of cured leaves in August 1945.[99] The consequence was that pepper gardens, which differed from rubber gardens in requiring continual intensive maintenance, gradually died out. The Department of Agriculture's Annual Report for 1946 stated that 'pepper cultivation was largely abandoned during the war and the acreage under the crop is now negligible'.[100]

Ironically, after June 1943, when most pepper gardens were well and truly run down, there was a renewed demand for pepper for shipment to Singapore to barter-trade for imports, especially rice. As with other commodities, a monopoly over the trade in pepper was given to one of the Japanese conglomerates. Much of the large quantity of the pepper stockpiled in Kuching during the 1930s was shipped to Singapore during this period.[101] However, considerable stocks remained after the war, as indicated by the sizeable exports of pepper in the immediate post-war years; over 3000 tons were exported between 1946 and 1949, most of which was thought to be pre-war production.[102] It appears that a great deal of pepper changed hands during the war without being exported. Reece remarks that

> ... at the end of the war there were in Kuching and Sibu a number of Chinese businessmen who had not only managed to survive the occupation without discomfort but had in fact substantially improved their material position through judicious purchases of property and produce, such as pepper, on a buyers' market.[103]

Sago

The sago industry, a smallholder concern dominated by the Melanau, experienced buoyant conditions before the invasion, particularly after the outbreak of war in Europe. The quantity of exports in 1940 was over 23 000 tons, close to an all-time high, and the value of exports was $2 185 000, a record. However, as with rubber and pepper, the demand for exports of sago flour collapsed during the occupation. In the Melanau sago-producing districts of the Third Division the industry was 'virtually dismantled' and the inhabitants were 'pushed back into a subsistence economy'. Some production of flour continued as 'the Melanau needed sago biscuit for food and barter', but the number of palms felled was small.[104] Similarly, in the Kalaka and Saribas districts of the Second Division many sago trees were allowed to mature without being cut.[105]

Part of the reason was that the owners of sago gardens were not as successful as coconut producers (see below) in taking advantage of the limited local demand. The Japanese firm, Mitsubishi (operating in Sarawak as Tawao Sangyo), had a monopoly in the production of sago flour. Mitsubishi forcibly took over all sago refineries in Kuching and the Second Division and producers had to sell their raw sago to this firm or its representatives. The controlled price for sago was $20 per picul in 1945, compared with the black-market price of $30 per picul. The low official price discouraged many producers from supplying Mitsubishi. Some garden owners managed to evade the official monopoly and did reasonably well selling on the black market, but many others chose not to work their sago. In addition to the poor price, there was difficulty in hiring labour and in obtaining the materials (such as muslin cloth and nails for raspers) needed to process the logs.[106]

Coconut

Coconuts were cultivated as a smallholder crop by Malays in the coastal districts of First Division, although there were also some larger Chinese-owned plantations. Less significant in the rural economy than the above three crops, copra exports had started to take off in the 1920s, peaking in 1938 at 3644 tons before falling to just over 2000 tons in 1940 due to a sharp drop in price. In contrast to rubber, pepper and sago planters, the owners of coconut gardens experienced a minor boom during the occupation. With

the depletion of pre-war stocks of cooking oil and kerosene, there was a considerable domestic demand for coconut oil. Later in the occupation, coconut oil was also in demand for the manufacture of soap and as a substitute engine oil. The Japanese firm, Nissan Norin, was given nominal control over the production of coconut oil, taking over all but one of the existing coconut oil mills. The firm made several attempts to force coconut planters to supply it with either copra or coconut oil on a quota basis but was unsuccessful, notwithstanding threats of punitive action. Coconut planters preferred to produce their own coconut oil which was selling for nearly $200 per picul in 1945. Chinese planters also had a profitable sideline rearing pigs on raw coconut meat. However, despite the good returns to coconut production, the scarcity and high cost of labour meant that many gardens which were not owner-cultivated became overgrown and went out of production. The increased pig population also did considerable damage, both to the internal garden drains and the roots of the trees.[107]

CONCLUSION

The Brooke government had long sought to increase food production in Sarawak, principally through the introduction of Chinese (and to a lesser extent, Javanese, Bugis, and even Japanese) paddy planters who, it was thought, would demonstrate the advantage of intensive wet paddy cultivation to the local Dayak and Malay farmers.[108] However, the intended impact on the indigenous population was not forthcoming, and the Chinese immigrants themselves soon turned to more remunerative pursuits (rubber, pepper and market garden crops), thus adding to the demand for imported rice. The growth in paddy production lagged behind the growth in population, except when a downturn in commodity prices made it worthwhile for both indigenous and immigrant farmers to concentrate again on paddy. This was particularly evident during the depression years (1930–3), when local production rose by perhaps 40 per cent in two years, and Sarawak's degree of self-sufficiency in rice increased from around 50 to 70 per cent.[109] However, on the eve of the Japanese Occupation, rubber, the most widely cultivated export crop, was booming, hence paddy production was down, despite renewed efforts by the government to promote rice cultivation, and imports were at record levels.

Under the Japanese, notwithstanding the difficulties faced by particular categories of the population,[110] Sarawak was more or less self-sufficient in food for the first time in over 70 years (as well as meeting the food requirements of the occupying forces).[111] This situation was a direct result of the increased area under paddy and other foodcrops (notably cassava and sweet potato) and the high proportion of the labour force engaged in food production, and it demonstrated that, given economic necessity, there were no serious technical barriers to achieving self-sufficiency; the resources and techniques available to the local farming population were adequate for the purpose. However, it is clear that this 'achievement' was the very antithesis of agricultural development. It was dependent on the collapse of the export economy, a reversion to subsistence agriculture and even barter-trade on the part of both semi-commercial and commercial (primarily Chinese) farmers, and the emigration of over half the urban population to the countryside. That is, an economic shock much greater than the depression was needed to induce the people of Sarawak to produce their food requirements.[112]

Moreover, it is doubtful if the dramatic increase in food output was sustainable. The increased utilization of swamp paddy lands represented a productivity gain which could probably have been maintained, but much of the growth of production was based on the accelerated clearing and more intensive utilization of hill land (as well as the expanded cultivation of crops like cassava), a trend likely to result in declining productivity within a relatively few years. In addition, the conflicts over land which emerged after the war suggest that, in many cases, the institutional arrangements underlying the growth in food production were ad hoc and unsustainable.

Hence the impact of the Japanese occupation on agricultural development in Sarawak was largely negative. The Japanese involvement in promoting food production through agricultural concentrations, while demonstrating some interesting organizational features, essentially built on existing arrangements. For example, the major wet paddy scheme at Bijat had been started before the occupation and was completed largely at the instigation of a local Iban official, who supervised the work himself. The Japanese approach to the marketing of food, involving monopoly rights and forced deliveries, was a strong disincentive to producers, and served to undermine the beneficial aspects of the food production programmes.

The impact of the occupation on the export sector was unambiguously negative. The rubber industry, which had been the basis of considerable and widespread prosperity for the rural population, was brought to a standstill, though the nature of the crop meant that the industry could quickly recover after the war. Pepper cultivation was on the decline in any case, but the effect of the occupation was virtually to obliterate it, making post-war recovery of the industry very slow. The coastal export industries – sago and coconut – were directly or indirectly encouraged to a limited extent during the Occupation but, in general, also suffered a major (if temporary) setback.

Thus, as in Malaya and Indonesia, the main economic achievement of the occupation was that 'somehow the Japanese war machine was kept in remarkable combat readiness, [while] the civilian economy was brought to its knees'.[113] In Akashi's terms, the impact of the occupation was not a 'transformation' of Sarawak's rural economy but a significant 'interruption' to the process of agricultural development.[114]

Notes

1 For example, 'Summary Draft of a Policy for the South' prepared by the Navy National Policy Research Committee in April, 1939; reproduced in Joyce C. Lebra (ed.), *Japan's Greater East Asia Co-Prosperity Sphere in World War II: Selected Readings and Documents* (Kuala Lumpur: Oxford University Press, 1975), pp. 64–7.

2 R.H.W. Reece, *The Name of Brooke: The End of White Rajah Rule in Sarawak* (Kuala Lumpur: Oxford University Press, 1982), p. 143.

3 S. Runciman, *The White Rajahs: A History of Sarawak from 1841 to 1946* (Cambridge: Cambridge University Press, 1960); R. Pringle, *Rajahs and Rebels: The Ibans of Sarawak Under Brooke Rule, 1841–1941* (London: Macmillan, 1970).

4 Department of Agriculture, Annual reports, 1937, 1941; C.L. Newman, *Report on Padi in Sarawak, 1938* (Kuching: Sarawak Government Printing Office, 1938); J.B. Archer, *Administrative Report for 1938* (Kuching: Sarawak Government Printing Office, 1939).

5 Throughout the paper the term 'paddy' is used in its local sense to refer both to the rice plant, whether grown in wet or dry conditions, and to the unhusked rice grain, whereas 'rice' refers to husked rice.

6 R.H.W. Reece, 'Economic Development under the Brookes', in R.A. Crumb and R.H.W. Reece (eds), *Development in Sarawak: Historical and Contemporary Perspectives*, Monash Papers on Southeast Asia

No. 17 (Melbourne: Centre for Southeast Asian Studies, Monash University, 1988).

7 The invasion has been described by Runciman in *The White Rajahs*, pp. 252–7, and A.V.M. Horton, 'A Note on the British Retreat from Kuching 1941–1942', *Sarawak Museum Journal*, 36 (1986): 241–9; for a summary, see R.A. Cramb, 'The Impact of the Japanese Occupation on Agricultural Development in Sarawak', Agricultural Economics Discussion Paper 2/93 (Brisbane: Department of Agriculture, University of Queensland, 1993).

8 Runciman, *The White Rajahs*, pp. 253–6; K.H. Digby, *Lawyer in the Wilderness*, Data Paper No. 114 (Ithaca: Southeast Asia Program, Cornell University, 1980), p. 58. Clark was executed towards the end of the war.

9 Runciman, *The White Rajahs*, pp. 253–5; V.H. Sutlive, Jr., *Tun Jugah of Sarawak: Colonialism and Iban Response* (Kuala Lumpur: Penerbit Fajar Bakti, 1992), p. 101; L. Edwards, 'Lawas District', in *Short Histories of the Lawas and Kanowit Districts* (Kuching: Borneo Literature Bureau, 1971), pp. 50, 51; Reece, *The Name of Brooke*, p. 143.

10 K.H. Ong, Report on the Department of Agriculture, Sarawak, June 1941–June 1945 (typescript); K.H. Ong, 'The Japanese Occupation: Extracts from an Interview . . .', *Journal of the Malaysian Historical Society, Sarawak Branch*, no. 3 (1976); Runciman, *The White Rajahs*, p. 255; P.W. Stevens, 'Kanowit District', in *Short Histories of the Lawas and Kanowit Districts* (Kuching: Borneo Literature Bureau, 1971), p. 161.

11 Reece, *The Name of Brooke*, p. 143; Ong, Report on the Department of Agriculture, p. 8; Reece, *The Name of Brooke*, 143; Edwards, 'Lawas District', p. 51; J.K.M. Wong (ed.), *'No Joke James': The World According to Wong Tsap En* (Singapore: Summer Times Publishing, 1985), p. 373.

12 Ong, Report on the Department of Agriculture.

13 *Sarawak Gazette*, 1 Oct. 1946, p. 18.

14 Edwards, 'Lawas District', p. 51.

15 C. Sather, 'Benedict Sandin, 1918–1982: A Biographical Memoir', *Sarawak Museum Journal* 29 (1981): 117, 118; Reece, *The Name of Brooke*, p. 147.

16 Sutlive, *Tun Jugah of Sarawak*, pp. 103–5; Reece, *The Name of Brooke*, pp. 144–6.

17 Stevens, 'Kanowit District', p. 162; Sutlive, *Tun Jugah of Sarawak*, pp. 104, 105; Edwards, 'Lawas District', p. 55.

18 Edwards, 'Lawas District', p. 52.

19 Stevens, 'Kanowit District', p. 162; Wong (ed.), *'No Joke James'*, p. 433; C.A. Lockard, *From Kampung to City: A Social History of Kuching, Malaysia: 1820–1970*, Monographs in International Studies, Southeast Asia Series, No. 75 (Athens: Ohio University Center for International Studies, 1987), p. 152; K.O. Chin, *Malaya Upside Down* (Singapore: Jitts and Co.; reprinted, Kuala Lumpur: Federal Publications, 1976); B.K. Cheah, 'The Social Impact of the Japanese Occupation of Malaya', in A.W. McCoy (ed.), *Southeast Asia*

Under Japanese Occupation, Monograph Series No. 22 (New Haven: Yale University Southeast Asia Studies, 1980), pp. 91–124; Reece, *The Name of Brooke*, p. 149.

20 Reece, *The Name of Brooke*, pp. 144, 145, 156, 157; Edwards, 'Lawas District', 1971: 53; Wong, *'No Joke James'*, pp. 371–3; cf. Cheah, 'The Social Impact of the Japanese Occupation', pp. 97, 98; Y. Akashi, 'The Japanese Occupation of Malaya: Interruption or Transformation', in A.W. McCoy (ed.), *Southeast Asia Under Japanese Occupation*, Monograph Series No. 22 (New Haven: Yale University Southeast Asia Studies, 1980), p. 81; Lockard, *From Kampung to City*, p. 153.

21 Reece, *The Name of Brooke*, p. 153.

22 Sutlive, *Tun Jugah of Sarawak*, pp. 105.

23 Runciman, *The White Rajahs*, p. 257; Edwards, 'Lawas District', 1971: 59–62; Stevens, 'Kanowit District', pp. 163, 164; Reece, *The Name of Brooke*, pp. 149, 150; Sutlive, *Tun Jugah of Sarawak*, pp. 110–14.

24 Edwards, 'Lawas District', p. 52; Ong, Report on the Department of Agriculture; Reece, *The Name of Brooke*, pp. 144, 145; Lockard, *From Kampung to City*, p. 152.

25 For a description of the position of the *zaibatsu* in the pre-war Japanese economy, see Mamoru Tsuda, 'Big Corporations and Business Groups in Contemporary Japan', in K.S. Jomo (ed.), *The Sun Also Sets: Lessons in Looking East*, 2nd edn (Kuala Lumpur: Insan, 1985), pp. 66, 67. Chin describes the role of Japanese companies and monopolies in occupied Malaya. See *Malaya Upside Down*, pp. 82–7.

26 Ong, Report on the Department of Agriculture; Wong, *'No Joke James'*, pp. 377, 387.

27 Lebra, *Japan's Greater East Asia Co-Prosperity Sphere*, p. 45. Koichiro Ishihara had built up mining and shipping concerns in Malaya and elsewhere and exercised considerable political influence behind the scenes in Japan. E. Robertson, *The Japanese File: Pre-War Japanese Penetration in Southeast Asia* (Hong Kong: Heinemann Asia, 1979), pp. 4, 5.

28 Reece, *The Name of Brooke*, p. 143.

29 *Sarawak Gazette*, 1 Oct. 1946, p. 25.

30 Sutlive, *Tun Jugah of Sarawak*, pp. 105, 106. A shipyard was built for this purpose at Pending, just downriver from Kuching (Department of Agriculture 1947, p. 19), and possibly elsewhere.

31 Sutlive, *Tun Jugah of Sarawak*, pp. 105–6, 167.

32 Sutlive, *Tun Jugah of Sarawak*, p. 106; Edwards, 'Lawas District', p. 51.

33 Sutlive, *Tun Jugah of Sarawak*, p. 107.

34 Reece, *The Name of Brooke*, pp. 149 n., 152; Lockard, *From Kampung to City*, p. 154.

35 This is indicated in several post-war district reports. See *Sarawak Gazette*, 2 Sept. 1946, p. 10, and 1 Oct. 1946, pp. 24, 25.

36 For example, *Sarawak Gazette*, 1 Oct. 1946, p. 25.

37 Edwards, 'Lawas District', p. 53.

38 Much of the information in this section is derived from the excellent report compiled by Ong Kee Hui in 1945. Ong Kee Hui's re-

port refers to the work of the Department of Agriculture in First and Second Divisions (*Kuching-shu*). There was no contact between the Department in Kuching and the other divisions, which came under separate prefectures. There was apparently a functioning Department of Agriculture in Brunei in 1943, servicing Limbang and other districts. See Wong, *'No Joke James'*, p. 376.

39 Ong, Report on the Department of Agriculture.
40 Interview with Ong Kee Hui, Kuching, 15 Aug. 1992.
41 Annual Report [AR], Department of Agriculture, 1947.
42 'Chinese agriculturists in the First Division planted appreciable areas with padi' in 1940: AR, Department of Agriculture, 1941, p. 6.
43 AR, Department of Agriculture, 1941; R.A. Cramb, 'The Changing Agricultural Economy of the Saribas', in Muhammad Ikmal Said and Johan Saravanamuttu (ed.), *Images of Malaysia* (Kuala Lumpur: Persatuan Sains Sosial Malaysia, 1991), pp. 8–36; R.A. Cramb, 'The Commercialization of Iban Agriculture', in R.A. Cramb and R.H.W. Reece (eds), *Development in Sarawak: Historical and Contemporary Perspectives*, Monash Papers on Southeast Asia No. 17 (Melbourne: Centre for Southeast Asian Studies, Monash University, 1988), pp. 105–34.
44 Newman, *Report on Padi in Sarawak, 1938*.
45 AR, Department of Agriculture, 1941; interview with Ong Kee Hui, Kuching, 15 Aug. 1992.
46 AR, Department of Agriculture 1941. Newman noted that these Iban plots averaged 165 gantangs per acre (just under one ton per hectare) in 1940–1. *Sarawak Gazette*, 1 Sept. 1941, p. 161.
47 AR, Department of Agriculture, 1941, 1948, p. 5; C.L. Newman, 'An Agricultural Policy for Sarawak', *Sarawak Gazette*, 1 May 1941, pp. 81, 82; 1 Sept. 1941, p. 161; 15 Sept. 1941, p. 182.
48 AR, Department of Agriculture, 1941, p. 4.
49 *Sarawak Gazette*, 1 Sept. 1941, p. 173.
50 Ibid., 2 Jan. 1936, p. 16; 1 Apr. 1936, p. 87.
51 Newman, *Report on Padi in Sarawak, 1938*, pp. 8, 9; Digby, *Lawyer in the Wilderness*, p. 33.
52 *Sarawak Gazette*, 1 Oct. 1941, p. 204.
53 Ibid., 1 Nov. 1941, p. 229.
54 Ibid., 1 Apr. 1941, pp. 70, 74.
55 Ibid., 1 Oct. 1941, p. 204.
56 Ong, Report on the Department of Agriculture, p. 4.
57 The Farm School at the Central Agricultural Station, Semongok, opened on 21 August 1941 with 16 Malay and 13 Dayak students, all from Second Division. *Sarawak Gazette*, 1 Nov. 1941, p. 228. The principal was Ong Kee Chong. Ong, Report on the Department of Agriculture.
58 AR, Department of Agriculture, 1947, p. 18.
59 Edwards, 'Lawas District', p. 54.
60 Ong, Report on the Department of Agriculture.
61 Interview with Ong Kee Hui, Kuching, 15 Aug. 1992; Reece, *The Name of Brooke*, pp. 147, 154.

62 *Sarawak Gazette*, 2 Sept. 1946, p. 16.
63 Ibid., 1 Oct. 1946, pp. 25, 26.
64 Ong Kee Hui recalls that, to help clear the surplus of sweet potatoes, the authorities stipulated that 'if you wanted to buy a kati of rice, you had to buy so many katies of sweet potatoes as well'. See Ong, 'The Japanese Occupation: Extracts from an Interview', p. 12.
65 Ong, Report on the Department of Agriculture.
66 Ibid.
67 *Sarawak Gazette*, 1 Oct. 1946, p. 31; Wong, *'No Joke James'*, pp. 387–96.
68 Edwards, 'Lawas District', pp. 51, 52.
69 Ong, Report on the Department of Agriculture.
70 The Kuching Market Price List for June 1941 quoted average prices for imported rice at from $7 to $10 per picul: *Sarawak Gazette*, 1 July 1941, p. 128. Assuming a milling percentage of 65 per cent, this is equivalent to a price of $5 to $7 per picul of paddy (unhusked rice).
71 Ong, Report on the Department of Agriculture.
72 Ibid.
73 *Sarawak Gazette*, 2 Sept. 1946, pp. 9–10; Cramb, 'The Commercialization of Iban Agriculture', pp. 117, 118; Stevens, 'Kanowit District', pp. 170–1.
74 Cramb, 'The Commercialization of Iban Agriculture', pp. 117, 118. For example, a household with a farm of 2 ha yielding 750 kg per ha would have produced 1,500 kg. Hence a requisition of 180 kg would have been 12 per cent of its total production.
75 Ibid.
76 Edwards, 'Lawas District', pp. 55, 56.
77 Ong, Report on the Department of Agriculture.
78 Interview with Hii Siew Ann, Kuching, 12 Aug. 1992.
79 Wong, *'No Joke James'*, pp. 373, 375, 379, 397, 401, 420.
80 R.A. Cramb, 'A Survey of Chinese Farmers in the Sungai Tengah Area'. National Extension Project, Farm Management Report No. 1 (Kuching: Department of Agriculture, Sarawak, 1982); interview with Hii Siew Ann, Kuching, 12 Aug. 1992.
81 AR, Department of Agriculture, 1933.
82 V.L. Porritt, 'British Colonial Rule in Sarawak, 1946–1963' (Ph.D. diss., Murdoch University, 1994), p. 283 n. 194.
83 *Sarawak Gazette*, 1 Oct. 1946, p. 27.
84 Ibid., 1 Oct. 1946, p. 23.
85 J. Chin, 'Reminiscences of the Japanese Occupation', *Journal of the Malaysian Historical Society, Sarawak Branch*, no. 3 (1976), p. 16. Circumstances forced the urban population to learn how to grow and utilize root crops in particular. Ong Kee Hui ('The Japanese Occupation: Extracts from an Interview', p. 13) recalls that 'people got to know how to use tapioca. Tapioca is a crop which can grow easily. You can get large quantities in a reasonably short time. This was, I think, what managed to help the civilian population to survive.' Ismail Hassan, a civil servant in Kuching who was later sent to

Jessleton, recalls that 'people learnt how to make cakes out of tapioca and sweet potatoes. People made wine from tapioca and bananas and all kinds of fruit': Ismail Hassan, 'My Life During the Japanese Occupation', *Journal of the Malaysian Historical Society, Sarawak Branch* No. 3 (1976), p. 19.

