

*The Great Second World War Vietnam and Java Famines**

GREGG HUFF

Pembroke College, University of Oxford

Email: gregg.huff@pmb.ox.ac.uk

Abstract

This article provides quantitative assessments of the great famines that occurred in Vietnam and Java in 1944–1945, which together claimed the lives of some 3.4 million people. It shows that in both Vietnam and Java, harvest shortfalls, in which weather figured prominently, were so large that insufficient food was available to feed everyone. Nevertheless, in both instances, even with the pressures of war and weather, governments could have acted differently and largely, perhaps even wholly, prevented famine. Although Java's famine had few political repercussions, Vietnam's was instrumental in the August 1945 Viet Minh and communist revolution.

Introduction

Between 1942 and 1945, the lethal triumvirate of war, weather, and human agency combined to create four great Asian famines. Two of these, in Bengal and Henan, have been extensively researched.¹ Less

* I owe thanks to the editor and two anonymous referees of *Modern Asian Studies* for a number of ideas and suggestions, and to Andrew Bain and Dick DuBoff for numerous suggestions on ways to improve earlier versions of this article. Pierre van der Eng offered numerous detailed and helpful comments. He both clarified my understanding of Indonesian agriculture and development, and warned me away from several errors. Appreciative thanks also to Robert Cribb and Ferjan Ormeling who were a great help with the Java maps. Tjitske Wijngaard and Sarah Womack provided excellent and greatly appreciated research assistance. Pham Huyen carried out expert data analysis. Mike Shand drew the maps. An earlier version of this article was presented at the East Asian Economic Association Conference, Bandung, 2016, and thanks go to the conference participants. I gratefully acknowledge support and funding from an ESRC grant (RES-062-23-1392), the Leverhulme Trust grant EM-2014-081, a British Academy/Leverhulme Small Research Grant, and the Royal Economic Society Small Academic Expenses Scheme.

¹ Recent major studies, each with numerous relevant references to the Bengal and Henan literature, are: C. Ó Gráda, 'The ripple that drowns? Twentieth-century famines

well documented are those that took place in 1944–1945 which claimed a million lives in Vietnam and led to 2.4 million deaths on the Indonesian island of Java.²

This article has two aims. One, fundamentally empirical, is to address the issue of whether famines in Vietnam and Java were distributional or due to a deficit in food availability. While Sen recognizes the difficulties of analysing famine in the context of war, he maintains, most famously in the case of Second World War Bengal, that famines can be explained by maldistribution.³ In other words, even though the amount of available food may fall, enough still exists to feed everyone. People starve because they lack sufficient entitlements to command enough of the available food.

The alternative explanation, of which Ó Gráda is a principal proponent, but with which many concur, is that an absolute shortfall in food can often be demonstrated to account for famine.⁴ Food availability deficit (FAD) famines pose an empirical question: was the decline sufficiently large that available food, even if more or less equally divided, was inadequate to sustain the existing population? This article

in China and India as economic history', *Economic History Review* vol. 61, no. S1, 2008, pp. 5–37; P. Bowbrick, 'The causes of famine: a refutation of Professor Sen's theory', *Food Policy* vol. 11, no. 2, 1986, pp. 105–24; A. Garnaut, 'A quantitative description of the Henan famine of 1942', *Modern Asian Studies* vol. 47, no. 6, 2013, pp. 2007–45; M. Muscolino, 'Violence against people and the land', *Environment and History* vol. 17, no. 2, 2011, pp. 291–311; M. Muscolino, *The Ecology of War in China: Henan Province, the Yellow River, and Beyond, 1938–1950*, Cambridge University Press, New York, 2015.

² Recent studies of Vietnam, which range widely but include consideration of the famine, are D. Marr, *Vietnam 1945: The Quest for Power*, University of California Press, Berkeley, 1995; D. Marr, *Vietnam: State, War and Revolution (1945–1946)*, University of California Press, Berkeley, 2013; and G. Gunn, *Rice Wars in Colonial Vietnam: The Great Famine and the Viet Minh Road to Power*, Rowman and Littlefield, Lanham, MD, 2014. The only in-depth study of Java is P. van der Eng, *Food Supply in Java during the War and Decolonization, 1940–1950*, Munich Personal RePEc Archive, p. 38 (originally published by the Centre for South-East Asian Studies, University of Hull, Hull, 1994). The famine is also examined in S. Sato, *War, Nationalism and Peasants: Java under the Japanese Occupation 1942–1945*, M. E. Sharpe, Armonk, NY, 1994.