86 Ong, Report on the Department of Agriculture; Lockard, *From Kampung to City*, pp. 151–3.
87 Interview with Ong Kee Hui, Kuching, 15 Aug. 1992.
88 Edwards, 'Lawas District', p. 54; Stevens, 'Kanowit District', p. 162.
89 Buffaloes were an important trade commodity for Kelabit and Lun Bawang farmers in the remote highland zone of northeast Sarawak.
90 Ong, Report on the Department of Agriculture.
91 Ibid.
92 AR, Department of Agriculture, 1941, p. 6; J.C. Swayne, *Administrative Report for 1931* (Kuching: Sarawak Government Printer, 1932), pp. 11, 12.
93 AR, Department of Agriculture, 1947, pp. 13, 19.
94 The statistics on rubber area in this paragraph are derived from B.A.St.J. Hepburn, *The Handbook of Sarawak* (Singapore: Malaya Publishing House, 1949), p. 68.
95 Wong Tsap En, a Limbang rubber planter, wrote in April 1942: 'Japanese Govt helping people to buy rubber at I think 20 cts a lb. We contracted for $18 a picul. Little tapping now. Wait till June when I will put [on] more men.' Wong, *'No Joke James'*, p. 420.
96 Wong, *'No Joke James'*, p. 374.
97 Exports of rubber had reached their pre-war tonnage by 1947.
98 AR, Department of Agriculture, 1941, p. 5.
99 Already in April, 1942, Wong Tsap En in Limbang reported that tobacco was selling at $320 per picul, up from $175, and he was planting increased areas with this crop. Wong, *'No Joke James'*, 420.
100 AR, Department of Agriculture, 1947, p. 11.
101 Reece, *The Name of Brooke*, p. 156; Ong, Report on the Department of Agriculture, p. 10.
102 AR, Department of Agriculture, p. 49.
103 Reece, *The Name of Brooke*, p. 156.
104 S. Morris, *The Oya Melanau* (Kuching: Malaysian Historical Society, Sarawak Branch, 1991), pp. 256, 257.
105 Ong, Report on the Department of Agriculture, p. 9.
106 Ibid.
107 Ibid.
108 For example, *Sarawak Gazette*, 1 Oct. 1930, p. 254.
109 See Cramb, 'The Impact of the Japanese Occupation', for details of these estimates.
110 The differences between groups were largely a function of what A.K. Sen terms their respective 'entitlements' to food. Thus those without a direct entitlement to food through access to land were the most vulnerable. Presumably the 3000 Chinese and Javanese who died were mostly forced labourers from outside the country whose indirect entitlements (wages, rations) were subject to bureaucratic

control. A.K. Sen, *Poverty and Famines: An Essay on Entitlements and Deprivation* (Oxford: Clarendon Press, 1981).

111 The actual level of production and its nutritional adequacy cannot be quantified. It is likely that the per capita intake of rice was lower than preferred and the per capita intake of other staples (cassava, sago, sweet potato, and so on) was higher. It also appears that meat consumption was reduced. Nevertheless, the available evidence suggests that the Sarawak population produced enough calories for its own needs during the occupation, as well as providing the Japanese military with a substantial surplus.

112 This has not prevented post-war governments in Sarawak from continuing to pursue the goal of self-sufficiency, mainly through medium-scale wet paddy schemes, but with little success. Hatta Solhee, 'The Rice Self-Sufficiency Policy: Its Implementation in Sarawak', in R.A. Cramb and R.H.W. Reece (eds), *Development in Sarawak: Historical and Contemporary Perspectives* Monash Papers on Southeast Asia No. 17 (Melbourne: Centre for Southeast Asian Studies, Monash University, 1988), pp. 69–103; R.A. Cramb, 'Problems of State-Sponsored Land Schemes for Small Farmers: The Case of Sarawak, Malaysia', *Pacific Viewpoint*, 33 (1992): 58–78.

113 A. Reid, 'Indonesia: From Briefcase to Samurai Sword', in A.W. McCoy (ed.), *Southeast Asia Under Japanese Occupation*, Monograph Series No. 22 (New Haven: Yale University Southeast Asia Studies, 1980), p. 20. See also Chin, *Malaya Upside Down*; Cheah, 'The Social Impact of the Japanese Occupation'.

114 Akashi, 'The Japanese Occupation of Malaya'.

7 Oppression and Romanticism: The Food Supply of Java during the Japanese Occupation

Shigeru Sato

RESOURCE EXPLOITATION AND POLITICAL ROMANTICISM

Before the invasion of South-East Asia, the authorities in Tokyo gave their expeditionary forces guidelines concerning the military administration of the lands to be occupied. These guidelines covered three main points: speedy acquisition of strategic resources; self-sustenance of the field forces; and restoration and maintenance of public order.[1] During the first half of the Occupation, the Japanese Army in Java achieved these objectives easily. The strategic resources to be obtained from Java were no more than several items which Java produced in abundance. These were, in the plan for 1942, manganese, rubber, castor oil, cinchona bark, quinine, industrial salt, maize, tobacco, coffee, kapok, and theriac (an antidote to venomous bites). With the exception of manganese, Japan planned to obtain less than the quantities Java used to export in the pre-war years.[2] Self-sufficiency for the field forces also posed few difficulties. The total Japanese population in Java, military men and civilians combined, fluctuated around 50 000, or 0.1 per cent of the local population. Therefore, to secure rice for their own use in Central Java, for instance, all the Japanese had to do was to request a few mills to process it for them.[3] With regard to public order there was no organized opposition to the Japanese, and the local people were generally cooperative.

During the latter part of the Occupation the administration faced sporadic riots and other forms of resistance, but some Japanese, particularly those who took an active part in the military administration

of Java, felt that it was relatively successful,[4] and consider their view vindicated by those scholars, many of them American, who propound the thesis that the Japanese Occupation was instrumental in the achievement of Indonesian Independence because it put an end to Western colonialism and provided the nationalists with an opportunity to advance their cause.[5] Benedict Anderson carried the argument further by suggesting that the revolutionary fervour among the Indonesian youths who, after the Japanese surrender, carried out what he called the 'Pemuda Revolution' ('Revolution by Youths'), a movement which had its origins in the 'romantic' style of the Japanese administration.[6]

In the economic field, however, the Japanese administration was far from successful, for the Occupation caused substantial damage to Java's economy. By disrupting international trade it devastated many of the export-oriented private estates. It also disrupted supplies of daily essentials, particularly in the countryside, where in the latter part of the Occupation many residents of Java were clothed in rags or modified storage sacks, or nothing at all, and it was common to see people starving to death along the roadside. Furthermore, the Japanese mobilized millions of Indonesians as labourers, and many died as a result of harsh treatment.

Since the war several monographs have appeared analysing broad economic and welfare issues in Java,[7] but the reasons for such devastation remain hazy. Until recently most writers attributed the deterioration of welfare to the original Japanese policy of exploiting natural and human resources.[8] Exploitation of strategic resources, particularly oil, was certainly the main motivation behind Japan's southward military expansion. Nevertheless, the general deprivation cannot be adequately explained in terms of resource exploitation, because the quantities Japan needed were simply too small to create such deprivation. In the case of export commodities such as coffee and rubber (oil was to be taken mostly from Sumatra and Borneo), Japanese exploitative and monopolistic policies created surpluses, rather than shortages.

Elsewhere I have argued that maldistribution, rather than exploitation, was responsible for the commodity shortages.[9] The gist of the argument is that the Japanese introduced a 'controlled economy', but, due to a lack of knowledge and experience, their policies often proved inappropriate for Java and disturbed the local economy. Those in the lower social strata suffered the consequences. In this chapter I carry the argument further to suggest

that an ideology with a 'romantic' propensity was responsible for the formulation of harmful policies. The Japanese conducted 'total mobilization' campaigns under such slogans as 'Greater East Asia War' and 'Construction of New Java'. Anderson emphasized the effect of this romantic style on the post-war revolutionary movement but did not investigate connections between romanticism and the oppressive aspects of the Occupation. It should be borne in mind that the Japanese mobilization involved not only mass rallies and military and quasi-military training for Indonesian youths – activities which Anderson did discuss – but also mobilization of labour and interference with Java's economy in ways which severely affected Java's peasantry. The Japanese romanticized their labour mobilization by calling the workers *perajurit pekerja* (worker-soldiers). They also justified their campaigns in connection with production and delivery of rice by claiming that it was the sacred duty of all Asian people to support the Japanese war effort, because the aim of the war was to liberate 'Asia for Asians'. In other words, the Japanese cloaked their oppressive policies in romantic garb. Most Indonesian nationalists supported the mobilization campaigns insofar as these seemed likely to strengthen Indonesia's potential to achieve independence in the future. However, during the war, political, military, and economic spheres of activity were not always clearly demarcated. Does this mean that nationalists should also be held responsible for the oppression? With a view to clarifying the relationships between the ideology, politics, and people's day-to-day lives, the following sections examine when, under what circumstances, and how the Japanese translated their ideology into policies, and how Indonesian nationalists responded.

Changing Objectives of Occupation Policies

The Japanese conducted 'total mobilization' campaigns in one form or another throughout the Occupation, but these amounted to little more than slogans until late 1943. Japan's short-term objective was the acquisition of strategic resources, while the long term objective was to introduce the 'Greater East Asia Co-Prosperity Sphere'. At an early stage, Japanese economic activities in Java were classified into three categories according to whether they fulfilled one or the other of these purposes, or could be considered emergency measures. The Tokyo authorities prepared detailed plans to satisfy the short-term objective prior to the invasion, but left the long-term

objective unarticulated because its achievement depended on the outcome of the war. The unarticulated long-term objective wavered as the war situation changed.

There were no overall guidelines concerning emergency measures. The Tokyo authorities instructed the occupation forces to utilize existing systems and institutions as much as possible, and to keep interference to a minimum, but Japanese administrators in Java found that they had to intervene in the local economy. The importation of certain vital commodities, such as coal (needed to keep Java's railway system operating and prevent paralysis of the local economy), textiles, cement and medicines had come to an abrupt halt, and major economic problems of this kind had to be resolved. To obtain coal, the Japanese decided to operate mines in West Java, and to make up for the stoppage of textile imports they planted cotton and other fibre-producing plants in East Java. Such projects involved mobilizing labour and requisitioning food for the workers, and to some extent altered the pattern of labour and food distribution in Java.

Despite such adjustments, economic problems were relatively moderate during the first half of the Occupation and there were no dramatic changes in the general standard of living. During the early part of 1943, however, the war situation turned decisively against Japan. In response, the Tokyo authorities decided to carry out a massive defensive build-up throughout the war theatre, and at the same time tried to enlist greater cooperation from the nations of South-East Asia by granting them political concessions. Following instructions from Tokyo, the Occupation authorities in Java made a number of administrative changes between August and November, including the establishment of central and local advisory councils, large-scale promotion of Indonesian administrators, the appointment of Indonesian advisers to the Occupation authorities (*Sanyo*), and the creation of self-defence forces.

The Japanese utilized these 'concessions' to achieve a radical strengthening of their 'total mobilization' policies. The first of eight sessions of the Central Advisory Council (*Chuo Sangiin*) took place from 16 to 20 October 1943. The topic for discussion as announced by the Commander-in-Chief was, 'What are the practical ways to strengthen the local inhabitants' cooperation in the prosecution of the Greater East Asia War?' Indonesian representatives in the council had to propose concrete measures to maximize mobilization of human and natural resources in support of the Japanese war effort. By

'adopting' proposals made by the Indonesian representatives, the Japanese 'legitimately' implemented their labour mobilization policy, creating mass organizations and imparting military and semi-military training to Indonesians in the characteristic 'romantic' style described by Anderson.

As the war situation became more pressing, the distinction between the aforementioned economic objectives increasingly blurred. During the early part of the Occupation, slogans such as 'Construction of New Java' clearly belonged to the long-term category, but from late 1943 onwards the Japanese treated these ideas as if they represented immediate, short-term objectives. Moreover, while the Japanese had initially planned to maintain the social status quo, but their 'total mobilization' policies disrupted local society to an unprecedented degree. These policies were meant to strengthen the potential to wage war, but they imposed heavy burdens on the people and created widespread social and economic problems. In order to see why these policies were introduced, the next two sections outline Japanese policies with regard to rice and labour; the concluding section examines them in a broader social, political and ideological context.

The Problem of Rice

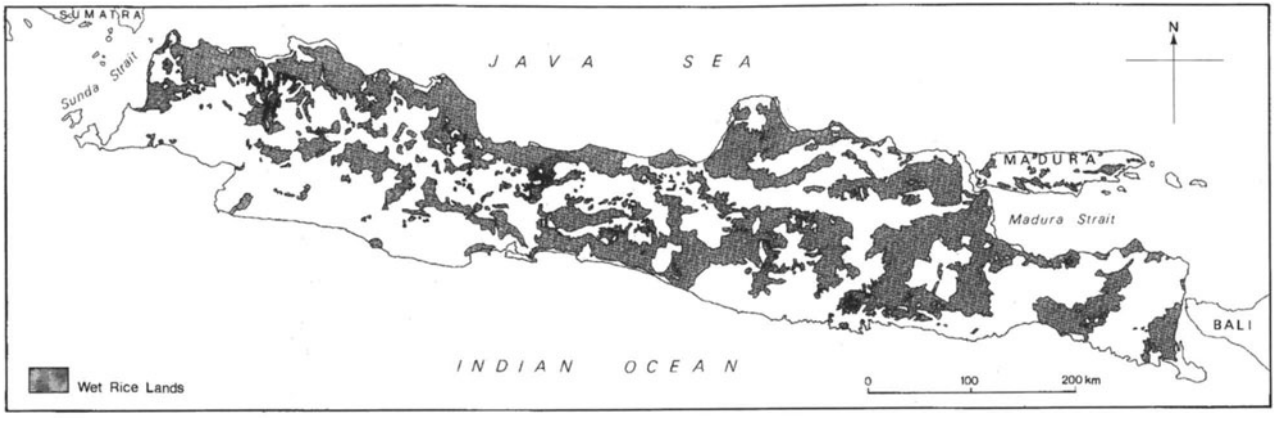
The Japanese did not need a significant proportion of Java's rice for their own use. Nonetheless, they faced problems with rice throughout the Occupation. The month of March, when the Japanese Army invaded Java and took over the Dutch colonial government, fell shortly before the harvest, a time when food stocks usually ran short. Before the war, cheap rice was imported from French Indochina, Thailand and Burma and released during this period, but the outbreak of hostilities put an end to the importation of rice. The harvest soon began throughout Java, but millers could not, or would not, buy the harvested paddy for processing, either because their mills had been destroyed by Indonesian looters, or out of fear of further looting, or because financing for the mills had stopped. Transportation of rice was also disrupted because the Dutch destroyed the main railway and road bridges as part of their scorched earth strategy. Thus paddy lay unsold in farming villages, and shortages persisted in cities and towns even after the usual lean season was over. Rice prices rose in the cities while the purchase price of harvested paddy fell in the villages, creating difficulties

for both urban consumers and rural producers, and the situation was aggravated by the activities of speculators[10] (see Map 9).

The Japanese responded by fixing purchase and retail prices of rice, buying up stocks of paddy, and mobilizing the Army's trucks and ships to transport paddy. Apart from these emergency measures, however, the administration devoted the first year of the occupation to an attempt to restore the pre-war pattern of rice distribution. For the fiscal year which began in April 1943, the Japanese envisioned only a slight modification of the system the Dutch created in Java after the European war broke out in 1939. The Dutch scheme called for control over the machine-milled portion of Java's rice crop. There were over five hundred rice mills in Java, and these mills, which were owned almost exclusively by ethnic Chinese, processed slightly more than 20 per cent of Java's rice. The remaining 80 per cent of the crop was pounded manually to remove the husks, and consumed at home or marketed locally. The Dutch authorities created a federation of rice millers' associations, called the Rice Sales Centre, in each of the three provinces in Java and obliged mills to sell processed rice exclusively to the Centres at a fixed price. The Centres then sold this rice to wholesalers, also at a fixed price.[11]

The system employed by the Japanese included one important innovation: in the Dutch period, the purchase of paddy for milling was left in the hands of Chinese rice brokers and millers, whereas the Japanese used Indonesian bureaucrats to oversee the process, probably with a view to exerting tighter control over the entire economy. The Japanese established a procurement quota for each residency and principality, and made local government officials responsible for fulfilling these quotas. The Japanese, like the Dutch, thought that a controlled economy must be maintained for the duration of the war, and considered the government bureaucracy the only agency with a Java-wide network suitable for the purpose.

The system of procurement was not successful. The target for 1943 was 1 995 000 tons, but during the main harvesting season, that is, by the end of July, the government secured just 850 000 tons, and at the end of November, well after the harvesting season had ended, the figure stood at 1 257 000 tons.[12] The main reason for this poor result was that rice dealers evaded the regulations. Black-market purchase prices of paddy fell during the early part of the occupation, but they gradually recovered and by early 1943 were generally higher than official prices, creating opportunities for rice



Map 9 Java, showing rice-growing areas, ca. 1937

dealers to make profits by circumventing official channels. Millers, for instance, put substantial quantities of milled rice on the black market and under-reported the amounts of paddy they bought and processed.[13]

Although the Japanese attempt to control milled rice was less than satisfactory and caused confusion in certain areas, the standard of living was not observed to alter in Java until late 1943, when the Japanese made further changes as part of an overall modification of Occupation policies. The rice procurement plan itself was left alone; what changed was the determination of the Japanese to make it work. In November the Jakarta authorities convened a meeting of residency and principality representatives in charge of economic affairs and asked them to make the utmost efforts to fulfil the rice delivery quota by the end of the 1943 fiscal year (that is, the end of March 1944). There were two main reasons for this request. First, the Japanese were worried that, unless radical steps were taken, urban areas would experience serious shortages of rice during the coming lean season. Second, the Japanese had decided to mobilize a very large number of labourers, and they needed substantial quantities of rice to feed these workers.

On returning from Jakarta, the residency and principality authorities launched rice delivery campaigns in their respective jurisdictions. Working through Indonesian bureaucrats, many of them ordered farmers to sell all their stocks of rice to the government with the exception of the portion needed for seed and domestic consumption.[14] Between December and March, the leanest season of the year, farmers were forced to sell 233 546 tons of rice to the government, and some Indonesian administrators reported signs of famine in the countryside.[15] Nevertheless, the total amount secured under the procurement programme during the 1943 fiscal year was just 1 490 546 tons, 25 per cent below the original target.[16]

From late 1943, the Japanese also began emphasizing the urgency of increasing rice production in Java, and set a production target for each year. Counting on an expected increase in rice production, the Japanese set the procurement target for 1944 at 2 086 400 tons and planned to purchase 64 per cent of this amount, or 1 333 000 tons, by the end of July. Despite their determination, and continued pressure on bureaucrats and farmers, just 1 070 000 tons had been collected by the target date.[17] During the dry season of 1944, the rainfall was less than 30 per cent of the average for this period,

and severe drought caused a 40 per cent reduction in the amount of paddy harvested. As a consequence, by the end of March 1945 the Occupation government only managed to buy 1 341 096 tons in stalk paddy, or 64 per cent of the original target.[18]

During the period of drought in 1944, black-market prices soared, cases of hunger oedema and death from starvation became much more prevalent, and the death rate surpassed the birth rate in most parts of Java.[19] Meanwhile, transportation and milling facilities were deteriorating. Because of the difficulty of procuring rice, the Japanese lowered the target for the 1945 fiscal year to 1 732 000 tons. They planned to secure 30 per cent of this in the first two months. As an incentive, the Japanese nearly doubled purchase prices and conducted a Java-wide campaign encouraging farmers to deliver rice to the government. Nevertheless only about 20 per cent of the target amount had been met by the end of May. It was clear that even the quantity which the Japanese considered the absolute minimum could not be acquired in the 1945 fiscal year.[20] Meanwhile, labourers continued to be mobilized for a wide range of projects, and the Japanese could not secure adequate quantities of rice to feed them.

The Question of Labour

The notorious *romusha* (conscripted labourer) issue is poorly documented. The widely held view is that the Japanese sent labourers from Java to various parts of Southeast Asia for war-related projects, including the construction of the Burma–Thailand railway. It is important to note that such activities are only a part of the story. In reality, the vast majority of the *romusha* were employed within Java itself in fields such as agriculture, forestry and mining, many of which were only indirectly related to the war effort.

There were three phases of labour mobilization.[21] In the first, from March 1942 to the end of October 1943, the main aim was to rehabilitate the facilities that had been destroyed by the Dutch 'scorched-earth' strategy. The second phase began in mid-August 1943 and was suspended at the end of 1944. The aim was to build air-strips and other war-related facilities such as pillboxes, trenches and tunnels at strategic locations in Java. The third phase began in early October 1943 and lasted until the Japanese surrender. In this phase, the Japanese conducted 'production increase' campaigns in a number of fields. By far the most important campaign was that

related to agriculture, particularly in connection with rice production. Of these three phases, the third one absorbed by far the largest number of labourers.

Until October 1943, the number of labourers mobilized was relatively small. The Japanese were then more concerned about solving the problem of unemployment. Java had long been considered 'over populated' and the lack of employment opportunities was serious. The Japanese invasion aggravated the situation because the closure of Dutch estates caused the loss of many jobs.[22] The Japanese therefore found it necessary to renew the transmigration of people from Java to South Sumatra, a process which the Netherlands Indies authorities had begun in the first decade of the century. Japanese administrators in the residencies and principalities also initiated various relief works for the unemployed.[23]

The third phase of labour mobilization changed the situation completely. Although it began in October 1943, administrative preparations took a few months, and systematic recruitment did not commence until early in 1944. To legitimize this process, the Japanese had the Central Advisory Council 'propose' the creation of a Java-wide network of recruitment agencies. So many people were mobilized in rural areas that labour shortages developed, and fields were left uncultivated in many villages.[24] According to one source, there were 2 623 691 people broadly categorized as *romusha* employed by the Japanese within Java as of November 1944.[25] This figure included a wide range of male and female, skilled and unskilled, permanent and temporary, and paid and unpaid workers as well as soldiers; 669 499 men and 69 345 women were temporary wage labourers. These were the *romusha* in the narrow sense of the word. A further 200 085 men and women performed unpaid labour services (*kinro hoshi*), partly to propagandize the spirit of 'Service to the Fatherland and Dai Nippon [Great Japan]' and partly to slow down currency inflation by minimizing wage payments. Temporary workers were usually sent home after expiry of their contracts and new groups of people took their place. Large numbers absconded, and they, too, were replaced by new recruits. Thus, the total number of people mobilized in the third phase was much larger than the above figures indicate.

The method employed in recruiting labour was similar to that used for rice procurement. The Jakarta authorities set a quota for each Residency and Principality. The quotas were subdivided at lower administrative levels, and eventually an order was sent from

the sub-district head to each village head requesting a certain number of workers on a certain date.[26]

Over 90 per cent of *romusha* received remuneration. Although the Japanese were wary of currency inflation, they considered that relatively generous payments, including advances on wages, were necessary for speedy and smooth mobilization of labour. To mitigate the workers' concerns about their families, a part of their wages was also remitted home through the government bureaucracy, although this system did not always function smoothly, and the money sometimes failed to reach those for whom it was intended.[27]

The wages paid by the Japanese were higher than in the Dutch period, but the printing of fresh currency combined with shortages of commodities caused price inflation, and as time passed, labourers' wages became inadequate to provide for their needs. *Romusha* who worked near residential areas were often expected to buy food out of their wages, but if a work place was away from residential areas, the employer was responsible for providing food and accommodation. As we have seen, however, the Japanese failed to procure a sufficient amount of food, and as time passed they were compelled to reduce the food rations given to labourers.[28] Malnutrition became widespread, and work efficiency conspicuously dropped.

Disease was a major problem for mobilized workers. Large-scale movement of people into swampy areas led to epidemics of malaria, while poor diets lowered labourers' resistance to disease and, combined with unhygienic conditions on work sites and living quarters, resulted in outbreaks of dysentery and yaws.

The workers' families left in the villages were no better off. Labour mobilization deprived families of their main and often their sole breadwinners. By way of compensation they received military currency whose value rapidly dwindled as essential goods disappeared from the local market.

It soon became obvious that the labour mobilization was excessive. The main purpose of the mobilization was to increase food production, but the process hindered agriculture in the villages and resulted in widespread undernourishment and general impoverishment in the countryside. The Japanese therefore decided to suspend their military projects at the end of 1944 to concentrate on agricultural production.

IDEOLOGY, POLITICS AND SOCIETY

The basic cause of the suffering endured by the people of Java lay in the large-scale mobilization of labour combined with the failure of the Japanese to control the distribution of milled rice. To identify what went wrong, it is necessary to consider why the Japanese mobilized so many workers.

The major Japanese employers of labour in Java were the Army, the Navy and the Military Administration.[29] As of November 1944, the Army had 316 052 Indonesian employees, the Navy 67 699 and the Military Administration 2 239 940. The Army figure includes 14 394 auxiliary soldiers and 36 067 men in the Indonesian self-defence forces. The Navy figure includes 877 auxiliary soldiers.[30] Both the Army and the Navy undertook projects directly related to the conduct of war. The Military Administration, which employed over 85 per cent of all the *romusha*, conducted a wide range of projects, mainly during the third phase of labour mobilization. The Japanese tried to increase food production in Java by introducing new cultivation methods, converting land or estates from export cultivation to food crops, extending irrigation and drainage channels, clearing forests, reclaiming swamps, and utilizing every possible vacant plot of land.

The motivation behind the Japanese campaigns requires careful analysis. First of all, we have to remember that the level of rice production in Java had for some time past been insufficient for its population. In the last few years of the Dutch era, exports of rice from Java surpassed imports but this did not mean that Java had a surplus. On a per capita basis, the total amount of rice available in Java was far below desirable levels, and the rice was also unevenly distributed, leaving a large part of the population poorly nourished. A second reason was that market mechanisms had been disturbed by the war and Japanese rice-distribution policy, and as time passed an ever-wider range of people experienced acute shortages as rice failed to reach the marketplace. A third reason was that because the Japanese rice-procurement plan failed to achieve its objectives, the Japanese tried to improve it by increasing the total quantity of rice available in Java.

The fourth and the most important reason was related to the concept of the 'Co-Prosperity Sphere'. The original idea was to establish an autarkic economic zone where Japan could procure strategic resources such as oil, tin and rubber. The attempt to es-

tablish such a zone had serious side-effects on the lands occupied by the Japanese because each area within the zone was also compelled to become self-sufficient. Establishment of local self-sufficiency required a major economic realignment, which proved extremely difficult, or utterly impossible. As a part of their attempt to establish self-sufficiency in clothing materials in Java, the Japanese created a five-year plan in late 1942 to grow cotton and other fibre crops on Java.[31] Cotton was planted on 2500 hectares in 1942 and the target for 1947 was set at 180 000 hectares. Even if this target had been reached, it would have provided no more than half of Java's requirements. As shortages of clothing materials became acute, the Japanese further strengthened the plan. Cotton was partly planted in irrigated fields, reducing the areas available for rice cultivation,[32] and worsening the chronic rice shortage. The Japanese authorities tried to tackle this problem by expanding irrigated fields and forcibly mobilized millions of people for this purpose. The campaign to increase rice production was, in fact, a desperate effort to prevent rice production from declining. The Japanese launched the campaign soon after they started the defence build-up, although the timing was more or less a coincidence. With or without the change in the war situation, the prolonged period of occupation would have resulted in an economic crisis and the occupation authorities would have been compelled to take some sort of countermeasures. In early 1945, the Japanese were conducting large land-extension projects at 62 places in Java. They issued extensive propaganda regarding these projects, publicizing the areas being converted into irrigated fields and the increase in rice production that was expected to result. Such activities notwithstanding, the total land area for rice production constantly declined, being taken up for other crops such as cotton. The Japanese authorities kept this fact secret as far as possible, and tried to camouflage the problem behind romantic ideas such as the 'Construction of a Second Japan in the South Seas'. Even Japanese agricultural specialists who were mobilized for these projects were not fully informed of the overall situation. Instead of revealing the reality, the policy-makers simply repeated the slogan, 'we must withstand all kinds of hardships during the war'. Another kind of idea that the Japanese used was that Java was an important supply base for the Southern Regions. Once again, this was erroneous concept because marine transport became so precarious in the course of 1944 that the higher authorities were compelled to reinstate the principle of self-sufficiency for field forces,

and Java virtually ceased to be a supply base.[33] Nevertheless, even as Java's role as a source of supplies diminished, the Japanese intensified their campaign to increase agricultural production in Java. The Japanese involved in the campaign were poorly informed but evidently felt that, with their fellow soldiers in the front lines fighting desperately, they had to pour all their might and resources into the 'total mobilization' campaign.[34] Japanese soldiers on the Pacific front were indeed in desperate need of food, but the amount they needed was negligible compared with Java's productive capacity and therefore a Java-wide campaign was not required.

The Japanese authorities used their misleading slogans to hide the problems which Japanese aggression had created, from the Indonesians as well as from most of the Japanese. As we have seen, the Japanese made plans to obtain strategic resources but did not prepare long term economic plans for their 'Co-Prosperity Sphere' or countermeasures for emergency situations. Neither did they formulate any well-thought-out, publicizable political programmes to give meaning to the idea of 'Asia for Asians'. Their political measures were always opportunistic and they substituted false slogans for concrete programmes. The Japanese usually had a sense of racial superiority towards the Indonesians and they lacked a broad knowledge and understanding of Javanese society. Consequently, many Japanese programmes had a strong taint of 'Japanization'. For instance, the Japanese found the Javanese method of rice cultivation primitive and hastily introduced their own practices, contending that the level of production could double in three years. These changes were not necessarily meant to be exploitative, and many of the Japanese involved in the project devoted themselves to it with enthusiasm because they felt they were helping convert Java into a more affluent island. However, when they tried to introduce their more labour-intensive techniques, such as more thorough weeding, they did not take into account that agriculture in Java depended to a large degree on wage labour and therefore large landholders would not readily adopt such innovations. The hasty application of Japanese methods disturbed social relations, and statistics show that rice production in Java decreased every year during the Occupation.[35]

Japan's attempt to control rice distribution provides another example of ignorance. The Japanese wrongly assumed that about half of the workforce in Java consisted of rice producers who set aside half of their produce for domestic consumption and sold

the rest; they further assumed that half of the rice that entered the market was carried to mills and then sold in the cities, and the other half was manually pounded for local use.[36] While it was true that about half of the workforce was engaged in rice production, rice producers did not retain half of their produce for domestic consumption. For various reasons they sold on average around 90 per cent of the harvest. Large landholders controlled most of the crop. In addition, there were numerous landless peasants who worked for landed farmers and earned cash, which went to buy food from the local market. Smallholders were also buyers. Even those who produced enough food for their own consumption in many cases sold most of their crop immediately after harvest because they needed cash to cover debts, taxes and other expenses. They earned additional cash through casual labour, petty trade, cottage industry and so on, and used their earnings to buy rice. During the lean season many of them sank deeply into debt. Residents of urban centres and of villages which grew only maize, cassava, soybeans, peanuts and the like also purchased rice. Rice was therefore a highly marketable commodity throughout Java, and many people depended heavily on the market for obtaining daily requirements of food.

The Japanese, who did not fully understand local market arrangements, imposed a system of control which proved inappropriate for Java. One problem with the system was that the local authorities who assigned the quotas to villagers were usually the major landholders. They were elected from amongst wealthy villagers, and received official land instead of salaries. When black-market prices exceeded official prices, these officials sold their rice into the black market, while ordering other villagers to sell their harvest to the government. Smallholders, who usually pounded their paddy by hand and sold it locally, were forced under these arrangements to deliver their paddy to Chinese millers, whom they detested. Mills or designated collection centres were often situated far away from villages and transporting paddy was hard work. After carrying their paddy to these places, they received much less money than those who were exempt from the delivery.

When pressure from the government increased, many farmers tried to take their paddy out of the village, district or Residency before the authorities came to order them to sell it to the government. Some Japanese Residency authorities, who thought that this kind of avoidance was one of the causes for the poor results of rice procurement, issued ordinances which banned the movement

of rice between residencies. These regulations disturbed the smooth flow of rice from surplus areas to deficit areas and caused famine in some places. Landed farmers also hoarded paddy. As rice became scarce on the official market and black-market prices soared, landless or marginal farmers found it very difficult to obtain food. Out of a desperate need for more cash they sold or mortgaged what property they had, such as land or cattle. In contrast, wealthy landowners who were making large profits by selling rice on the black market invested their money in property. The wealthy thus became wealthier, while the poor became poorer and sometimes starved. When pressure built to recruit labour, it was mainly such marginalized villagers who were forced to become *romusha*. The situation affected social relations in Java's countryside by creating hostile feelings among poor villagers against the village and higher-level authorities, and also against Chinese rice dealers, money lenders, and some Islamic teachers who supported the Japanese policies.

The Japanese were aware that the work efficiency of *romusha* they had mobilized was adversely affected by undernourishment. They pressed farmers harder in order to secure rice for *romusha*, but the pressure they applied created widespread famine in the countryside. At least some of the Japanese realized that there was something fundamentally wrong with their mobilization policy but, in the overwhelming enthusiasm for 'total mobilization', they lacked the necessary sobriety for working out exactly what was wrong or what could be done to remedy the situation.

Japanese propaganda directed at Indonesians, particularly after Premier Koiso's promise in September 1944 concerning the grant of independence in the future, emphasized that fighting for the Fatherland, becoming *romusha*, and delivering rice to the government, were heroic and patriotic actions, and would help to achieve the ultimate goal of victory in the war and liberation of Asians from Western colonial fetters. Out of excessive enthusiasm, combined with ignorance, carelessness and irrationality, the Japanese mobilized millions of Indonesians for counterproductive campaigns and drove them to starvation.

How did Indonesian nationalists react to these measures? As we have seen, the Central Advisory Council and the *Sanyo* (advisers) supported the mobilization policies so long as they seemed to strengthen Indonesia's defence potential. The Japanese imparted military and semi-military training widely to the Indonesians and stirred up their fighting spirit. Most nationalists welcomed this aspect

of mobilization with enthusiasm, and some created their own military organizations such as Hizbullah and Barisan Pelopor. Concerning labour and rice, the nationalists in the Central Advisory Council had some reservations. They were certainly aware of the negative impact of mobilization policies, and frequently presented criticisms and made concrete proposals for improvement.[37] Their criticisms, however, concerned the methods of mobilization, and never questioned its purpose. They supported the Japanese propaganda line that to become a *romusha* and toil under harsh conditions was a heroic action, comparable to the Japanese suicide pilots' self-sacrifice for their country.

When the question of 'collaboration' became an issue after the Japanese defeat, Sukarno tried to defend himself by stating that he had to accept some sacrifices in order to achieve his main goal, which was independence for Indonesia.[38] There is, in fact, no evidence that Sukarno and other nationalists condoned the Japanese exploitation of Indonesian people out of sober calculation. They were certainly aware that people were suffering due to the Japanese administration and that there was something seriously wrong, but they, like the Japanese, did not see exactly what the problem was. Most Sanyo supported the idea that the government should control distribution of rice during the war, and proposed alternative measures to strengthen that control.[39] However, government interference itself was the basic cause of the disturbance in the pattern of rice distribution within Javanese society, and with hindsight it is clear that stronger measures, if implemented, would have worsened the situation.

In post-war Indonesian nationalist history, the Japanese Occupation came to be viewed in terms of the recurrent theme, 'through darkness into light', an understanding partly shaped by the well-known Joyoboyo prophecy that Indonesia would endure a dark period under foreign rule followed by a bright period under its own 'Just King' ('Ratu Adil'). From this perspective, the Japanese oppression was like a purgatory which cleansed the freedom fighters of the stigma of collaboration, and provided an independence that was not a 'gift' from the Japanese. The darkness of the Japanese period added to the brightness of the Indonesian struggle for freedom.[40]

Sukarno's apologia fits in with the scheme of 'through darkness into light'. It is unlikely, however, that darkness and light were so clearly demarcated in his or other people's perceptions during the

Occupation. It is more likely that neither the Japanese nor the nationalists clearly distinguished the mobilization of people's energy for fighting (whether for the victory of Japan or the freedom of Indonesia) from conscription of labour and forced delivery of rice. Indonesian nationalists and the Japanese had different goals in mind. The nationalists were clearly trying to achieve their own goal by seizing the opportunity, and were not trying to help the Japanese. In this sense they were not Japanese 'collaborators'. Nonetheless they adopted the Japanese style of administration, which was a 'total mobilization' with a romantic inclination.

A combination of enthusiasm, neglect of practical aspects, and lack of reflection on the consequences is a usual trait of romanticism. The 'total mobilization' campaigns, which raged in Java like a torrent, displayed these characteristics. We could perhaps characterize the Japanese style of administration as romantic oppression, or oppressive romanticism. The Japanese used romantic slogans to mobilize both the Japanese and the Indonesians without making them aware of underlying realities. Consequently, in most people's minds, light and darkness coexisted without clear demarcation. Light for the Japanese was like twilight, gradually overwhelmed by darkness. For the nationalists it represented the dawn. For many Indonesians, however, there was very little light at all. They were victims of the 'romantic' dreams of the Japanese.

Notes

1 'Nanpo Senryochi Gyosei Jisshi Yoryo', in *Nanpo no Gunsei* (Tokyo: Asagumo Shinbunsha, 1985), pp. 91–2.
2 *Nanpo no Gunsei*, pp. 133–5.
3 'De Rijstpellerijen in Midden-Java gedurende de Japansche Bezetting', *Economisch Weekblad voor Nederlandsch-Indië*, no. 21 (3 Aug. 1946), p. 162. In 1940 there were 128 rice mills in Central Java.
4 See, for instance, Yamamoto Moichiro, *Watashi no Indoneshia* (Tokyo: Nippon Indoneshia Kyokai, 1979), p. 3.
5 See George McTurnan Kahin, *Nationalism and Revolution in Indonesia* (Ithaca: Cornell University Press, 1952); George Sanford Kanahele, 'The Japanese Occupation of Indonesia: Prelude to Independence' (Ph.D. diss., Cornell University, 1967); and Benedict R. O'G. Anderson, *Java in a Time of Revolution: Occupation and Resistance, 1944–1946* (Ithaca and London: Cornell University Press, 1972).
6 Anderson, *Java in a Time of Revolution*, pp. 1–60 and Anderson, 'Japan: "The Light of Asia"', in Josef Silverstein (ed.), *Southeast Asia in*

World War II: Four Essays, Monograph Series No. 7, Southeast Asia Studies (New Haven: Yale Southeast Asia Studies, 1966), pp. 13–50.

7 John O. Sutter, *Indonesianisasi: Politics in a Changing Economy 1940–1955*, 4 vols. (Ithaca: Southeast Asia Program Data Paper No. 36, Cornell University Press, 1959); Aiko Kurasawa, *Nippon Senryo ka no Jawa Noson no Henyo* (Tokyo: Soshisha, 1992); Shigeru Sato, *War, Nationalism and Peasants: Java under the Japanese Occupation, 1942–1945*, Southeast Asia Publications Series No. 26 (Sydney: Allen & Unwin, 1994); and Pierre van der Eng, *Food Supply in Java during War and Decolonization, 1940–1950* (Hull: The University of Hull, Centre for Southeast Asian Studies, Occasional Paper No. 25, 1994).

8 Another widely held interpretation was that the Japanese banned inter-Residency trade in foodstuffs for military reasons. This argument has been refuted. See Sato, *War, Nationalism and Peasants*, chs. 2 and 6.

9 Ibid., chs. 5 and 6.

10 *Gunsei ka Jawa Sangyo Sokan*, vol. 1 (Tokyo: Ryukei Shosha, 1990), pp. 37–8; 'Senryo go ni okeru Jawa Noringyo no Jitsujo to sono Taisaku', compiled by Gunseikanbu Sangyobu Norinka, 1942, in Kishi Shiryo, the Institute of Developing Economies; and 'Jawa ni okeru Saikin no Beikoku Josei Shiryo', compiled by Nanpo Kaihatsu Kinko Sosaishitsu Chosaka, 1944, held by the National Diet Library, Tokyo.

11 'De Rijstpellerijen', pp. 161–3.

12 *Gunsei ka Jawa Sangyo Sokan*, vol. 1, p. 48, and 'Jawa ni okeru', p. 3.

13 Ben Anderson (intro. and trans.), 'The Problem of Rice', *Indonesia*, no. 2 (Oct. 1966): 95.

14 'Keadaan di Soebanson', Rijksinstituut voor Oorlogsdocumentatie, Indische Collectie 031592.

15 'Kesan Perjalanan Keliling didaerah Tjirebon, Indramajoe dan Pemanoekan pada Tanggal 23–31 Agoestoes 2604', Indische Collectie 031666.

16 'Jawa ni okeru', p. 3.

17 Ibid., pp. 9–11.

18 Sato, *War, Nationalism and Peasants*, p. 122.

19 E. de Vries, 'Vital Statistics Under Japanese Rule', *The Economic Review of Indonesia*, 1, 1 (1947): 18–19.

20 *Jawashinbun*, 2 Feb., 23 May, 18 June and 12 July 1945. The amount delivered to the government by the end of July 1945 was 875 669 tons. See NEFIS/CMI doc. no. 2350 (Ministry of Foreign Affairs, The Hague).

21 NEFIS/CMI doc. nos. 1776 and 2048.

22 'Interrogation of Van der Veer', Indische Collectie 004842, and 'Compilation of NEFIS Interrogation Reports, Nos. 252–260', AI2/6272/G, inv. No. AA8, 1944, Centraal Archieven Depot, Ministrie van Defensie.