³ A. Sen, *War and Famines: On Divisions and Incentives*, Suntory-Toyota Centre, London School of Economics and Political Science, London, 1991; A. Sen, 'Ingredients of famine analysis: availability and entitlements', *Quarterly Journal of Economics* no. 96, 1981, pp. 433–64; A. Sen, *Poverty and Famines: An Essay on Entitlements and Deprivation*, Clarendon Press, Oxford, 1981.

⁴ C. Ó Gráda, *Black '47 and Beyond: The Great Irish Famine in History, Economy and Memory*, Princeton University Press, Princeton, 1999; Ó Gráda, 'The ripple'; B. Campbell, 'Nature as historical protagonist: environment and society in pre-industrial England', *Economic History Review* vol. 63, no. 2, 2010, pp. 281–314; Garnaut, 'Quantitative description'.

quantifies food availability in Vietnam and Java, and establishes that there was simply not enough food to go around, even if it had been approximately equally distributed.

An analysis of famine inevitability and preventability is the article's other main aim. I argue that in a famine area, in the context of war, while decisions for war and the existence of erratic weather are exogenous, human agency is not. Voluntary action may avert a potentially avoidable famine or may fail to do so, possibly due to misguided policies. The article contends that the second of these two possibilities applied to both Java and Vietnam. In Java, policies enacted by the occupying Japanese military led to mass famine. The Vietnam famine, notwithstanding highly unfavourable weather and wartime bombing, might well have been sidestepped if one or more of three main groups had moved to supply food to the famine-affected Tonkin delta and North Annam. Those whose decisions could have made a difference included the French, who administered the country as a pro-Vichy regime until the 9 March 1945 Japanese coup, the Japanese military which occupied Vietnam from 1941 onwards, and the Americans who bombed the country.

In exploring human agency, the article draws on the work of Ellman and his distinction between FAD_1 and FAD_2 famines.⁵ For the former, feasible human actions to avoid famine do not exist. Ellman shows this to be true of the 1941–1944 starvation of Leningrad and Ó Gráda identifies the Great European famine of the 1310s as falling into the FAD_1 category.⁶ By contrast, FAD_2 famines are differentiated by the existence of 'feasible policies that could have prevented the famine or greatly reduced the number of victims'.⁷ This article demonstrates that the famines in both Java and Vietnam were FAD_2 and indicates what could have been done to avert them.

Even in a FAD_2 famine, entitlements matter. An account that utilizes the concepts of endowments and entitlements shifts the focus from the Malthusian nature of FAD famines towards uncovering which population groups were most at risk. In Vietnam and Java, the landless and those dependent on wage labour were by far the most likely to die during the famine. And although famine occurred largely in the

⁵ M. Ellman, 'The 1947 Soviet famine and the entitlement approach to famines', *Cambridge Journal of Economics* vol. 24, no. 5, 2000, pp. 603–30.

⁶ C. Ó Gráda, *Famine: A Short History*, Princeton University Press, Princeton, 2009, p. 232.

⁷ Ellman, 'Soviet famine', p. 621.

countryside, many of its victims died in Hanoi, Haiphong, or Jakarta, having walked to these cities in the hope of finding food.

Famine magnitude

In both Vietnam and Java, the total number of famine victims is impossible to establish, as is the case for most famines.⁸ Estimates of Vietnam's famine-induced deaths vary from a lower boundary of about 700,000 to an upper one of two million people. The latter, although enshrined in Vietnam's Declaration of Independence and communist mythology and accepted by some observers, is generally regarded as too high.⁹ A semi-official figure of 1.3 million deaths appears in a November 1946 report, apparently based on an earlier report dated 13 November 1945, stating that in 1945 over one million people died of famine in northern Vietnam and 300,000 in central Vietnam. However, that report does not discuss how the figures were derived.¹⁰ The best reckoning of total famine deaths, which include both Tonkin and North Annam in northern Vietnam, is probably Marr's estimate of a million from January through to May 1945 when the famine was at its height.¹¹ This figure amounts to 8.3 per cent of the 1943 population of Tonkin and the North Annam provinces of Than Hoa and Nghe An, and 7.9 per cent of the total Tonkin and North Annam (Than Hoa, Nghe An, and Ha Tinh) population of 12,708,700. Accepting a figure of 1.3 million deaths would raise mortality to 10.2 per cent of the 1943 population of all of Tonkin and North Annam. For either one million or 1.3 million, a tighter definition of Vietnam's famine affected area, restricted to the Tonkin delta and North Annam (Than Hoa and Nghe An), would substantially increase mortality percentages to 10 per cent for a million deaths and 13 per cent for 1.3 million. With any of these estimates, excess mortality was as high in relative terms as in 1840s

⁸ Ó Gráda, *Famine*, p. 92.