23 *Jawashinbun*, 6 May 1943.

24 'Rapport Berhoeboeng dengan Perjalanan ke Djawa Tengah dan Timoer dar tg. 18/8–'04 sampai 3/9–04', Indische Collectie 031756–7.

25 Mori Fumio, *Gunsei Shubo* (Tokyo: Ryukei Shosha, 1998).

26 *Azas-Azas tentang Pendaftaran Sementara oentoek Kaoem Romusha jang Dikirim Keloear Jawa atau keloear Shuu* (Jakarta: Kokumin Toshokyoku,

1944), and *Garis-Garis Besar tentang Pengerahan Romusha* (Jakarta: Naimubu Romukyoku, n.d., held at Perpustakaan Nasional, Jakarta).

27 Tan Malaka, *Dari Pendjara ke Pendjara*, vol. 2 (Jakarta: Widaya, 1947–8), p. 174.

28 Ibid., p. 182. For the same reason food rations to the Allied nationals in concentration camps and the Indonesian defence forces were also reduced. See Nugroho Notosusanto, *The Peta Army during the Japanese Occupation of Indonesia* (Tokyo: Waseda University Press, 1979), p. 151.

29 Under these authorities, 209 Japanese private firms operated. For a complete list of the firms and their tasks, see NEFIS/CMI doc. no. 2398.

30 Mori, *Gunsei Shubo*.

31 *Gunseika Jawa Sangyo Sokan*, vol. 1, pp. 289–351.

32 According to the plan formulated in 1943, the land area for wet rice was to be reduced from 3 799 000 ha (1943) to 3 764 000 ha (1944) and then to 3 716 000 ha (1945) (NEFIS/CMI doc. no. 1776).

33 Those who have interpreted the Japanese oppression in terms of exploitation have overestimated the amounts of resources taken out of Java during the Occupation. Recent research has shown that the amount of rice sent overseas by the Japanese was most probably smaller than the amount Java exported before the war. See Sato, *War, Nationalism and Peasants*, pp. 126–7.

34 These ideas were constantly expressed in the Japanese newspaper, *Jawashinbun*, and other contemporary publications particularly in the second half of the Occupation.

35 See Pierre van der Eng's chapter in this volume.

36 *Gunseika Jawa Sangyo Sokan*, vol. 1, p. 35.

37 In the sessions of the Central Advisory Council, for instance, many members presented these criticisms, which were subsequently published in newspapers such as *Asia Raya*, and *Jawashinbun*.

38 Cindy Adams, *Sukarno: An Autobiography as Told to Cindy Adams* (New York: Bobbs-Merril, 1965), pp. 186–94.

39 'Tjatatan Stenografis Sidang Sanyo Kaigi Pertama', Indische Collectie 036574 ff. and 'Tjatatan Stenografis Sidang Sanyo Kaigi Ke-Ampat', Indische Collectie 036627 ff. After the Japanese surrender, many Indonesian administrators tried to mitigate the problem of rice shortages in the cities by enforcing the rice delivery system created during the occupation.

40 A number of books have been written on the Indonesian struggle against Japanese fascism. See, among others, O.D.P. Sihombing, *Pemuda Indonesia Menantang Fasisme Djepang* (Jakarta: Sinar Djaya, 1962), and Sagimun, M.D., *Perlawanan Rakyat Indonesia Terhadap Fasisme Jepang* (Jakarta: Inti Idayu Press, 1985).

8 Regulation and Control: Explaining the Decline of Food Production in Java, 1940–6*

Pierre van der Eng

The Japanese occupation of Java caused a major upheaval, but the overall extent of the economic turmoil is difficult to assess in the absence of concise indicators of economic activity throughout Java during these ominous years. In the 1930s the colonial government used food production as a major indicator to monitor economic development in Java, on the grounds that most people in Java were employed in farm agriculture,[1] and since extensive production data do exist for the six main food crops in Java for each of the years 1940–6, these figures can at least suggest overall trends in economic activity.[2]

The first part of this chapter offers an assessment of the reliability of wartime data on food production as a measure of the decline of food supplies. The second part assesses some of the major differences between the system which the Dutch colonial government used to regulate the domestic rice market in Indonesia and the arrangements for purchase and distribution which the Japanese authorities implemented in Java. The third part advances an argument that the decline of food supplies in Java during the Japanese occupation was not caused by the regulation of the rice economy as such, but by the choice of a regulatory system which largely aimed to displace existing marketing mechanisms.

REPORTING ON FOOD PRODUCTION

Before the Occupation, the Central Office of Statistics (*Centraal Kantoor voor de Statistiek*) monitored the main annual foodcrops

on Java,[3] using monthly reports of planted, harvested and failed areas of all annual farm crops. Data were gathered by the heads (*lurah*) or clerks (*carik*) of the more than 20 000 villages in Java, and submitted to the assistant-*wedana* in the 2100 sub-districts. Each assistant-*wedana* aggregated the data and forwarded it to the *wedana* in the approximately 420 districts, and the *wedana* in turn reported the information to the Central Office of Statistics in Jakarta and to the main office of the Agricultural Extension Service (*Landbouw-voorlichtingsdienst*) for their residency. Field workers for the Agricultural Extension Service used visual estimates and random checks to see that village reporting remained accurate, and estimates of land use had to match the data from the village cadastral surveys, which were revised every ten years.

To calculate average yields, the Central Office of Statistics used sample crop cuttings. In the case of paddy, the figures came from the Land Tax Service (*Landrentedienst*) of the Ministry of Finance, which assessed the productivity of rice fields in order to determine land tax. The cuttings were taken from about 20 000 plots of 1500–2000 square metres, and the sample was varied every ten years when revision of the land tax took place. Village heads organized and administered the system, and received 8 per cent of the land tax revenues in return for maintaining registers on land use.

The Agricultural Extension Service carried out sample cuttings for non-rice crops, but its field staff was too small to organize a system of sample cuttings comparable to that of the Land Tax Service. During the 1920s and 1930s an increasing share of annual non-rice production was estimated on the basis of these cuttings.[4] By 1939 about 58 per cent of total non-rice food production was estimated through sample cuttings of 100 square meters each, which the Agricultural Extension Service field workers chose at random each year. Although these sample plots numbered about 6600 by 1939, they did not cover all crops in all sub-districts. Estimates based on sample cuttings in previous years or in neighbouring sub-districts were therefore used to complete the set of crop yield data for all sub-districts.

The Central Office of Statistics combined the estimates of planted areas received from the assistant-*wedana*, the estimated average paddy yields from the Land Tax Service, and the estimated average non-rice crop yields from the Agricultural Extension Service to calculate the total production of food crops throughout Java.[5] The results proved reliable, and officials of the Central Office of

Statistics and the Agricultural Extension Service considered the arrangement very satisfactory for the purpose of monitoring food supply.[6] The estimates indicated that the average food supply in Java was generally adequate, while specific locations identified as problem areas were examined in greater detail, in particular by the Institute of Nutrition Research (*Instituut voor Volksvoeding*) in the 1930s.[7]

The colonial authorities in Indonesia attached great value to accurate statistical reporting on food production because there was a delicate balance between food supply and population in Java. After 1900 the growing demand for food was largely met with the production of non-rice food crops on newly opened upland areas, but the limits of land extension came within sight in the late 1920s, and the colonial government began introducing measures to facilitate more intensive use of existing farm land.[8] For instance, public investment in the improvement of irrigation works to achieve more efficient distribution of water during the dry season made possible double- and in a few cases triple-cropping of land. Starting in the late 1920s, the government also established a system for the multiplication and distribution of superior varieties of rice and other foodcrops. However, the effectiveness of such measures could not be taken for granted, and close monitoring of food production was deemed crucial to avoid malnutrition or famine.

This background indicates that the system of statistical reporting on the production of the main food crops in Java was very comprehensive when the Japanese arrived. The system apparently continued to function throughout the Occupation. There was discontinuity at the upper administrative levels because the central colonial government collapsed and the Japanese authorities abolished provincial governments, but the lower administrative levels, which were manned by the indigenous civil service (*pangreh praja*), remained largely in place. Moreover, the Japanese authorities developed plans to step up food production in Java by expanding the Agricultural Extension Service (*Noomuka*, continued after August 1945 as *Djawatan Pertanian Rakjat*), reforming it in line with Japanese principles of doing extension work.[9]

Data on food production during 1940–6 were discovered in late 1947 in the Office for General Research (*Chosashitsu*, after August 1945, *Kantor Penjelidikan Oemoem*), which had incorporated the Central Office of Statistics and was housed in its former building.[10] The pre-war practice of collecting data at the district level

was retained until midway through 1945, but following the Japanese surrender, data were collected by the Agricultural Extension Service at the residency level, sometimes on the basis of visual estimates of harvested area at lower administrative levels and on rough estimates per residency of average crop yields. It is possible that these estimates overstated harvested areas; owing to the deterioration and discontinuation of the village registers on land use, a similar procedure was used during the 1950s, and a sample survey taken in 1955 suggested that such visual estimates were about 14 per cent too high.[11]

Table 8.1 shows the reported areas of harvested irrigated paddy for 1940–6 together with a set of estimates prepared by the South East Asia Command based on an aerial photographic survey of 8.5 per cent of irrigated land in Java in May 1946,[12] and figures collected in 1950, the first post-war year for which complete data are again available. For 1946 the figures generated by the photographic survey are 9 per cent lower than those in the official data. Given that about 15 per cent of paddy was harvested outside the main April–September season,[13] and that about 6 per cent of the total area planted with irrigated paddy failed each year during the 1930s, the official data for 1946 are not likely to be too low, and this surmise is confirmed by the data for 1950. The total area in 1950 was 11 per cent higher than in 1946, but many residencies show little increase over the 1946 level. These two comparisons therefore suggest that the figures collected during the 1940s were reasonably accurate. Given that the system of reporting was transparent and relatively easy to check, it is difficult to assume that harvested area was grossly underreported.

During the 1920s and 1930s there was concern about the possibility that village heads were misreporting paddy yields. However, a comparison of Land Tax Service and Agricultural Extension Service sample cuttings in the late 1930s indicated that errors tended to average out. Where village heads owned more than 8 per cent of village land, they tended to underreport the yields from sample cuttings, because by doing so they saved on their own land tax payments. Where the heads owned less than 8 per cent of village land, they were more likely to overreport, because this would increase their returns from the 8 per cent of the land tax revenue which they collected in the villages.[14] Thus, the interests of village heads may have been an important factor in their reporting on average paddy yields. A rice-purchase scheme which the Japanese

Table 8.1 Harvested area of irrigated paddy, 1941–6 and 1950 (thousand hectares)

							Survey	
Residency	*1941*	*1942*	*1943*	*1944*	*1945*	*1946*	*1946*	*1950*
Banten	106	107	111	97	65	90	111	98
Jakarta	383	370	387	313	272	340	311	360
Bogor	200	208	206	188	161	169	184	173
Priangan	320	329	334	276	247	266	226	315
Cirebon	269	270	278	252	246	225	196	264
West Java	1278	1285	1315	1126	989	1090	1028	1210
Pekalongan	215	222	224	196	152	177	153	214
Semarang	206	198	207	178	175	170	144	185
Pati	191	183	185	140	150	150	147	143
Banyumas	210	213	208	150	114	126	101	159
Kedu	218	225	221	176	163	138	148	179
Yogyakarta /Surakarta	277	282	283	255	211	220	216	270
Central Java	1317	1324	1328	1096	965	979	909	1150
Madiun	175	179	175	158	134	159	130	164
Bojonegoro	202	149	173	170	109	127	109	143
Surabaya	180	169	190	179	165	146	128	164
Kediri	148	149	155	140	123	129	129	119
Malang	180	180	179	149	129	140	107	156
Besuki	202	193	208	222	214	197	165	192
Madura	62	60	66	70	48	50	36	54
East Java	1148	1079	1145	1088	922	947	803	992
Total Java	3743	3687	3789	3310	2877	3016	2740	3352

Sources: For 1941–6 *Geoogste Uitgestrektheden en Productie van de Voornaamste Voedings-gewassen op Java en Madoera 1937–1946* (Jakarta: Centraal Kantoor voor de Statistiek, 1947); for survey 1946 'Photographic Survey of the Rice Producing Areas of Java and Madura' (14 June 1946), British Public Record Office, FO371/53889 (F9802); for 1950 *Panen dan Penanaman Tanaman Bahan Makanan Rakjat jang Terutama di Djawa dan Madura* (1950).

authorities implemented after 1943 indeed gave the heads some reasons to underreport food production in their villages, whether to protect the local food supply from the requisitioning of rice, to obtain rice for black-market operations, or simply because of their increased administrative workload.

The available statistics indicate that average yields of all food crops declined significantly during the Japanese occupation, as shown in Table 8.2. The reasons for this decline include a deterioration in the operation and maintenance of irrigation works, the absence of any concerted effort by Agricultural Extension Service officials to combat crop diseases and pests (especially rats), and widespread crop failures in 1944 due to drought. However, the reported averages in 1945 and 1946 are well below the minimum averages recorded during 1923–41, and this fact suggests that there was underreporting. In particular, observers noted in 1946 that the paddy crops in the field appeared to be good, which may indicate that the very low average yields reported for that year cannot be accepted.[15]

With regard to collection of figures indicating the yields of non-rice foodcrops, the Agricultural Extension Service suffered from shortages of manpower following the detention of its Dutch staff. Indonesian officers took charge of operations, but increasingly found themselves tied to their offices due to insufficient transport. Moreover, beginning in mid-1944 the field workers of the service were mobilized by the Japanese to carry out tasks in connection with attempts to step up rice production in Java.[16] These duties left them with little time to do sample cuttings because they were kept busy passing along directives on rice cultivation methods to farmers. Average yields in 1944 and 1945 may therefore simply have been estimated on the basis of past experience. There are also indications that farmers sabotaged sample cuttings by thinning crops at night prior to the harvest.[17]

The average yields of all food crops fell continuously during the Japanese occupation, a trend that can be seen in Table 8.2. Given that the Indonesian Republic continued the Japanese system of procuring rice after the Japanese surrender in August 1945, the yields for 1946 were probably also underreported.[18] However, results in 1944 were also affected by the drought. On the assumption that reported yields were too low in 1945 and 1946, Figure 8.1 provides re-estimated production figures for those years using 1942/3 average crop yields. For each of the three main areas of Java, this chart shows an index of the real gross value of food production calculated on the basis of 1940 food prices, and an index of total harvested area. Re-estimation of production in 1945 and 1946 using 1942/3 yields raises production in those years, although it remains low.

Figure 8.1 indicates that in West Java real production declined during 1941–3, despite a slight increase in the harvested area. For East Java the harvested area fell faster than food production dur-

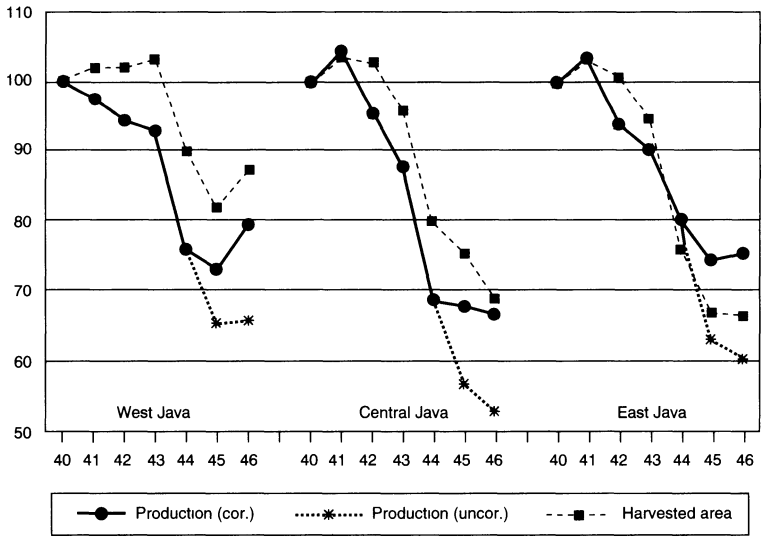
Table 8.2 Average yields of six main food crops, 1930s and 1940–6 (tons per hectare)

	1930s	*1940*	*1941*	*1942*	*1943*	*1944*	*1945*	*1946*
Irrigated Paddy	2.13	2.28	2.26	2.13	2.02	2.00	1.91	1.71
Upland Paddy	1.22	1.35	1.47	1.29	1.31	0.99	0.70	0.70
Maize	0.97	0.96	1.09	0.98	0.88	0.84	0.65	0.63
Cassava	8.27	8.08	8.71	8.95	7.92	6.35	5.88	5.62
Sweet Potatoes	6.65	6.73	7.18	6.95	6.01	5.73	4.33	4.37
Peanuts	0.75	0.78	0.81	0.82	0.72	0.62	0.56	0.56
Soybeans	0.69	0.70	0.77	0.73	0.71	0.58	0.50	0.52

Note: The column for the 1930s is based on annual averages for 1930–9. Paddy yields are given in terms of stalk paddy, yields of cassava and sweet potatoes in terms of fresh tubers.

Sources: For the 1930s, *Indisch Verslag* (1932–40); for 1940–6, *Geoogste Uitgestrektheden en Productie van de Voornaamste Voedingsgewassen op Java en Madoera 1937–1946* (Jakarta: Centraal Kantoor voor de Statistiek, 1947).

Figure 8.1 Indices of real value of production and harvested area of six main food crops, 1940–6 (1940 = 100)



Note: Real value of production calculated with 1940 rural prices.

Sources: *Indisch Verslag* (1940); *Geoogste Uitgestrektheden en Productie van de Voornaamste Voedingsgewassen op Java en Madoera 1937–1946* (Jakarta: Centraal Kantoor voor de Statistiek, 1947).

ing 1944–6, which suggests that land productivity increased. Most of the drop in food production in West, Central and East Java can be explained by the reduction in harvested areas, whether production in 1945 and 1946 is corrected or not. As noted above, it is not likely that the reduction in harvested area is a function of underreporting. Thus, although the exact magnitude of the decline in food production can be debated, it seems obvious that food production in Java mainly decreased because farmers cultivated their land less intensively, or left land idle.

One possible explanation for these results is crop failures, which would suggest that planted area was greater than harvested area. Crop failures may have increased due to the deterioration of irrigation facilities caused by inefficient operations and poor maintenance. Shortages of irrigation water were certainly a problem during 1944, which was a very dry year. The worst year before the Japanese occupation was 1921, when 453 000 ha. of irrigated paddy (15 per cent of the planted area) failed. However, crop failures cannot explain the further fall in 1945 and the stagnation in 1946. In 1963 and 1964, failures of the main paddy crop in Java were followed by rapid increases in the harvested area and yield of other foodcrops, especially maize and sweet potatoes.[19] However, in the case of maize the area harvested fell after 1943 (see Table 8.3), which would indicate that farmers in Java did not grow maize to compensate for the fall in rice supply during 1944/5. The area harvested with sweet potatoes did increase after 1943 to an unprecedented 350 000 ha in 1945, but in terms of calories the increase of production of sweet potatoes was far from sufficient to offset the fall of production of grains and pulses.[20]

Another possible explanation for the decline in rice cultivation was a labour shortage. In 1944 the Japanese recruited about 2.6 million Javanese as labourers and auxiliary soldiers.[21] In the early 1940s total employment in Java was around 19 million, with 60 to 65 per cent of the workforce engaged in farm agriculture. However, the collapse of plantation agriculture, and the loss of employment opportunities in manufacturing and other non-agricultural sectors of the economy, released manpower for recruitment by the Japanese without causing labour shortages of sufficient magnitude to force farmers throughout rural Java to leave land idle. When farmers did leave land idle, it was more likely a conscious choice not to produce food crops rather than an inability to do so for want of labour.

Table 8.3 Harvested area of six main food crops, 1940–6 and 1950 (thousand hectares)

	1940	*1941*	*1942*	*1943*	*1944*	*1945*	*1946*	*1950*
Irrigated paddy	3724	3743	3687	3789	3310	2877	3016	3352
Upland paddy	365	357	338	343	262	241	244	223
Maize	1983	2229	2214	1812	1399	1488	1150	1622
Cassava	1041	1003	976	950	829	551	626	711
Sweet potatoes	209	205	189	180	259	349	227	154
Peanuts	251	259	253	291	175	99	144	223
Soybeans	418	440	481	384	185	141	246	325
Total	7993	8237	8139	7749	6419	5833	5729	6610

Sources: For 1940–6, *Geoogste Uitgestrektheden en Productie van de Voornaamste Voedings-gewassen op Java en Madoera 1937–1946* (Jakarta: Centraal Kantoor voor de Statistiek, 1947); for 1950, *Panen dan Penanaman Tanaman Bahan Makanan Rakjat jang Terutama di Djawa dan Madura* (1950).

A shortage of draught animals offers a somewhat better explanation for the fall in harvested area. The number of draught animals, mainly cows and buffaloes, fell from 5.6 million head in 1941 to about 4.2 million in 1945,[22] not only because of Japanese army purchases but also because many farmers decided to slaughter their livestock themselves rather than sell the animals to the Japanese for rapidly depreciating currency. The decline in total harvested area between 1942 and 1945 was 29 per cent, which corresponds to the 25 per cent fall in livestock. On the other hand, reduced employment opportunities outside farm agriculture in rural Java may have depressed real wage rates, which to some extent would have allowed farmers to replace animals with human labour for the preparation of fields.

In short, physical impediments prevented farmers from cultivating some land, but these do not appear to add up to an explanation for the dramatic decline in total harvested area of food crops during the Japanese occupation. Perhaps, then, the answer should be sought by examining changes in the opportunities to market food crops, and in the returns to farmers from selling their crops.

THE REGULATION OF THE RICE MARKET

The Dutch colonial authorities had developed a meticulous system for monitoring food supply in Java because of concern about the delicate balance between the growth of population and food production, but official efforts to promote food production were largely indirect. The government, for example, invested in irrigation works and the supply of superior rice varieties and chemical fertilizers as a means of increasing productivity.[23]

Direct government regulation of the rice market began in 1933, when rice imports were restricted because the import of cheap rice from mainland South-East Asia threatened the domestic rice industry, thus jeopardizing the livelihood of large numbers of rice farmers in Java. Regulation also shielded the domestic market from price fluctuations of imported rice, which had impeded the development of rice milling, and the milling industry grew rapidly in Indonesia after 1933 until excess milling capacity and overproduction threatened to trigger price falls. The colonial authorities, in consideration of the delicate balance between population growth and food production, and the threat of a new world war, felt that Indonesia could not afford to wait for the rice market to achieve a new equilibrium, a process which would take several years. Accordingly they established the Food Supply Fund (*Voedingsmiddelenfonds*) in April 1939, formalizing a complex set of measures that had emerged since 1933 to stabilize food prices throughout the country by purchasing food products (mainly rice) in surplus areas, arranging for storage and transport, and selling food products in deficit areas, particularly during the lean season that preceded the main harvest.[24] With the outbreak of the Second World War, the fund's task shifted to the establishment of food buffer stocks in anticipation of the effects of war on international trade.

The establishment of the Food Supply Fund led in 1940 to the regulation of rice milling. The fund purchased, at a guaranteed minimum price, stocks which cooperating rice mills were otherwise unable to sell, on condition that these mills purchased paddy at minimum target prices and when selling rice did not exceed the maximum prices set by the fund. The fund therefore did not seek to control the entire market for milled rice, nor did it handle all milled rice or orchestrate the distribution of milled rice throughout the country. By purchasing only the stocks which participating rice mills were unable to sell at the guaranteed minimum price, it

sought to insure fair returns to both rice farmers and rice mills, and to stabilize prices. Most rice continued to be traded and transported through private channels.

In all, 29 per cent of the harvest, amounting to 1.35 million tons of rice, was transported from surplus to deficit areas in Java in 1941.[25] The Food Supply Fund held 230 000 tons at the end of 1941 and most of this grain was used as a reserve stock rather than for market operations. During 1941 Indonesia was virtually self-sufficient, and could even afford a small net export surplus of rice.

Japanese officials were not initially involved in the purchase of rice, although they requisitioned the stocks of the Food Supply Fund to feed Japanese forces and to supply urban areas, and several quartermasters purchased paddy and requisitioned mills to process it. The first year of the Occupation brought a good crop, and rice supplies were abundant. Still, the Japanese experienced surprising difficulties in their efforts to replenish rice stocks through purchases. One reason was that rice traders were reluctant to accept the newly printed currency, with which the Japanese authorities to a large extent financed their operations, because this money circulated at a discount next to Dutch colonial money.

In September 1942 the Japanese established a successor to the Food Supply Fund, the Office for Food Supply (initially called *Syokuryo Kanri Zimusho* but later renamed several times),[26] which basically ordered rice mills to purchase paddy during the remainder of the 1942/3 cropping year, and to sell the milled rice to the food office. The results were disappointing, and the Japanese adopted a more systematic approach for the 1943/4 cropping year. All residencies were given a quota of paddy, and the grain was to be sold at controlled prices to the mills, which the Office for Food Supply now took over and prevented from operating on their own account. Milled rice was sold, also at controlled prices, to the Office for Food Supply, which handled its distribution to the Japanese military, the Indonesian auxiliary forces, the civil service, detention camps and urban areas.

The authorities in the residencies set quotas for the regencies, which in turn assigned quotas to the districts, sub-districts and villages. These quotas were not regulated in a uniform way, and lower-level officials marked them up to ensure that the rice collected would be sufficient. Farmers were obliged to submit paddy exclusively to *kumiai* (non-voluntary cooperatives modelled after the Japanese *nokyo*). Despite this more rigorous organization, it became clear

Table 8.4 Paddy quota and paddy milled by rice mills, 1943–5 ('000 tons)

	1943			*1944*			*1945*		
	Quota	*Total milled*	*Milled as % of production*	*Quota*	*Total milled*	*Milled as % of production*	*Quota*	*Total milled*	*Milled as % of production*
West Java	656	640	22	792	396	17	509	220	10
Central Java	357	240	9	417	270	13	428	210	11
East Java	626	611	23	877	679	18	795	558	25
Total	1640	1491	18	2086	1344	20	1732	988	15

Notes: Quotas and milled rice refer to cropping seasons (April–March); 1943 quota is the quota revised downward from the original two million tons in November 1943; 1945 milled paddy refers to April–October; total milled is the amount of paddy actually surrendered.

Sources: For quotas, Shigeru Sato, *War, Nationalism and Peasants: Java under the Japanese Occupation* (Sydney: Allen and Unwin, 1994) pp. 117–23; for milled paddy, Indische Collectie, Rijksinstituut voor Oorlogsdocumentatie (Amsterdam) No. 056514; for paddy production, *Geoogste Uitgestrektheden en Productie van de Voornaamste Voedingsgewassen op Java en Madoera 1937–1946* (Jakarta: Centraal Kantoor voor de Statistiek, 1947); 1945 production is estimated based on the 1942–3 average yield per residency.

by November 1943 that the quotas would not be met. They were then lowered, and the Japanese applied greater pressure to the indigenous civil service to secure compliance, but even these reduced targets were not met (see Table 8.4).

The same system was used for the 1944/5 cropping year. However, an extraordinary long dry season prolonged the planting and harvesting period, and insufficient rainfall caused widespread damage to the main paddy crop. Poor harvests increased the reluctance of farmers to submit paddy to the *kumiai*, and the general food shortage pushed black market prices well above prices offered by the Office for Food Supply (see Table 8.5). The fact that many basic commodities were in short supply, either because they were no longer imported (especially textiles), or because there were impediments to greater domestic production, increased the reluctance of farmers to sell their paddy at official prices. Many of them hid paddy stocks.

Several residencies and regencies had already restricted or prohibited the export of rice and paddy (and later of all foods) to be able to fulfil the imposed quota, and this now became the general

Table 8.5 Rice prices in Java, 1942–5 (guilders per 100 kg)

Year	*Rural black market*	*Purchase prices of paddy*		
		Padi bulu	*Padi cereh*	*Gabah*
1942	6.00–7.00	6.43	6.13	6.17
1943	8.00–10.00	6.78	6.50	6.48
1944	25.00–30.00	7.68	7.36	7.34
1945	200.00	13.39	13.39	13.28

Note: Purchase prices are prescribed minimum prices for 1942 and 1943, and maximum prices for 1944 and 1945, all recalculated to rice equivalents.

Sources: 'De Economische Toestand van Nederlandsch-Indië tijdens de Japanse Bezetting', *Statistische en Econometrische Onderzoekingen*, 2 (1947): 126; S. Sato, *War, Nationalism and Peasants. Java under the Japanese Occupation (*Sydney: Allen and Unwin, 1994), p. 123.

practice. When it was clear late in 1944 that the purchase quota was unlikely to be achieved, the Japanese announced a prohibition on sales of home-pounded rice. Toward the end of the year, the growing shortage of transport (rail, ships, trucks) caused the Japanese to order residencies to become self-sufficient. This measure further immobilized food surpluses, and made it impossible to overcome the drastic shortages in some areas through the free trade of non-rice food crops. This may explain why the areas planted with maize and cassava did not increase during 1944 and 1945 to compensate for declining rice supplies. The restrictions remained in force during the 1945/6 cropping year, at least until after the Japanese surrender in August 1945.

DISCUSSION

Two recent publications have addressed the causes of the decline in food production during the Japanese occupation of Java. Aiko Kurasawa has argued that rice shortages caused by the suspension of foreign trade and 'large-scale Japanese military demands' necessitated control over the rice economy. She attributes the dramatic fall in food production to physical impediments, some of which have been discussed above, and to a 'lack of working spirit' among farmers in Java.[27] However, Java was exporting rice in the late 1930s, and there were no rice shortages in 1942 despite the suspension of

foreign trade. Food supplies remained adequate in 1943 and the rice requirements of the Japanese military in Java were not very substantial. Even the paddy quotas noted in Table 8.4 should have been manageable. Both as absolute quantities and as shares of production, these quotas were lower than the volume of paddy sold to the rice mills in 1940 and 1941.

Shigeru Sato has argued that the rice shortages were not caused by the Japanese military demands, but rather by the system which the Japanese authorities used to obtain and distribute rice, which in effect immobilised supplies: 'The more the Japanese tried to control rice marketing, the more it slipped out of control.'[28] He says the Japanese authorities lost control of the situation because their ignorance and inexperience led them to introduce inappropriate measures, in particular a defective purchase and supply system which lacked coordination and was riddled with opportunities for corruption and obstruction by the *pangreh praja*. However, Sato is uncertain about the extent of the problems caused by this system, because of the underreporting of production and the existence of a black market.

Although better preparation, coordination and communication might have allowed the authorities to avoid fragmentation and obstruction in the rice purchase and distribution system in Java during the occupation, it is difficult to see how an improved system could have prevented the dramatic decline in food production. After all, the Japanese authorities also tried to stimulate food production by introducing a range of technically superior cultivation techniques, and the failure of these efforts to stem the fall in food production cannot entirely be explained by reference to physical impediments during 1944–5, or defects in the system of procurement.

The key issue in explaining the drop in food production is the fact that the occupation disturbed the Javanese economy as a whole. During the late-colonial era the balance between food supplies and the growth of population in Java had been maintained on the supply side by technological changes in rice production which helped to increase food availability, and, more importantly, on the demand side by a gradual increase in the ability to purchase food products over both regions and socio-economic groups. Growing numbers of people found income opportunities in, for example, plantation agriculture and manufacturing industries. The employment of growing numbers of people outside farm agriculture did not lead to a fall in per capita food production, and the rise in income opportuni-

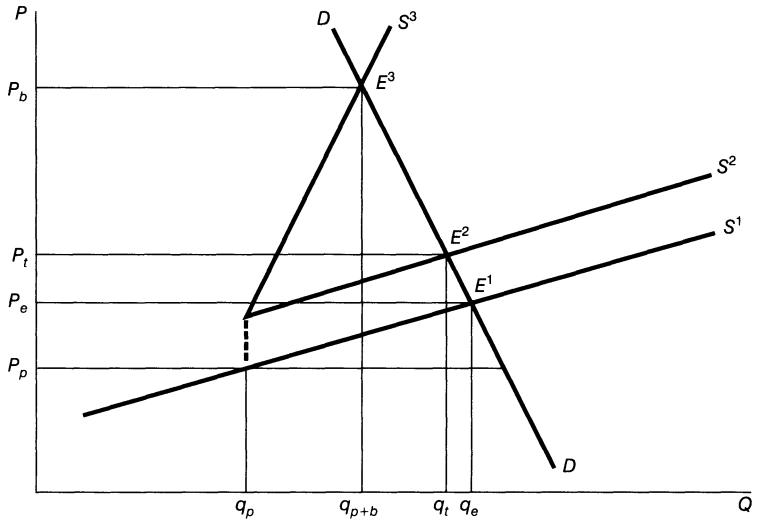
ties outside farm agriculture allowed such people to purchase food products.[29] The demand thus generated provided incentives for rice farmers in West and East Java, where most of the Javanese rice surplus was produced, to increase surplus production.

During the Japanese occupation foreign trade all but disappeared, and the loss of trade opportunities caused the demise of plantation agriculture and of the manufacturing industries that depended on imported capital goods, spare parts and raw materials. Moreover, a range of Japanese measures, such as the dismantling of several industries and of part of the transportation network, deprived large numbers of Javanese wage labourers of their livelihood. It is therefore likely that the key to interpreting the famines in Java during 1944 and 1945 can be found in the reduced ability to purchase food in several regions, particularly among people who depended primarily on income from wage labour.[30]

A black market for food products continued to exist, in spite of the restrictions on trade and transport, and salaried workers who had assets could barter them on the black market for food to supplement their rations. However, the black market price of rice increased thirty-fold during 1942–5, while the volume of money in Java increased by a factor of five, from *f*450 million in March 1942 to *f*2.3 billion in August 1945,[31] indicating that the increasing black-market price of rice did not just reflect the depreciation of currency, but the growing shortage of rice. The increasing disparity between official and black-market rice prices meant that rice production became increasingly less profitable at the prescribed purchase prices. Hence, farmers had little incentive, apart from compulsion, to cooperate with the official purchase system. At the same time the controls which the Japanese authorities and the *pangreh praja* imposed on free trade and the transport of food products are likely to have reduced the supply of food to the black market and to have exacerbated the discrepancy between black-market and official rice prices. In other words, the black market could not correct the deficiencies in the official purchase and distribution system. Farmers were discouraged from producing a surplus for the black market, while wage labourers found it increasingly difficult to purchase food to supplement rations.

The argument of this chapter is summarized in graphic form in Figure 8.2. This chart depicts total supply (S^1) and total demand (D) in the rice market in Java and the main economic changes in rice supply during the years 1944–5. The assumption is that Java's

Figure 8.2 Schematic impression of the main changes in supply and demand in the rice-market in Java during 1943–6



rice market was still unified during those years. The mounting restrictions imposed on trade and transport perhaps suggest the contrary, but the existence of a black market indicates that rice continued to be traded from surplus to deficit areas. The equilibrium situation (E^1) that would have emerged if the situation had not changed compared to previous years can be approximated with the situation during 1942 and 1943. The equilibrium quantity (q_e) can therefore be put at around 2.3 million tons of rice, or about half of total production. This is the total amount produced minus subsistence usage by farm households.

The first effect to be taken into account is the purchase of rice by the Japanese authorities. As Table 8.5 indicates, the purchase price (p_p) of paddy (in terms of rice) was well below the clearing price on the black market (p_b). Due to the fact that the Japanese authorities offered a low purchase price, the quantity of rice they managed to purchase (q_p) was well below 2.3 million tons: 1.4 million tons in 1944 and 1.7 million tons in 1945.

The difference ($q_e - q_p$) could have been sold on the black market. However, given the many accounts of drastic food shortages, the quantity of rice traded on the black market was presumably much smaller than ($q_e - q_p$). There were two main explanations

for this. One was the impact of a range of physical impediments to production and supply. These factors effectively increased the unit cost of supplying rice. One important element may well have been the greater cost of transporting rice. If the transport of rice was limited by shortages of railway carriages and road trucks, these would in principle have been replaced by other means of transport, such as ox-carts or even bicycles. In practice such means of transport could not have handled the volume of freight formerly carried by rail and by road, not because such alternative means of transport were difficult to organize, but because they would have been much more expensive and therefore would have increased the cost of supplying rice.

Physical impediments to the production and marketing of rice, such as transport difficulties, would have increased the unit cost rather than the marginal cost of supplying rice. This effect is indicated in the graph by the shift in the supply curve from S^1 to S^2. S^2 is truncated at the left side because rice supply at quantities up to q_p was determined by the purchase and transport policies of the logistic agency, which set below-market transport costs. Rice supply in that segment of the market was therefore determined by S^1. As a consequence of, for instance, higher transport costs, the market reached a new equilibrium (E^2), in which the price (p_t) exceeded the purchase price (p_p), and the total quantity demanded and supplied fell from q_e to q_t.

A second reason why the quantity of rice traded in the black market was much smaller than might have been the case under normal circumstances was the ban on the trade and transport of rice without permission from the logistic agency. In general the supply of produce in food markets is highly elastic, which means that a small change in the market price triggers a substantial change in the quantity supplied. Java's rice market cannot have been an exception to this rule, given that there were several million rice farmers. However, the operation of a black market and the increasingly restrictive measures taken to control it drastically increased the marginal cost of supplying rice. The risk involved in trading rice on the black market was considerable. The risk to producers and traders not only involved the possible loss of rice stocks, but also heavy penalties. Indeed, relative to free markets, suppliers in black markets in general face a much higher and rapidly rising marginal cost of supplying produce. This effect is indicated in the graph by the shift in the supply curve from S^2 to S^3. As a consequence,

the market reached an equilibrium (E^3), in which the black-market price (p_b) far exceeded the purchase price (p_p), and the total quantity demanded and supplied fell to q_{p+b}, the quantity purchased by the food logistic agency plus the quantity traded in the black market.

The main argument in this article is that the second effect greatly outweighed the first effect. Table 8.5 shows a thirty-fold increase in the black-market price of rice from 1942–5. If the five-fold increase in the volume of money mentioned above approximates the general depreciation of currency, it follows that the real price of black-market rice increased six times. There is no direct evidence on the difference in the cost of transport between truck and ox-cart, but a comparison of evidence from a range of developing countries suggests that the cost of transporting rice by cart is some 15 times that of transport by truck.[32] Assuming the initial transport margin in the price of rice to be 5 per cent, one would conclude that a higher transport cost raised the per unit cost of supplying rice by $15 \times 5 = 75$ per cent, which is insufficient to explain the sixfold increase in the real black-market price of rice. This article maintains that the increase can be largely explained as a consequence of the creation of a black market, as outlined above. Farmers were discouraged from producing a surplus for the black market, while wage labourers found it increasingly difficult to purchase food to supplement rations.

In conclusion, the problem with food supply in Java during the Japanese occupation was not primarily the purchase system which the Japanese put in place, or the effects of corruption, but the fact that the authorities sought to control the entire rice market, both the supply and demand side. In doing so, they took incentives away from those farmers who could have produced a significant surplus. Such farmers found it easier to cut back production when the official purchase prices depreciated. They produced enough to meet their own requirements, and to satisfy the official quota insofar as this was absolutely necessary. On top of that they may have produced a surplus for the black market, but this surplus was much smaller than the marketable surplus before the Japanese occupation.

The effort to control the market is the key difference between the Japanese system of intervention in the rice market and the operations of the colonial Food Supply Fund, and of the food logistic agencies established in Indonesia after independence in 1949, which did not seek to control and regulate the entire rice mar-

ket.[33] This, rather than the inadequacy of the Japanese arrangements to purchase and distribute rice, is the main explanation for the fact that a relatively moderate claim by the Japanese authorities on Java's food production had such disastrous effects on food supply in Java during the occupation.

Notes

* I am grateful to Shigeru Sato and Paul Kratoska for their comments on a previous version of this article and to Akemi Inoue for her thoughtful translation of relevant publications in Japanese.

1 During the 1930s the Department of Economic Affairs issued monthly reports on the economic situation of the indigenous population of Java, which contained a multitude of indicators. See *Maandcijfers over den Economische Toestand der Inheemsche Bevolking op Java en Madoera* (1935–1940).
2 *Geoogste Uitgestrektheden en Productie van de Voornaamste Voedingsgewassen op Java en Madoera 1937–1946* (Jakarta: Centraal Kantoor voor de Statistiek, 1947).
3 For a concise description, see E.A. Van de Graaff, *De Statistiek in Indonesië* (The Hague: Van Hoeve, 1955), pp. 13–22; J. Ecimovic, 'Report to the Government of Indonesia on Agricultural Statistics' (Rome: Unpublished report, Food and Agriculture Organization, 1957).
4 'De Arbeid van het Centraal Kantoor voor de Statistiek, in het Bijzonder met Betrekking tot de Welvaart der Inheemsche Bevolking', *Mededeelingen der Regeering omtrent Enkele Onderwerpen van Algemeen Belang* (Jakarta: Landsdrukkerij, 1928), pp. 103–9; 'De Inlandsche Landbouw in 1939', *Economisch Weekblad voor Nederlandsch-Indië*, 9 (1940): 1820–1.
5 In the 1930s the system was extended to Bali, Lombok, Sumbawa and South Sulawesi.
6 A.M.P.A. Scheltema, 'Rice Production on Java en Madoera', *Proceedings of the Fourth Pacific Science Congress Java 1929*, Vol. 4. *Agricultural Papers* (Bandung: Maks & Van der Klis, 1930), pp. 285–300; A.M.P.A. Scheltema, 'De Statistiek van den Inlandschen Landbouw op Java en Madoera', *Landbouw*, 6 (1930/31): 296–340.
7 S. Postmus and A.G. van Veen, 'Dietary Surveys in Java and East-Indonesia', *Chronica Naturae*, 105 (1949): 229–36, 261–8, 316–23; A.G. Van Veen, 'Nutrition Studies in Indonesia 1850–1950', *Documenta Neerlandica et Indonesica de Morbis Tropicis*, 1 (1950): 374–83.
8 'Voedingsproblemen en Overheidspolitiek op Java en Madoera', *Koloniaal Tijdschrift*, 29 (1940): 663–72; S. Hadiwinoto, 'Masalah Beras', *Warta Ekonomi di Indonesia*, 12 (1959): 761–3.
9 'Landbouwvoorlichting in Oost-Java tijdens de Japansche Bezetting', *Landbouw*, 19 (1946): 174–90.