⁹ K. C. Chen, *Vietnam and China 1938–54*, Princeton University Press, Princeton, 1969, p. 369.

¹⁰ Centre des Archives d'Outre-Mer, Aix-en-Provence, France (hereafter AOM), Fonds du gouvernement de fait (hereafter GF)/12, 'Report to the Minister of the Interior (Le Nhiep)'. The report is signed: 'Chair of the Northern Region People's Committee, Nguyen Van Xuoc'. A pencilled archival note gives a date of 7 Nov. 1946. The earlier report of 13 November 1945 is signed by Phan Tu Nghia, Bureau of Economics and Relief, Northern Region, and is found on p. 179 of the file.

¹¹ Marr, *Vietnam 1945*, p. 104.

Ireland, and a good deal higher than in 1943–1944 Bengal. Both are regarded as ‘great’ famines and, on that basis, Vietnam in 1944–1945 deserves a similar description.

Famine mortality in Java, although uncertain, probably also ranks as sufficient to constitute it as a great famine. It is clear that by 1944 in Java, as recent histories point out: ‘a very high death rate was recorded’, ‘starvation was widespread’, and people dying by the roadside were a common sight.¹² At the time, however, there seems to have been, unless this information was in destroyed Japanese records, remarkably little comment on famine or attempts to quantify it. Post-war estimates vary from Jong’s some two million, or about one in 20 Javanese, to the approximately three million suggested by Friend, although this includes deaths caused by a lack of medical attention and executions as well as hunger and disease.¹³ De Vries arrives at a total of 2.45 million ‘lost souls’ but this seems to encompass births that would have occurred in the absence of Japanese occupation.¹⁴ Booth appears to endorse this estimate but does not provide additional evidence.¹⁵ Reconstruction of demographic data, itself imprecise, affords the only reliable means of attempting to quantify Java’s famine. Van der Eng provides a thorough analysis of available data and his figure of about 2.4 million deaths above normal mortality is probably near the truth.¹⁶ While a staggering number, at around 5.7 per cent of Java’s population of about 42 million, this was, in terms of proportionate impact, well below the Vietnamese famine.

Ecology and population pressure

Both Vietnam and Java had complex ecologies and fragile equilibria between population and food. In Vietnam, ingenuity and, from the late

¹² A. Kurasawa, ‘Forced delivery of paddy and peasant uprisings in Indramayu, Indonesia: Japanese occupation and social change’, *Developing Economies* vol. 21, no. 1, 1983, p. 70; Sato, *War, Nationalism*, pp. 33, 128, 203.

¹³ L. de Jong, *The Collapse of a Colonial Society: The Dutch in Indonesia during the Second World War*, KITLV Press, Leiden, 2002, pp. 235, 281; T. Friend, *The Blue-Eyed Enemy: Japan against the West in Java and Luzon, 1942–1945*, Princeton University Press, Princeton, 1988, p. 264; T. Friend, *Indonesian Destinies*, Harvard University Press, Cambridge, 2003, p. 34.

¹⁴ E. De Vries, ‘Vital statistics under Japanese rule’, *Economic Review of Indonesia* vol. 1, no. 1, 1947, pp. 18–19.

¹⁵ A. Booth, *Economic Change in Modern Indonesia: Colonial and Post-Colonial Comparisons*, Cambridge University Press, Cambridge, 2016, p. 36.

¹⁶ van der Eng, *Food Supply*, p. 38.

nineteenth century, French engineering allowed large increases in rice production in both the Red River delta in Tonkin in the north of Vietnam (see [Figure 1](#)) and the Mekong River delta in Cochinchina in Vietnam's south.

The contrast between the two deltas, separated by some 1,700 kilometres, could, however, hardly have been sharper. In Cochinchina, an extensive system of French-constructed canals, which linked existing waterways and enabled substantial inwards migration, transformed frontier land into one of the world's three major rice-exporting areas. French hydrology had a quite different impact on northern Vietnam. Dykes holding back the Red River (also called the Song Hong, as in [Figure 1](#)) prevented most of the delta from being flooded and allowed rice production to expand and Tonkin's delta provinces to become among the world's most densely populated areas (see [Figure 2](#)). Population continuously pressed against food availability in a way that was Malthusian. Rice was intricately cultivated and, as early as the 1920s, Tonkin's population consumed as food some 80 per cent of the rice it produced.¹⁷