10 'Het Centraal Kantoor voor de Statistiek', *Economisch Weekblad voor Nederlandsch-Indië*, 12 (1946): 225–6; S. Fukami, 'Japanese Source Materials on the Japanese Military Administration in Indonesia', *Utrechtse Historische Cahiers*, 7, 2/3 (1986): 48–9; S. Fukami, 'Nihon Gunseika Jawa ni okeru Chosa Kenkyu Kikan', *Nichiran Gakkaishi*, 13 (1988): 21–36.
11 Ecimovic, 'Report to the Government'; W.C. Hollinger and A.D. Tan, 'The National Income of Indonesia, 1951–1952', *Ekonomi dan Keuangan Indonesia*, 10 (1957): 5–7.
12 'Fotografische Opname van de Rijstproduceerende Gebieden op Java en Madoera', *Economisch Weekblad voor Nederlandsch-Indië*, 12 (1946): 236.
13 E. de Vries, 'Het Javaansche Rijstjaar', *Economisch Weekblad voor Nederlandsch-Indië*, 1 (1933): 2109–12.
14 Unpublished investigation by J. van der Ploeg in the late 1930s. Personal communication by Prof. E. de Vries to the author, April 1988.
15 'Photographic Survey of the Rice Producing Areas of Java and Madura' (14 June 1946), FO371/53889 (F9802); journeys by A. Clark Kerr in January 1946 and Lord Killearn in August 1946, FO371/53907 (F12706).
16 S. Sato, *War, Nationalism and Peasants. Java under the Japanese Occupation* (Sydney: Allen and Unwin, 1994), pp. 176–7; Pierre van der Eng, *Food Supply in Java during War and Decolonisation, 1940–1950* (Hull: Centre for South-East Asian Studies Occasional Paper No. 25, University of Hull, 1994), pp. 17–21; A. Kurasawa, 'Mobilization and Control. A Study of Social Change in Rural Java, 1942–1945' (Ph.D. diss., Cornell University, 1988), pp. 35–61; This work has been published in Japanese as *Nihon Senryoka no Jawa Noson no Henyo* (Tokyo: Soshisha, 1992), and in Indonesian as *Mobilisasi dan Kontrol: Studi tentang Perubahan Sosial di Pedesaan Jawa 1942–1945* (Jakarta: Grasindo, 1993).
17 A. Soebardjo, 'The Life Conditions of the Population with Regard to the Requisition of Paddy by the Government' (1944), p. 7, Wason Collection, Cornell University Library, No. 905/3/16.
18 Van der Eng, *Food Supply in Java*, pp. 42–51.
19 *Luas Panen dan Produksi Tanam²an Rakjat Berumur Pendek di Djawa dan Madura* (1963–4).
20 For more detail on the calorie conversion of food crops and the implications for per capita food supply, see Van der Eng, *Food Supply in Java*, pp. 26–31, 78–9.
21 Sato, *War, Nationalism and Peasants*, p. 157.
22 Calculated on the basis of stock and slaughter data, assuming a 10 per cent reproduction rate during 1944 and 1945, from 'Kort Overzicht van de Ontwikkeling van de Economische Situatie in de Republiek Indonesia sinds Haar Oprichting', 6 Sept. 1947, p. 5, Arsip Nasional Republik Indonesia (Jakarta), Djogya Papers, No. 5240.
23 Pierre van der Eng, *Agricultural Growth in Indonesia: Productivity Change and Policy Impact since 1880* (London: Macmillan, 1996), ch. 2.
24 For a more detailed description, see 'Voedselproblemen en Overheidspolitiek', pp. 673–84.

25 'De Rijstpositie van Nederlandsch-Indië', *Economisch Weekblad voor Nederlandsch-Indië*, 12 (1946): 81–2.
26 For more detailed descriptions of the development of the rice purchase system during the Japanese occupation, see Sato, *War, Nationalism and Peasants*, pp. 115–53; Kurasawa, 'Mobilization and Control', pp. 113–80; Van der Eng, *Food Supply in Java*, pp. 10–17.
27 Kurasawa, 'Mobilization and Control', pp. 11, 31–3, 62–8, 108.
28 Sato, *War, Nationalism and Peasants*, p. 203, but cf. p. 148.
29 Pierre van der Eng, 'Food Consumption and Standard of Living in Indonesia, 1880–1990' (Canberra: Research School of Pacific Studies, Economics Division Working Paper, Southeast Asia No. 93/1, Australian National University, 1993), p. 14.
30 The occurrence of famine in Java during 1944 and 1945 can be analyzed using the causal framework developed by A.K. Sen, who argues that famines are not necessarily due to there not being enough food to eat, but rather due to groups of people not being able to purchase enough food. See his *Poverty and Famines: An Essay on Entitlement and Deprivation* (Oxford: Clarendon Press, 1981), pp. 45–51.
31 I.J. Brugmans *et al.* (eds), *Nederlandsch-Indië onder Japanse Bezetting. Gegevens en Documenten over de Jaren 1942–1945* (Franeker: Wever, 1960), p. 257. The rapid inflation was caused by the fact that the Japanese authorities financed most of their expenditure by printing more money. H.J. Manschot, 'Het Geld-, Bank- en Credietwezen in Nederlandsch-Indië in de Bezettingsjaren 1942/1945', *Economisch-Statistische Berichten*, 31 (1946): 196–200, 213–15.
32 C. Clark and M. Haswell, *The Economics of Subsistence Agriculture* (London: Macmillan, 1970), pp. 191–200.
33 Until 1975 the food logistic agency used targets, but the difference between targets and actual purchases could be met with imported rice. This became difficult in the early 1960s due to Indonesia's foreign exchange shortages. At that time the operations of the food logistic agency indeed started to resemble those of its predecessor during the Japanese Occupation. It also started to work with purchase quota and with rapidly depreciating purchase prices. However, even at that time, the rice purchase targets were only 8 per cent of rice production in Java. M. Sadli, 'Kesimpulan[2] Mengenai Sistim Pembelian Padi untuk Pemerintah jang Ditjepat', *Warta Research*, 2 (1961): 33–44; S. Moeljono, *Seperempat Abad Bergulat dengan Butir-Butir Beras* (Jakarta: Badan Urusan Logistik, 1971), pp. 56–79.

9 Japanese Food Policies and the 1945 Great Famine in Indochina

Nguyên Thê Anh

Immediately after the fall of France to Germany in June 1940, Japan applied diplomatic pressure on the government of French Indochina to gain bases and a strategic position in northern Vietnam, and to sever the Red River route which had been used to send supplies to Nationalist China. It further expanded its position by creating bases in southern Indochina in mid-1941. In this fashion, Japan effectively occupied Indochina without having to destroy the French administration, honouring a pledge to respect French sovereignty and French territorial integrity in that part of the world. In addition, the signature of a commercial treaty and a navigation convention in Tokyo in May 1941 gave the Japanese the right to acquire the commodities they needed in exchange for their industrial products. The 'Empire of the Rising Sun', whose requisites in rice became more pressing as its armies were developing their action in territories farther from their departure bases, managed in this way to gain control of the greater part of Indochina's foreign trade.

From a social and economic standpoint, the Japanese occupation involved measures whose ruinous effects soon came to light. Above all, impounding the vital resources of Indochina caused a significant modification of its economy. Imports quickly slumped owing to the disruption of regular communications with France, while exports declined as Allied submarines sank more and more Japanese ships.[2] Indochina had to meet Japan's requirements for rice and raw materials, and at the same time to deal with the shortfall of manufactured articles that Japan was unable to provide in sufficient quantities. (See Tables 9.1 and 9.2.) The population suffered from shortages of various industrial goods needed for daily consumption, and increasingly from food shortages as Indochinese production was tapped for export to Japan. (See Tables 9.3a and 9.3b for two sets of figures for rice and corn exports.)

Table 9.1 Indochina's imports from Japan

	Quantity (tons)	*Value (million francs)*
1941	30 000	336 400
1942	48 400	1 142 800
1943	38 600	1 258 100
1944	6 100	337 800
1945	500	50 700

Source: *Annuaire statistique de l'Indochine*, vol. 10: 1941–1942 (Hanoi, 1945): 154; vol. 11: 1943–1946 (Saigon, 1948): 156–7.

Table 9.2 Indochina's exports to Japan

	Quantity (tons)	*Value (million francs)*
1941	1 395 500	1 599 300
1942	1 609 800	2 338 800
1943	1 435 500	1 966 000
1944	538 000	793 200
1945	58 200	133 100

Source: *Annuaire statistique de l'Indochine*, vol. 10: 1941–1942 (Hanoi, 1945): 154; vol. 11: 1943–1946 (Saigon, 1948): 156–7.

To compensate for Japan's interference and the consequences of the loss of economic balance, Admiral Decoux, the Governor-General of Indochina, endeavoured to set up a type of planned economy by severely limiting the supply of staple commodities and controlling production and trade ever more tightly through the creation of such monopolistic agencies as the *Comité des Céréales* (Cereals Committee) established in December 1942. The executive organ of the *Comité des Céréales*, called the *Comptoir des Céréales* (Cereals Agency), held a monopoly over the purchase of paddy crops.[3] As resources dwindled, a regulation was enacted to prohibit free trade in additional products, and to subject their use to administrative controls.[4] The use without administrative authorization of all chemical and metallurgical goods, whether imported or of local production, that were necessary to enterprises and industries, was prohibited. This control was not to be restricted to products intended for manufacture and industry: wherever supplies became insufficient because of low production or because of transport difficulties,

Table 9.3 Rice and corn exports from Indochina to Japan

(a) According to the *Annuaire statistique de l'Indochine*

Year	*Rice exports (tons)*	*Corn exports (tons)*
1940	468 280	177 023
1941	583 323	119 252
1942	961 941	123 980

Source: *Annuaire statistique de l'Indochine*, vol. 10, p. 176.

(b) According to the Ministère de l'Information

Year	*Rice exports (tons)*	*Corn exports (tons)*
1941	854 577	201 857
1942	905 401	126 334
1943	978 699	100 763

Source: Ministère de l'Information. Notes documentaires et études no. 90. Série Coloniale X, 6 July 1946. Centre des Archives d'Outre-Mer. *Indochine NF*, Box 366, file 2907.

rationing was introduced. A central supply committee was created and entrusted with determining quotas for the different regions and services. Local committees in their turn allocated the quota for each region among its provinces and main urban centres; their activity extended to every textile product regardless of its nature or origin, and to various other articles such as soap, matches, sugar, and so on.

The colonial government's arbitrary intervention in the rural economy first took the form of forcing peasants to cultivate plants with industrial uses, sometimes to the detriment of food crops. Admiral Decoux described the process as 'the adaptation of Indochinese agriculture, until then practically centred on monoculture (paddy and corn), to the new requirements of mixed farming'.[5] In particular, the government needed to increase the cultivation of fibre-producing plants in order to make up for the shortage of cotton and silk cloth, and of oleaginous plants which could be used to manufacture fuels and lubricants to replace products derived from hydrocarbons, whose import had ceased. Private organizations called *comptoirs* (agencies), which were tightly controlled by the administration, were entrusted with collecting, transporting and processing

Table 9.4 Cultivated areas in Indochina devoted to various economic crops (in hectares)

	1942		*1943*		*1944*	
	Tonkin	*Indochina*	*Tonkin*	*Indochina*	*Tonkin*	*Indochina*
Cotton	1 000	19 000	3 199	33 626	2 990	51 752
Jute	3 000	3 400	14 200	15 230	12 993	17 653
Ramie	350	1 300	56	1 025	58	1 174
Peanut	5 000	50 000	4 600	48 099	4 809	47 467
Castor-oil plant	8 300	10 000	14 900	19 678	18 477	29 516
Sesame	1 200	4 500	2 440	5 885	3 219	6 955

Source: *Annuaire statistique de l'Indochine*, vol. 10, p. 89; vol. 11, pp. 92–3.

the products. In the span of three years, the area occupied by industrial crops nearly doubled, from 88 200 hectares in 1942 to 154 517 hectares in 1944 for the whole of Indochina. In Tonkin it nearly trebled, expanding from 18 850 hectares in 1942 to 42 546 hectares in 1944 (see Table 9.4).

The rural population found it difficult to cope with this forced conversion: while being reduced to extreme penury regarding everyday necessities, especially clothing, they had to witness certain food plants, corn among others, being driven off fertile lands such as the alluvial soils of river beds, because these locations proved to be excellent for growing castor-oil and textile plants. The administration cared little for the preservation of subsidiary crops, the produce of which might have compensated for the deficiency of rice production for the population under dire necessity. Hostile mutterings soon made themselves heard, and the Resident Superior in Annam pointed out in a report dated 15 October 1944:

> The general state of mind of the masses remains good; extreme attention, however, should be paid to the imposed crops. They are a heavy load: as for oil seeds and cotton, we must now display great authority in view of collecting them in the warehouses of the monopoly. I am taking every useful step to try to obtain better results in 1945 than this year, without overlooking the fact that in some places one will have to show a rather harsh attitude.[6]

Concerning rice-growing, the French authorities introduced a system of compulsory requisitioning. Their purpose was to constitute safety stocks and at the same time to 'carry out the engagements'

towards the Japanese, referring to the covenant of 19 August 1942 under which Japan was to receive the entire exportable surplus of rice during the 1942–3 harvest, or a minimum of 1 050 000 tons of the highest quality white rice.[7] According to Admiral Decoux's statement, 'it matters above all to ensure the regularity of the prices and to ward off carefully any show of panic or speculative measure on the market'.[8] Consequently, at the end of 1942, the Resident Superior in Tonkin decided to impose on the villages the constitution of paddy reserves, 'proportional to the production, available on request and payable on delivery'.[9]

Whereas it strictly limited the free circulation of paddy and rice both between and within the different provinces of northern Vietnam, the administration forced each farmer to deliver a part of his harvest in proportion to the surface he cultivated. The owners of five *mau*[10] or less of rice land were thus required to sell to the government 20 kilograms per *mau*; farmers who owned five to ten *mau*, 80 kilograms per *mau*; and those who owned over fifteen *mau*, their entire surplus. This rate was increased in 1944: farmers who owned up to ten *mau* were required to sell to the government 72 kilograms per *mau*; those who owned from ten to fifteen *mau*, 120 kilograms per *mau*; and those who owned more than fifteen *mau*, 200 kilograms.[11] On this basis, Tonkin had to supply by way of compulsory deliveries 130 205 tons of rice in 1943, and 186 130 tons in 1944.[12]

The official requisitioning of rice at an imposed price did not take into account the rise of production costs. While the cost-of-living index had more than trebled between 1940 and 1943, the official purchase price offered to paddy producers was raised by just 25 per cent in 1943, after a slight increase in 1941.[13] Requisitions thus constituted a crushing burden for the population who, having made the compulsory deliveries, would be obliged to buy rice at very much higher free market prices in the event of a bad harvest. Yet, the authorities seemed oblivious to the harm the system was liable to cause. On 13 May 1944 the Resident Superior in Tonkin expressed his satisfaction at the good disposition of the masses:

> The notification of the next levy on the harvest of the fifth month has not roused any unfavourable reaction. There will of course be some trouble at the time of the delivery, albeit not very serious. The harvest promises to be average. I think I'll be able to obtain

Table 9.5 Paddy production in Tonkin

	Area of land planted with paddy (hectares)	*Amount of paddy harvested (tons)*
1919–22 (ave.)	1 540 000	2 100 000
1937	1 230 666	1 604 297
1938	1 372 505	1 953 447
1942	1 487 000	1 882 200
1943	1 386 000	1 762 000
1944	1 427 000	1 680 000

Sources: Centre des Archives d'Outre-Mer, *Indochine NF*, 471/4095; *Annuaire statistique de l'Indochine.*

the expected 80,000 tons and to secure a sufficient supply for the second semester.[14]

In fact the condition of the rural population in northern Vietnam was growing more and more distressing.[15] Long before the outbreak of the Pacific War, the agricultural economy of the North already manifested symptoms of grave deterioration. As the second most important rice-producing territory of Indochina after Cochinchina, Tonkin yielded on average 2 100 000 tons of paddy per year during the period 1919–22, from a tilled area of 1 540 000 hectares.[16] However, from 1930 onward, the level of production decreased regularly, dropping sharply in 1937 and after (see Table 9.5).

Setting aside extra-economic factors such as climatic accidents, this decline reflects a continuing reduction in productivity. Owing to the stagnation of agricultural techniques, the per hectare output fell from 13.6 quintals of paddy in 1930 to 13 in 1939 and to 12 in 1944.[17] During the same period, the population of Tonkin increased steadily, growing at a yearly rate of more than 100 000 additional births: the number of inhabitants of northern Vietnam increased from 8 700 000 in 1936 to 9 851 000 in 1944. Paddy production per head, therefore, steadily declined in Tonkin, falling to 190 kilograms in 1942, 180 kilograms in 1943 and 170 kilograms in 1944; in Cochinchina the figure was three times higher, amounting to 590 kilograms per head in 1942–3, when total production was 3 179 300 tons from an area of 2 303 000 hectares.[18] The average quantity of paddy necessary for the maintenance of a person was

300–337 kilograms per year, and production in Tonkin was far from sufficient to meet this standard. With agricultural production falling behind demographic growth, the population of Tonkin lived on the brink of starvation despite consuming complementary crops, and it became essential to obtain rice from the South to ensure their survival.

The spectre of famine thus loomed ominously over the North. From 1936 to 1939, floods caused by the bursting of dykes occurred regularly, affecting practically all of Tonkin in 1937. In late August of that year, 147 950 hectares of paddy fields in the provinces of Bac-ninh, Bac-giang, Hai-duong, Hung-yên, Ninh-bình, Son-tây, Phútho and Phúc-yên were inundated; the victims of this disaster numbered as many as 732 000, and some 300 000 farmers lost their entire crop. In six districts of Bac-ninh province, about 150 000 famished peasants were reduced to beggary. (See Map 11.) The losses amounted to 10 990 000 Indochinese piastres.[19]

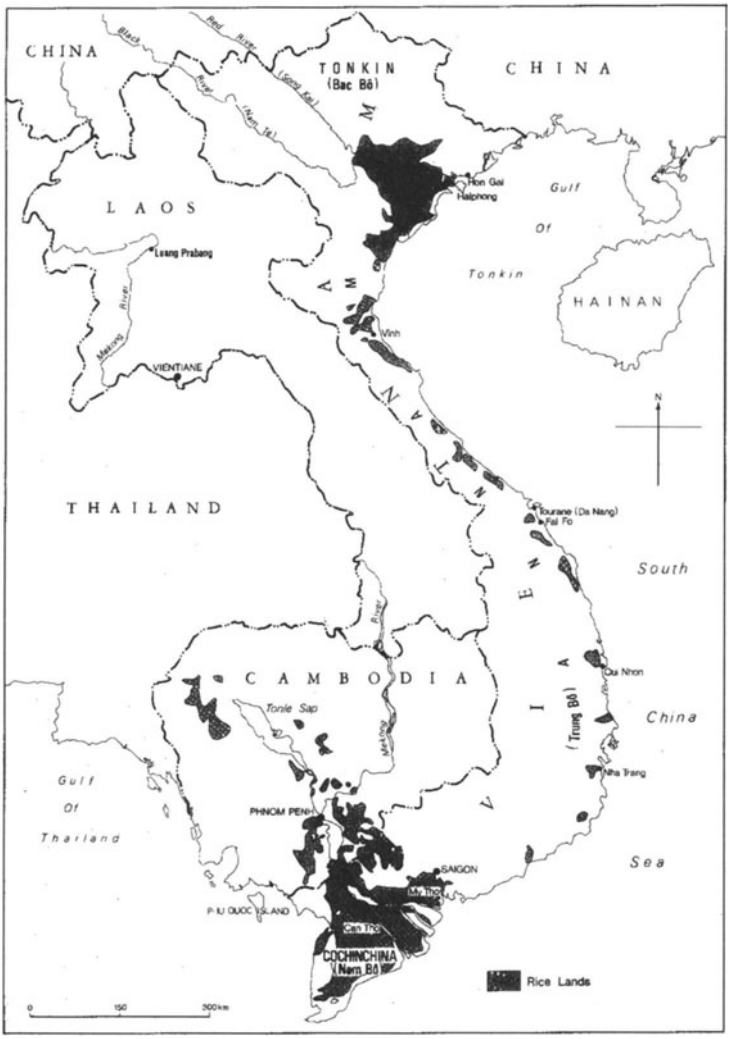
The Japanese Occupation and the events connected with the war created conditions so adverse that they gave a final blow to this overstretched economy. The fall in production and the insufficiency of resources found expression in an increasingly unbalanced rice market, which began to experience speculation and price escalation. The action of the government in controlling the situation most often amounted only to ratification of price rises that it could not prevent.[20] In fact, the excessive expansion of the currency, from 235 million piastres on 1 January 1940 to more than 1300 million on 1 January 1945, produced an outrageous increase in all domestic prices.[21] Inflation made the cost of rice particularly prohibitive: a quintal of rice cost 30 piastres in 1940 but sold for 600 piastres at the beginning of 1945.

In May, 1941, the authorities restricted the daily individual ration of paddy to 750 grams; already inadequate, this quantity was reduced to less than 500 grams in 1943. The situation was further complicated by disruptions to the supply of southern rice, which did not arrive regularly enough to help provide for the most pressing needs and bridge the gap between harvests. From 1942 onward repeated bombing raids caused heavy damage to public buildings, highways, railroads, bridges, and rolling-stock. In 1945, railway links between Saigon and Hanoi were practically broken, while 50 per cent of the road network was destroyed and some 90 per cent of the country's motor vehicles had disappeared or were unusable. Sea transport also fell victim to Allied attacks. The closing of the

port of Haiphong, the destruction of the harbour installations of Tourane, the intensification of submarine warfare in the Gulf of Tonkin and then along the coasts of central Vietnam, progressively reduced the activity of coastal steamers, which first plied only between Saigon and Tourane, then between Saigon and Qui-nhon, and finally between Saigon and Nha-trang[22] (see Map 10). Transportation difficulties prevented the distribution of products from one area to another to such an extent that a very critical economic divide emerged between the North and the South. Tonkin ran out of rice, while in Cochinchina huge quantities were stored without hope of being shifted, and in the end simply rotted. In mid-October, 1944, a portion of the large stocks of rice that could not be shipped to Japan was sold off very cheaply in Saigon. About 55 000 tons were offered to distilleries for less than the purchase price. In general, the price asked from the consumer for rice was some forty times lower in Cochinchina than in Tonkin.

Dearth was the lot of Tonkin as early as 1943, but the region was brought to the verge of disaster by a mediocre harvest early the following year. The crop harvested in the fifth month of 1944 yielded only 655 000 tons of paddy, about 154 000 tons less than the corresponding harvest in 1942.[23] It appeared impossible for Tonkin to hold out until the harvest that would take place during the tenth month without assistance, and at the very moment when supplies were exhausted, typhoons followed by tidal waves of a rare violence swept down upon the country, flooding and destroying a large part of the autumn rice crop. Famine was immediately rife, and hunger-stricken peasants began dying in large numbers, with entire villages sometimes perishing. The crisis was aggravated by a long cold winter of nearly unprecedented severity, which stopped the cultivation of secondary crops and heightened still further the misery of the population. A newspaper reported the dreadful sight of the people's distress in these words:

> The constant state of heat loss is a factor of high mortality for the poor folks wrapped in miserable rags, in shreds of mats. To these people, the ever rising price of rice, the delay caused by the cold weather to the maturation of substitution farm products, would leave as food nothing but some vegetables, some weeds low in calories . . . They die slowly but surely of progressive malnutrition.[24]



Map 10 French Indochina, showing rice-growing areas, 1940s

As early as the Têt festival (lunar New Year) of the year Ât-dâu (1945), it appeared obvious that the extent of the disaster could in no way be circumscribed. Paul Beauchesne, the commercial director of the *Charbonnages du Tonkin*, observed afterwards that the catastrophe seemed inevitable. He wrote from Hon-gai on 12 October 1945 that even if the mistake of imposing drastic rice requisitioning in 1944 had been avoided, 'it is probable that the people saved from hunger in February [1945] would be dead in May, as it was impossible for the 300,000 tons that had been lacking to have arrived'.[25]

The great famine of the year Ât-dâu was an atrocious calamity that left an indelible mark on people's memories.[26] Estimates of the number of deaths between the autumn of 1944 and the winter of 1945 vary from 1 500 000 to 2 000 000, which would have brought the population of northern Vietnam to less than 7 000 000 persons. The French authorities, however, issued a more moderate figure of 700 000 deaths. They claimed that as of 9 March 1945 there was still enough rice to prevent famine, and that the French administration had been determined to deal severely with profiteering, with a view to restoring concealed stocks to consumers and warding off the disaster of high-priced rice, but had been prevented by the Japanese coup from carrying out its plans.[27]

The famine set in motion a procession of physical afflictions described in these hallucinatory terms by a French witness in April 1945:

> They [the country-people] move away in endless file by families, the aged, the children, the men, the women, bent under the weight of their misery, shivering all over their denuded skeletons, even with young girls at the very age when modesty allows no infraction, stopping from time to time either to close the eyes of one of theirs that has dropped to get up no more, or to strip him of some unnamable rag that, occasionally, still covers him. To behold these human forms more hideous than the ugliest of the animals, to behold these corpses curled up at the roadside, having as clothes and shrouds only some stalks of straw, one is ashamed of mankind.[28]

The provinces of Nam-dinh, Thái-bình, Hung-yên, Hà-nam and Ninh-bình were among the worst affected. Out of 1 259 734 inhabitants in Nam-dinh province, 646 147 were estimated in April 1945 to

have starved to death.[29] Every day, it appeared, on average 3154 persons died of hunger and cold during the winter of 1944–5 in the provinces of Nam-dinh and Thái-bình; by mid-April 1945, the total number of victims there may have reached the stunning figure of 467 000.[30] The disaster drove throngs of famished people to Hanoi and Hai-phong; in Hanoi, from 50 to 70 corpses crouching along the pavement were picked up every day.

To assist the needy, a First-Aid Committee of Tonkin (*Ban Cúu Tê Bac-ky*) was created on 22 January 1945. On 18 March 1945, the General Association of the Institutions of Social Assistance (*Tông Hôi Cúu Tê*) was formed to direct the struggle against the growing distresses. The administration halted the practice of requisitioning rice at an imposed price in the ruined areas; it also distributed food and clothing, and facilitated the purchase of blankets and vests made of kapok at low prices. These actions could reach only a small percentage of the great mass of people living in the Red River Delta, and because hunger and starvation affected the agricultural workforce, only 1 251 670 hectares of paddy fields were tilled for the first planting season of 1945, against 1 414 444 hectares for 1944.[31]

Thus, the Japanese coup of 9 March 1945 took place against a background of death and desolation. Political confusion accompanied the collapse of the French colonial regime, and as disorder spread, acts of banditry bred by the famine proliferated to a disquieting extent. The Japanese, who had replaced the French administration, incited aggression against the French, who they accused of having deliberately starved the Vietnamese peasantry,[32] but they too lost control of the situation. The introduction of the death penalty for speculators temporarily brought the price of rice in Hanoi down from 600 to 440 piastres per quintal,[33] but prices soared again at the beginning of April, and reached 800 piastres per quintal in the middle of May.[34] Other emergency measures also proved ineffective, such as the creation of an Advisory Supply Committee to study the issuing of provisions for the population of Tonkin and propose solutions to relieve the most badly stricken areas and regularize consumption in big cities. The government also called for people to improve every plot of land suitable for cultivation with rice or food plants in connection with a scheme to achieve 'a rational increase of the productive capacity in the whole territory of Tonkin as to food crops'.[35]

Installed on 17 April 1945 by the Japanese, the Trân Trong Kim

government courageously pledged in its first public statements to give priority to the rice problem. Having gotten the Japanese authorities to give up the system of obligatory deliveries, it cancelled all the former stipulations concerning paddy and rice, and created a new regulation aimed at preventing speculators from buying up supplies, thereby seeking to counter any artificial rise of prices. Only the administration could buy rice or paddy directly from the producers, but free circulation of cereals was restored for quantities not exceeding 50 kilograms to expedite the provisioning of private individuals. In every province, purchases indispensable to military needs and to general provisioning were to be carried out exclusively by the agricultural banks, under the control and direction of the province chief, at prices varying between 100 and 130 piastres per quintal of paddy, and between 150 and 195 piastres per quintal of rice (except in the provinces of Thái-bình, Nam-dinh and Ninh-bình, where the maximum price for a quintal of paddy was set at 150 piastres, and for a quintal of rice at 225 piastres).[36] It was hoped that the situation of the farmers would improve thanks to this overhauling of the prices paid to producers, now five times higher than under the former regime. Moreover, the decision decreed by the emperor Bao-Đai on 23 May 1945 to grant a moratorium to debtors for agricultural loans worked toward the same end of bringing some relief to small peasants.

The government also attempted to overcome the shortage of transport. Nguyên Huu Thi, the Equipment Minister, travelled to Saigon during the first fortnight of June to negotiate with the Japanese authorities the details of rice transport from the South to the North, and to arrange for the immigration of one million needy people from Tonkin (Bac-bô) and Annam (Trung-bô) into Cochinchina (Nam-bô). The government rounded out its measures against the famine with a decree passed on 30 July 1945 which imposed a tax on expenses for entertainment and pleasure; the returns were to be used for relief work in Tonkin. Through an active press campaign, the government endeavoured to make people elsewhere in the country sensitive to the misfortunes of their fellow citizens in the North, and the result was a veritable upsurge of national solidarity, reflected in the creation in Huê of a Central Rescue Committee for the Needy of North Vietnam, and in Saigon of a Committee of Mutual Aid for the Victims of Bac-bô. Funds were raised, and loads of rice were conveyed by junks and carts to Tourane or Faifo, and thence to the North.

These measures, in conjunction with a certain alleviation of the famine following the gathering of the fifth month crops, allowed the situation to return to normal, at least for the time being. If lines of indigents were still forming at some points for free food distribution, they were shorter than before, and the price of rice fell perceptibly: in mid-June, a quintal of rice cost just 260 piastres in Hanoi.[37] This improvement was acknowledged by a French author, albeit with some resentment:

> One witnesses the strengthening of the effort of the Annamese who continue, as they believe, to ensure by themselves, without the French and better than them, the provisioning of the northern provinces. The distribution of our stocks by the Japanese, the harvest of May 1945, as well as an intensification of the transports from the South to the North through brutal measures that we ourselves would not have ventured to take, bring a momentary abundance that explains that impression. The purpose is answered and the Annamese have come to think very seriously that they are ripe to be a great nation.[38]

The respite was only of short duration. The onset of the rainy season brought new anxieties. A Committee for the Protection and Supervision of Dikes was created to organize the defence of the network of dykes and dams during the period of spate. As if to exorcise bad fortune, an exhibition on dykes and their protection opened on 30 July at the Information Hall in Hanoi; there the hope was expressed that, thanks to unrelenting vigilance, the dikes would be adequate to preserve the crops from flooding.[39] The effort was to no avail: during the second fortnight of August, torrential rains raised the rivers to 12.68 metres in Hanoi, the highest level ever recorded. There were considerable breaches in the dike network, and floods submerged newly planted paddy fields in the provinces of Hà-dông, Bac-ninh, Son-tây, Phúc-yên, Vinh-yên, Haiduong, Hà-nam and Thái-bình. The catastrophe was extensive: floods covered 330 000 hectares of the tenth-month rice, which would represent a loss amounting to 510 000 tons of paddy.[40] Prices again skyrocketed, resulting in widespread famine. In some places, people were forced to consume seed rice, compromising any chance of replanting even if the floodwaters receded quickly. A foreign observer described the situation towards the end of September 1945 as follows:

> Hanoi with a population of 200 000 inhabitants is literally dying of hunger. Communication with the regions exporting food supply have not yet been restored, and the current rice harvest has been seriously damaged by the recent floods. Famine is affecting a very wide area. People are dying in the streets every day. The worst situation is that of the feeding of infants . . . Unless heroic measures be taken, famine at all ages and in all nationalities will reach a very high level in the region.[41]

Earlier, a clear awareness of its powerlessness had induced the Tran Trong Kim cabinet, which had little training in administrative tasks and saw its legitimacy increasingly called into question, to tender its resignation on 8 August 1945. Unrest was then at its highest pitch, as the different political groups had intensified their activities. Among them, the Vietminh, the organ of the Indochinese communist party, appeared to be the best organized political force.

Since 1943, the main activities of the Vietminh had consisted in mobilizing the peasants of the Red River Delta against taxation, corvée labour, paddy requisitioning and the forced cultivation of jute. The famine offered the communists a set of arguments for their propaganda to win the support of the population of the countryside, and an opportunity to galvanize them into action, using the rallying call 'destroy the paddy granaries of the colonialists to avert the danger of famine', as a prelude to a general uprising that would 'liberate the country from the yoke of the French and Japanese imperialists'. When Vietminh leaders inventoried the 'objective conditions' prevailing after the Japanese coup of 9 March 1945, they viewed the famine, which aroused the hatred of the masses against the armies of occupation for seizing rice for their exclusive use, as one of three 'favourable circumstances' that characterized the period prior to the revolution, the other two being the political crisis that bound the hands of the French and the Japanese, and the imminent landing of the Allied troops in Indochina as the Pacific war entered its final stage.[42] Their campaign against hunger allowed the communists to command a genuine mass movement, and largely accounted for the accession of the Vietminh to power. The revolution of August 1945 matured among the wretched rural population long before the city dwellers perceived it. For this reason, it seemed in Tonkin to have followed the ideal pattern ascribed by the communists to the 'general insurrection', that it should spread

first from the villages to district and then to province towns, before reaching the large urban centres.

The Vietminh seized power without much effort during the days following the surrender of Japan on 15 August 1945. The Democratic Republic of Vietnam was proclaimed on 2 September,[43] and the subsistence issue constituted a decisive test for the new government: its credibility would depend on its capacity to master the famine. It immediately launched slogans announcing its policy – 'intensification of the production', 'not a wasted inch of land, not an idle arm' – and engaged in an operation to increase food production. The famine was placed among enemies that must be eliminated, together with illiteracy and the occupation.

The need was to move faster than the French, who were preparing to resume control over Indochina with the help of the British forces charged with disarming the Japanese under the terms of the Potsdam Agreement. Before the arrival of the French Far Eastern expeditionary corps, a Vietminh propaganda campaign placed responsibility for the famine on the French administration:

> More than two millions of our compatriots, even in the most productive areas, have died of hunger. After having mowed down two thirds of the population of Nam-dinh, Thái-bình, Hà-nam, Hai-duong, etc., the famine has shown its apparition in Annam and even in Cochinchina. Those who escaped from starvation are reduced to poverty, because the most scandalous speculation has been encouraged by the French administration: it was the first to have set the example of stockpiling and monopolizing. An unprecedented rise of prices has resulted, aggravated moreover by a policy of monetary inflation that ruins classes up to now relatively well-to-do.[44]

At a very early stage, therefore, psychological warfare with the famine as the principal theme became part of the war of resistance that the Vietminh waged against the French. For their part, the French soon understood that meeting the country's food requirements was a necessary condition for reestablishing control. On 19 September 1945, General Leclerc, the Commander-in-Chief of the French troops in the Far East, transmitted this cablegram to Paris:

> Wide publicity should be given to the catastrophic situation in

> Tonkin during our absence, disastrous floods owing to the bursting of the dikes not maintained by the Annamese in the absence of French technicians, disorder and banditry owing to the deficiency of the security service, depletion of the coffers of the Treasury, absence of the health service, prospect of a new famine. Need to insist on the famine question: that of the first semester of 1945 has caused two million victims and the Annamese revolutionary propaganda is trying to make us shoulder the responsibility for it. To do this, underline that: 1-As good rice consumers, the Japanese have besides speculated in that foodstuff and squandered the stocks indispensable to fill the gap. 2-The Japanese have diminished the surface of the paddy fields by imposing instead cultivations necessary to their war effort, in particular castor-oil plant. 3-The harvest of the last months of 1944 was already 200 000 tons short. 4-Ousted, the French were never able to execute the projected relief programs, as they were replaced by incompetent Japanese or Annamese. Hence, the famine became tragic after the end of April. It is also necessary to say that the French government has taken measures to bring rice without delay to the populations of Tonkin that a new famine is endangering... In short, it is worth to broadcast whatever may militate in favour of our return in this country and help put a check on the propaganda of our enemies.[45]

How did the situation look toward the end of 1945? The Vietminh asserted that, for the whole of the territory placed under the direct control of the Democratic Republic of Vietnam, the harvest during the winter of 1945 took place in favourable conditions, and that of the fifth month of 1946 produced a clear-cut increase compared to the pre-war period. The augmented quantity of provisions, equivalent to 2 592 000 tons of basic foodstuffs against 2 226 260 tons in the pre-war period, helped neutralize the famine. It is utterly impossible to verify these figures. It is certain, however, that the triumph of the revolution over hunger would not have been accomplished without the efforts made by the French to supply Tonkin with rice, amounting to about 20 000 tons per month beginning with November 1945,[46] since it was necessary to feed a Chinese army of 180 000 troops assigned the task of disarming the Japanese north of the 16th Parallel. These forces ransacked northern Vietnam as if it were conquered territory, taking to Nationalist China whatever they could carry off. However, although the food

situation remained difficult, people no longer died of starvation in the spring of 1946.

It would assuredly be a fundamental mistake to view the famine of 1944–5 as the sole factor that created the conditions of instability indispensable for the Vietnamese communists to place their revolutionary political structure in position. It is undeniable, however, that the repercussions of this catastrophe on subsequent events were momentous. In another respect, fear that the famine would recur induced the Vietminh leaders to cut back for the time being their policy of struggle against 'feudalism'. They would in fact wait until 1953 before enforcing radical agrarian reforms intended to lead to the building of socialism.

Notes

1 The fiftieth anniversary of the Japanese occupation of South-East Asia has rekindled interest in its political and economic effects on the area. The greatest problem researchers must confront is the scarcity of precise numerical data. For former French Indochina, the principal statistical source remains the *Annuaires statistique de l'Indochine*, however dependable these materials may prove to be. In his article 'Japan's Role in the Vietnamese Starvation of 1944–45', *Modern Asian Studies*, 29, 3 (1995): 573–618, Bùi Minh Dung, the latest author to study the matter, also has to rely on them for most of the figures used in his analysis, despite the considerable use he made of recent Japanese and Vietnamese publications. It is perhaps due to the dearth of statistics that most authors have emphasized political rather than economic features during this period. See Ralph Smith, 'The Japanese Period in Indochina and the Coup of 9 March 1945', *Journal of Southeast Asian Studies*, 9 (1978): 268–301; Masaya Shiraishi, 'La présence japonaise en Indochine (1940–1945)', in Paul Isoart (ed.), *L'Indochine française 1940–1945* (Paris: PUF, 1982), pp. 215–41; Nguyên Thê Anh, 'La famine de 1945 au Nord-Vietnam', *The Vietnam Forum*, 5 (1985): 81–100; Masaya Shiraishi, 'Vietnam under the Japanese Presence and the August Revolution', *International Studies*, 2 (1985): 1–34; David G. Marr, 'Vietnam 1945: Some Questions', *The Vietnam Forum*, 6 (1985): 155–93; David G. Marr, *Vietnam 1945: The Quest for Power* (Berkeley: University of California Press, 1995); Stein Tønnesson, *The Vietnamese Revolution of 1945: Roosevelt, Hô Chi Minh and de Gaulle in a World at War* (London: Sage, 1991). However, Lin Hua's *Chiang Kai-Shek, de Gaulle contre Hô Chi Minh (Vietnam, 1945–1946)* (Paris:

L'Harmattan, 1994) is the only volume to ignore economic subjects altogether.

2 In 1939, exports were worth 350 000 000 piastres and imports 240 000 000 piastres; in 1945, they totalled respectively 18 000 000 and 17 000 000 piastres. See Lê Châu, *Le Viêt-Nam socialiste, une économie de transition* (Paris: Maspero, 1966), p. 57.

3 Centre des Archives d'Outre-Mer (Aix-en-Provence), *Affaires Economiques*, carton 14.

4 Centre des Archives d'Outre-Mer, *Indochine NF*, 141/1267.

5 Admiral Decoux, *A la barre de l'Indochine, 1940–1945* (Paris, 1949): 430.

6 Centre des Archives d'Outre-Mer, 14 PA, carton 1.

7 André Gaudel, *L'Indochine française en face du Japon* (Paris, 1947), pp. 208–9.

8 Decoux, *A la barre de l'Indochine*, p. 430.

9 Centre des Archives d'Outre-Mer, 14 PA, carton 1, report dated 7 Jan. 1943.

10 One mau equals 3600 square metres, or 0.36 hectare. Thus five mau would be 1.8 hectares, or 4.45 acres.

11 Huynh Kim Khánh, *Vietnamese Communism, 1925–1945* (Ithaca: Cornell University Press, 1982), p. 299.

12 *Études vietnamiennes*, 24 (n.d.): 135.

13 Centre des Archives d'Outre-Mer, *Affaires Economiques*, carton 14, telegram dated 14 Dec. 1943.

14 Centre des Archives d'Outre-Mer, 14 PA, carton 1.

15 See Nguyên Thê Anh, 'La campagne nord-vietnamienne de la dépression économique de 1930 à la famine de 1945', *Revue française d'Histoire d'Outre-Mer*, 274 (1987): 43–54.

16 J. Gauthier, *L'Indochine au travail dans la paix française* (Paris, 1949), p. 228.

17 Lê Châu, *Le Viêt-Nam socialiste*, pp. 153–5. A quintal is 100 kilograms.

18 *Annuaire statistique de l'Indochine*, vol. 11, pp. 87–8.

19 Nguyên Thê Anh, 'La campagne nord-vietnamienne', p. 51.

20 Centre des Archives d'Outre-Mer, *Indochine NF*, 471/4095.

21 For more details on money circulation, inflation and indices of living cost, see Masaya Shiraishi, 'Vietnam under the Japanese Presence', pp. 12–14.

22 Centre des Archives d'Outre-Mer, *Indochine NF*, 141/1267.

23 Centre des Archives d'Outre-Mer, *Indochine NF*, 141/1267.

24 *L'Action*, 1 Mar. 1945.

25 Centre des Archives d'Outre-Mer, *Indochine NF*, 338/2718.

26 The terrible scenes of suffering endured by a population that deprivation drowned in the darkest despair have haunted the creative imagination of Vietnamese writers. These images provided Nguyên Hông with the theme of his two short stories *Đia nguc* and *Lò lua* ('The Inferno' and 'The Furnace', 1945), and, fifteen years later, Nguyên Công Hoan with the subject of his narratives *Tranh tôi tranh sáng* ('Penumbra', 1956) and *Hôn canh hôn cu* ('Chaos', 1961).

27 *Le Monde*, 8 Mar. 1946.
28 Quoted by Lê Châu, *Le Viêt-Nam socialiste*, p. 59.
29 *Tin Moi*, 28 Apr. 1945.
30 Ibid., 18 Apr. 1945.
31 Ibid., 30 June 1945.
32 Compare, for example, Trân Van Khu, 'Hàng van dân quê bi chêt dói và rét vì chính sách thuc dân vô nhân dao cua Pháp' ['Thousands of peasants died of hunger and cold because of the French's inhuman colonialist policy'], *Tin Moi*, 17–18 Apr. 1945; and Nghiêm Xuân Yêm, 'Nan dân dói' ['The scourge of famine'], *Thanh Nghi*, 5 May 1945.
33 *Tin Moi*, 17 Mar. 1945.
34 Ibid., 18 May 1945.
35 *L'Action*, 3 May 1945.
36 *Tin Moi*, 8 June 1945.
37 Ibid., 14 June 1945.
38 R. Bauchar, *Rafales sur l'Indochine* (Paris, 1946), p. 210.
39 *L'Action*, 1 Aug. 1945.
40 Centre des Archives d'Outre-Mer, *Indochine NF*, 338/2717.
41 Centre des Archives d'Outre-Mer, *Affaires Economiques*, carton 14.
42 For details, see Alexander Woodside, *Community and Revolution in Modern Vietnam* (Boston: Houghton Mifflin, 1976), pp. 215–34; Huynh Kim Khánh, *Vietnamese Communism*, pp. 302–15.
43 See David G. Marr, 'Hô Chí Minh's Independence Declaration', in K.W. Taylor and John K. Whitmore (eds), *Essays into Vietnamese Pasts* (Ithaca: Cornell University South-East Asia Program, 1995), pp. 221–31.
44 Centre des Archives d'Outre-Mer, *Indochine NF*, 338/2717.
45 Centre des Archives d'Outre-Mer, *Indochine NF*, 125/1123.
46 Centre des Archives d'Outre-Mer, *Indochine NF*, 158/1362.

10 A Survey of Village Conditions during the 1945 Famine in Vietnam

Motoo Furuta

JAPAN–VIETNAM JOINT RESEARCH ON THE 1945 FAMINE

Between the autumn of 1944 and the summer of 1945, in the final phase of the Second World War, North Vietnam was struck by a severe famine. Early Vietnamese accounts reported that 'two million' people died of starvation, and Ho Chi Minh repeated this figure in his pronouncement of independence for Vietnam on 2 September 1945.

The famine occurred at a major turning-point in Vietnam's modern history. The French colonial government was abruptly unseated by Japan on 9 March 1945, following the Japanese surrender, and the Tran Trong Kim government, created under the Japanese framework of 'independence', collapsed in the face of the Vietminh August Revolution, from which emerged the Democratic Republic of Vietnam. Since the famine occurred at a time when no government machinery existed for monitoring population movements, determining the actual conditions during the famine is extremely difficult, and made even more complicated by the 30 years of war which followed the Second World War.

The purported death toll of 'two million' became a political issue. In the course of negotiating with the Ngo Dinh Diem government concerning war reparations, the Japanese provided a figure of 'thirty thousand', to which the Diem government responded that 'one million' was more accurate. Neither side appears to have had a firm statistical basis for these statements, but the Democratic Republic of Vietnam, and the Socialist Republic of Vietnam that

succeeded it, criticized the reluctance to accept the original figure of 'two million' as a tendency of those who preferred 'to ignore the crimes of French colonialism and Japanese fascism'.

Fifty years after the event, reconstructing the facts of the famine has become extremely difficult. However, two recent changes in Vietnam have made it possible to approach a better understanding of this event. The first of these changes is linked to the re-examination of Vietnam's modern history in the midst of 'Doi Moi'. The notion now gaining currency in Vietnamese academic circles is that it is more important to assess the famine on scientific grounds than to dwell on the validity of the 'two million' figure. The importance of a systematic reconstruction of the data concerning the famine is widely recognized among scholars. The second important change is connected with a recent florescence of regional historical studies in Vietnam. Published village, district, and province histories are replete with records of the damage from the 1945 famine, showing it to be one of the most devastating episodes in the twentieth-century history of Vietnam.

Under these circumstances, by mutual consent of the Japan–Vietnam Friendship Association (a non-governmental organization (NGO) in Japan) and the Vietnam-Japan Friendship Association (an NGO in Vietnam), the author and Professor Van Tao of the Vietnam Research Institute of History (Vien Su Hoc) carried out a collaborative research project to examine conditions during the 1945 famine. This project conducted surveys in 23 hamlets in an area extending from Quang Tri province up to Cao Bang province during 1992 and 1995, and published the results in a 727-page joint report in Vietnamese in August 1995 under the title of *Nan Doi Nam 1945: Nhang Chung Tich Lich Su* (*The 1945 Famine in Vietnam: Historical Records and Evidence*), published by the Vietnam Research Institute of History in 1995.

The Methodology and Results of the Survey

The most critical aspect of the survey was to develop population figures for each hamlet and determine the number of deaths in 1945 as accurately as possible. Almost no data could be found concerning population, so it was necessary to rely on the recollections of older residents in reconstructing this information. Using this method, we calculated the number of households which formed the community, the number of persons in each household, the eco-

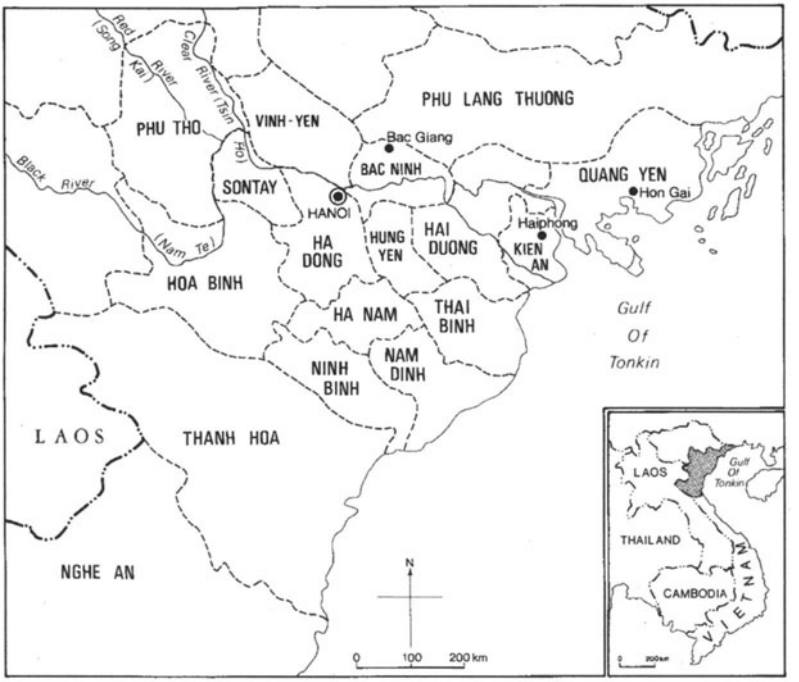
Table 10.1 The total population and deaths at the time of famine in 1945

Hamlet	*Province*	*Population*	*Number of Deaths*	*Death Rate (%)*
Kha Ly	Bac Giang	1 300	162	12.50
Duong Huc	Bac Ninh	1 473	372	25.25
Nhuong Ban	Cao Bang	430	36	8.37
La Khe Bac	Ha Dong	652	177	27.14
Binh Trung	Ha Nam	1 398	638	45.64
Co Bi[1]	Bac Ninh	2 401	234	9.75
Do Nhan Ha	Vinh Phuc	580	147	25.34
Thach Mon[2]	Ha Tinh	1 943	215	11.07
Nhu Tinh	Hai Duong	2 403	351	14.61
Chi Lai	Hai Phong	329	80	24.32
Quan Muc	Kien An	2 052	1 206	58.77
Yen Quang	Hoa Binh	1 104	207	18.75
Phuong Thong	Hung Yen	792	180	22.73
Dong Coi	Nam Dinh	1 395	781	55.99
Tay Yen	Ninh Binh	494	189	38.20
Lang Trung	Nghe An	869	293	33.72
Huong Non	Phu Tho	523	70	13.38
Tho Ngua	Quang Binh	1 391	600	43.14
Cam Pho	Quang Tri	1 237	164	13.26
Bui Xa[3]	Quang Yen	524	382	73.70
Luong Phu	Thai Binh	1 379	594	43.07
Dong Quang	Thai Nguyen	339	66	19.47
Thu Phu	Thanh Hoa	1 141	217	19.02

Notes:
1 Co Bi was a village consisting of 3 hamlets.
2 Thach Mon was a village consisting of 4 hamlets.
3 It was impossible to reconstruct the total population of Bui Xa hamlet; 524 is the total number of people belonging to the families which had deaths, so the death rate of 73.7 per cent for this hamlet has a different meaning from the death rates cited for other hamlets.

nomic standing of each family at the time of the famine, and the number of deaths. The results, which are summarized in Table 10.1, are considered to have a high degree of accuracy (see Map 11).

Of these 23 sites, five are in the northern part of Annam. The 18 sites in Tonkin can be classified into five types: (i) ethnic-minority hamlets in mountainous regions (Nhuong Ban and Yen Quang); (ii) hamlets in the middle reaches of the Red River (Kha Ly, Huong Non and Dong Quang); (iii) hamlets with handicraft industries located near large cities (La Khe Bac, Co Bi, Do Nhan Ha, Chi Lai



Map 11 Tonkin, showing provinces, 1940s

and Dong Coi); (iv) non-agricultural hamlets occupied by fishermen or labourers in the Red River Delta (Quan Muc and Bui Xa); and (v) agricultural hamlets in the Red River Delta (Duong Huc, Binh Trung, Nhu Tinh, Phuong Thong, Tay Yen, and Luong Phu). Death rates for these five categories during 1945 are shown in Table 10.2.

Table 10.2 shows that losses were concentrated in the Red River Delta. This overpopulated region was characterized by agricultural hamlets which had very small amounts of arable land. Two of the five agricultural hamlets surveyed in the Red River area, Luong Phu in Thai Binh Province and Phuong Thong in Hung Yen Province, had less than one sao (360 square metres) of arable land per capita at the time of the famine. The next two sections provide brief summaries of the survey findings for these two hamlets.

Table 10.2 Average death rates for different categories of hamlets

Category	*Death rate (%)*
(1) Ethnic-minority hamlets in mountainous regions	13.56
(2) Hamlets in the middle reaches of the Red River	15.10
(3) Hamlets with handicraft industries near large cities	28.51
(4) Non-agricultural hamlets in the Red River Delta	65.84
(5) Agricultural hamlets in the Red River Delta	31.59

LUONG PHU HAMLET IN TIEN HAI DISTRICT, THAI BINH PROVINCE

Luong Phu is situated in the northernmost region of Tay Luong village, which faces the Tra Ly river. This hamlet was founded some 300 years ago and was the earliest community in Tien Hai district of Thai Binh province. The primary occupations of Luong Phu's inhabitants during this early period were fishing and salt production, but with the retreat of the coastline, many villagers turned to paddy farming, with carpentry as a secondary occupation. Even after this shift, fishing remained important through the harvest of shrimp and crab from ponds.

The amount of arable land available to Luong Phu was very small. In 1945, there were no more than 35 mau of public fields (1 mau = 10 sao = 0.36 hectare) and 80 mau of private fields, or a total of 41.4 hectares. At the time, Luong Phu had 286 households and a population of 1379. According to village elders, the public fields distributed to adult males amounted to only 1.70 sao (612 square metres) per person. Furthermore, the productivity of public fields was low compared with private fields, with an average yield of 35 kilograms per sao, and two harvests per year; the average annual return of farmers possessing only 1.70 sao of public fields was just 119 kilograms of rice. Considering that the average population per household was 4.8 people, these rice fields provided the farmers with a standard of living that was extremely low.

According to our survey, 70 households (24 per cent of the total) possessed private fields, with an average size of 1.14 mau per farm. It is believed that private fields had much greater productivity than public fields, but even if the output were the same, the average farm possessing private fields would harvest 798 kilograms of rice. Thus, the yield of private fields was sufficient to provide a farmer

with a stable life. The largest private fields were slightly more than five mau, indicating that large-scale land possession had not yet developed among the people of Luong Phu.

Luong Phu was considered a prosperous community by the residents of other hamlets nearby. It is thought that this was due to the fact that the people of Luong Phu were able to secure relatively high levels of income through secondary activities such as carpentry and fishing. Yet, even for Luong Phu the famine of 1945 proved to be a miserable experience, resulting in the death of 594 villagers or 43.1 per cent of the population. To be precise, the figure of 594 represents the number of deaths which occurred in the midst of the famine, but the famine was not the direct cause of all of these deaths. Among those identified by the present survey whose death was not clearly a result of the famine, are the case of a family which lost two members to an epidemic illness; one person who died from eating an unripe papaya; one that died following corporal punishment for stealing rice; and some people who died suddenly after partaking heavily of the spring rice harvest. Strictly speaking, such cases could not be considered famine deaths, but these individuals can still be considered victims of the famine. There remains the definite possibility that other deaths were caused by old age or illness, and it is nearly impossible to determine the cause of death for each individual case. However, basing the calculation on the figure of an average death rate of 1.4 per cent to 2.8 per cent given by Pierre Gourou in his 1930 survey of Tien Hai District, there is little doubt that over 40 per cent of the population of Luong Phu fell victim to the famine of 1945.

The immediate cause of the famine was a poor autumn harvest in 1944, the result of erratic weather throughout the Red River Delta. Nguyen Trong Dot, who had a 1.5 mau private field in Luong Phu, recalled that his harvest that autumn amounted to approximately 300 kilograms. Based on the figure of 35 kilograms per sao, this represents just slightly more than half of a normal harvest. Adding to the difficulties created by a poor harvest was a system of forced rice purchasing implemented by the French colonial administration under pressure from Japan. Nguyen Trong Dot, for example, was required to hand over 100 of his 300 kilograms of rice. Past research has indicated that this system of forced rice purchasing depleted supplies in farming village and reduced emergency stocks, thus triggering the famine, and the case studies in our survey re-affirm this conclusion. In Luong Phu, famine deaths

Table 10.3 Deaths by household

Death rates of family members (%)	*Number of households*	*Death rates in 286 households (%)*
0	82	29
1–32	38	13
33–66	54	19
67–99	57	20
100	55	19

Table 10.4 Economic status and famine losses

	0–32%	*33–66%*	*67–100%*	*Total*
Holding private land	55	13	2	70
No arable land	10	9	20	39
Full-time farmer	39	29	29	87
Farmer with secondary employment	71	26	63	160

had begun to occur by January, 1945, and residents report that the famine was at its peak between January and May, when the spring harvest took place. Famine conditions continued for several months, forming the background to the August Revolution and the Declaration of Independence of the Democratic Republic of Vietnam, and finally showing some signs of easing with the autumn harvest in 1945.

Table 10.3 shows 286 households arranged by the number of deaths in each. This table indicates that the data clusters around two extremes: the 82 households with no deaths at all, and the 55 households which lost all members. In particular, 42 per cent of all families lost less than one-third of their members, 19 per cent lost more than one-third but less than two-thirds, and 39 per cent lost two-thirds or more. This suggests the presence of economic factors which sharply separated the fates of the families.

Table 10.4 examines famine losses according to ownership of arable land, ownership of private lands, and the difference between full-time farming households and farming households with some kind of secondary occupations. Since information was not available for all of the families, the chart is incomplete. However, from this data, it is still possible to examine disparities in the effects of the famine.

First and foremost, the table clearly indicates that losses experienced by families which held private lands were relatively light. Among the 70 families in this category, 52 lost no family members at all. These private tracts of land differed in size – one family held more than five mau of land, 21 families held more than one mau but less than five, and 48 families held less than 1 mau – and only three families holding more than one mau of private land experienced any deaths. Since the overall death rate among private landholders was less than one-third, it would be more accurate to say that holding more than 1 mau of land served as a safety net during the famine in the Luong Phu hamlet. In contrast, among the families listed as holding 'no arable land', 20 families (51 per cent) lost more than two-thirds of their members. Thus, it would be accurate to conclude that ownership of arable lands mitigated the impact of the famine. While the death rate among full-time farming households was 35.5 per cent, that for farming households with secondary employment was 43.75 per cent. The rate goes up to 53.5 per cent for full-time farmers with no private land. These figures also indicate that holding arable lands was instrumental in preserving life during the famine. However, for poor families which only planted crops on public fields or did not hold any arable lands, income from secondary employment played an important role in minimizing the effect of the famine.

Among these secondary occupations in the Luong Phu hamlet, fishing and carpentry were important. However, the extent of losses among these two professions was in clear contrast as shown in Table 10.5.

Table 10.5 indicates that while 54 per cent of households engaging in carpentry had death rates of less than one-third, 55 per cent of households engaging in fishing lost more than two-thirds of their members. As the latter was a form of food production, this result is a bit surprising. Actually, however, fishing in Luong Phu consisted mainly of rearing shrimp, crabs and frogs in lakes and swamps, and provided a meagre income. Moreover, the situation is even more understandable if we consider that the peak of the famine fell outside the season for gathering shrimps and crabs. By contrast, carpenters had higher incomes than fishermen, and their market was not limited to the local village but extended to areas throughout the Red River Delta, including large cities, allowing many of them to accumulate enough income to pull through the famine.

Table 10.5 Secondary occupations and famine losses

	Death rate (%)			
	0–32	*33–66*	*67–100*	*Total*
Fishing	11	15	32	58
Carpentry	22	6	13	41

PHUONG THONG HAMLET IN PHU TIEN DISTRICT, HUNG YEN PROVINCE

As a part of the former Red River port city of Pho Hien, Phuong Thong hamlet is located at an important trading centre between Thai Binh and Hung Yen. However, Phuong Thong at the time of the 1945 famine did not have strong commercial activities and was an agricultural hamlet, with a population of 792 individuals in 153 households. According to our survey, 180 people died during the famine, that is, 22.7 per cent of the total population. Among these deaths, three persons were missing and believed dead, nine persons died of illness, and one person from over-eating. Table 10.6 shows 180 households arranged by the number of deaths in each one.

In Phuong Thong, 65.3 per cent of all households lost less than one-third of their members, 17 per cent lost more than one-third but less than two-thirds, and 17.7 per cent lost two-thirds or more. Here, in contrast with Luong Phu, the data does not cluster around two extremes. This is a difference between a hamlet which lost more than 40 per cent of its members and a hamlet which lost about 20 per cent or less. However, Table 10.7 shows that in Phuong Thong, as in Luong Phu, land holding directly affected famine losses.

It is clear from this table that families holding private lands suffered very few losses. Among the 32 families in this situation, only four had deaths while the other 28 lost no family members at all. In contrast, among the families listed as holding 'no arable land', 12 (50 per cent) lost more than two-thirds of their members, and the overall death rate was 63.9 per cent. The death rate for people in full-time farming households was about 15.2 per cent, and that of farming households with secondary employment was 21.5 per cent. But for full-time farms with less than 4 sao of land, the rate goes up to 22.5 per cent, higher than that for farming households

Table 10.6 Status of death by household

Death rate of family members (%)	*Number of households*	*Death rate in 180 households (%)*
0	75	49.0
1–32	25	16.3
33–66	26	17.0
67–99	16	10.5
100	11	7.2

Table 10.7 Land holding and famine losses

	Death Rate(%)			
	0–32	*33–66*	*67–100*	*Total*
No Arable Land	6	6	12	24
Having Private Land	32	0	0	32
Holding 1–3 sao	48	16	13	77
Holding 4–9 sao	31	2	1	34
Holding 1 mau or more	13	1	0	14
No Information	1	2	1	4

with secondary employment. These figures are very similar to those of Luong Phu mentioned above, and support the conclusion that ownership of private lands was instrumental in preserving life during the famine.

Like Luong Phu, Phuong Thong had little arable land. In 1945, there were about 35 mau of public fields and more than 16.4 mau of private fields – a total of 18.5 hectares. Per capita arable land in Phuong Thong was merely 234 square metres, compared with 300 square metres in Luong Phu, and 66 per cent of all households held less than three sao of arable land or had no arable land at all. As far as agriculture is concerned, Phuong Thong was poorer than Luong Phu. This being the case, why did Phuong Thong suffer fewer losses than Luong Phu? The answer lies in a significant feature of Phuong Thong hamlet – the presence there of a jute factory operated by a Japanese company called Dainan Koshi (Cong ty Dai Nam, Dai Nam company). Jute cultivation during the Second World War has been long considered as one of the main factors magnify-

ing the distress caused by the 1945 famine. In the case of Phuong Thong, however, the village elders said that the jute factory had brought some cash income to the villagers and this had helped reduce the impact of the famine. In a very poor village like Phuong Thong, the losses might have been greater without the existence of the jute factory.

SOME CONCLUSIONS

This survey aimed at reconstructing conditions during the 1945 famine in 23 hamlets which were characteristic of the region affected. However, since the survey has not yet examined how typical these 23 cases are, it would be premature to draw conclusions concerning the accuracy of the figure of 'two million' deaths. However, the survey does make it evident that although death rates differed from one place to another, the whole of northern Vietnam was struck by a very severe famine and the consequences were dire.

After the great famine of 1945, Tay Luong village, including the hamlet of Luong Phu, became a battle site during the war fought against the French. Later, during the Vietnam War, many residents were sent to fight against the United States in South Vietnam. Tay Luong village lost 511 people and more than 500 were wounded during the 30 years of war following the end of the Second World War. Even so, these figures are far lower than the number of victims of the 1945 famine. This situation was the same for almost all of the 23 hamlets covered by the survey. Thus, for many villages in North Vietnam, it seems fair to conclude that the famine was the worst experience of this century.

Note

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