Acute overpopulation, both in Tonkin and to the south of North Annam, was accommodated only through a highly unequal social structure that left most people vulnerable to shocks. In the late 1930s, the delta population of some seven million included between two and three million day labourers and a further million unemployed or underemployed.¹⁸ Between 50 and 60 per cent of families were virtually or wholly landless. Unpredictable, often violent, tropical weather placed these people at risk: 'in a normal year the poorest section of the population (50 per cent to 60 per cent) is barely sustained, but only slightly unfavourable circumstances suffice to make this population suffer from a dearth in the pre-harvest season'.¹⁹ The poor typically ate only one meal a day and had enough to eat for no more than four months of the year, mainly after harvests, which was also the only time they could achieve a predominantly rice diet. Otherwise, they relied on

¹⁷ Office of Population Research, 'French Indo-China: demographic imbalance and colonial policy', *Population Index* vol. 11, no. 2, 1945, p. 74.

¹⁸ G. Khérían, 'Les méfaits de la surpopulation délétère', *La Revue Indochinoise: Juridique et Économique* nos. 7–8, pt 2, 1938, pp. 478, 498–99; P. Brocheux and D. Hémery, *Indochina: An Ambiguous Colonization 1858–1954*, University of California Press, Berkeley, 2009, p. 265.

¹⁹ P. Gourou, *The Standard of Living in the Delta of the Tonkin (French Indo-China)*, Institute of Pacific Relations, New York, 1945, p. 14; see also p. 6.

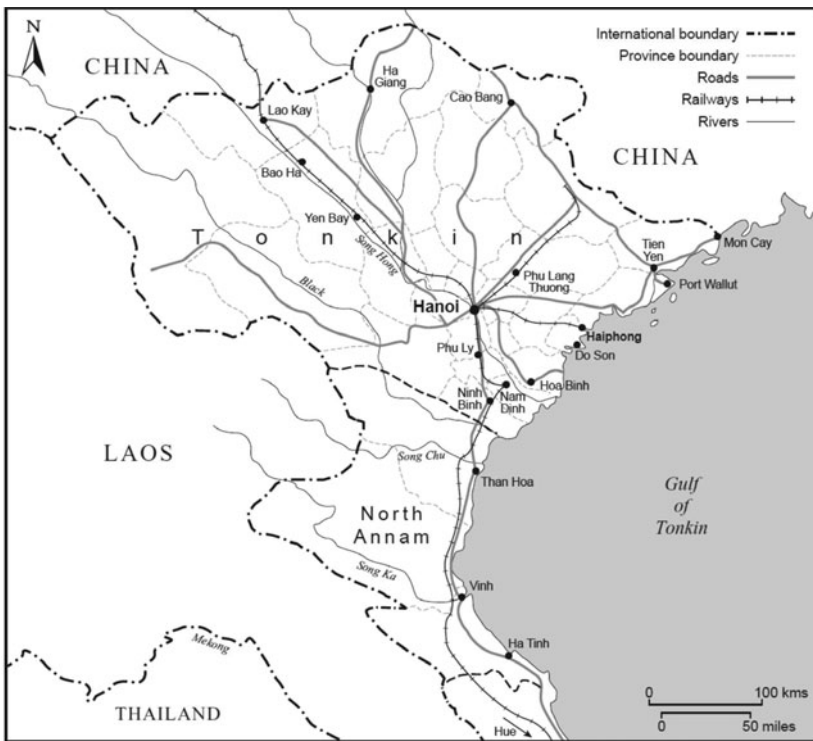


Figure 1. North Vietnam's railways, roads, and rivers. *Source: Indochina, Atlas de l'Indochine, Service Géographique de l'Indochine, Paris, 1928.*

somehow being able to buy or borrow rice and on greater consumption of potatoes, corn, and taros.²⁰

Java's ecology produced a system of food crop cultivation which, extending over much of the available land, was divided between irrigated and non-irrigated regions. The former, known locally as *sawah*, consisted of flooded fields in lowlands and on terraced hillsides; in farm agriculture, this was used almost exclusively to grow rice. Non-irrigated, rain-fed fields also produced rice, but were generally used to grow other crops including cassava, maize, and sweet potatoes.

Because mineral plant food was carried in water, *sawah* cultivation was capable of greater expansion than would have been the case had rice been dependent wholly on its immediate soil. However, an obvious constraint on *sawah* farming was the ability of its farmers to subsist on

²⁰ Office of Population Research, 'French Indo-China', p. 75; V. H. Nguyen, *Le Problème de la Paysannerie Annamite au Tonkin*, Tendances, Hanoi, 1939, pp. 9, 11, 18.

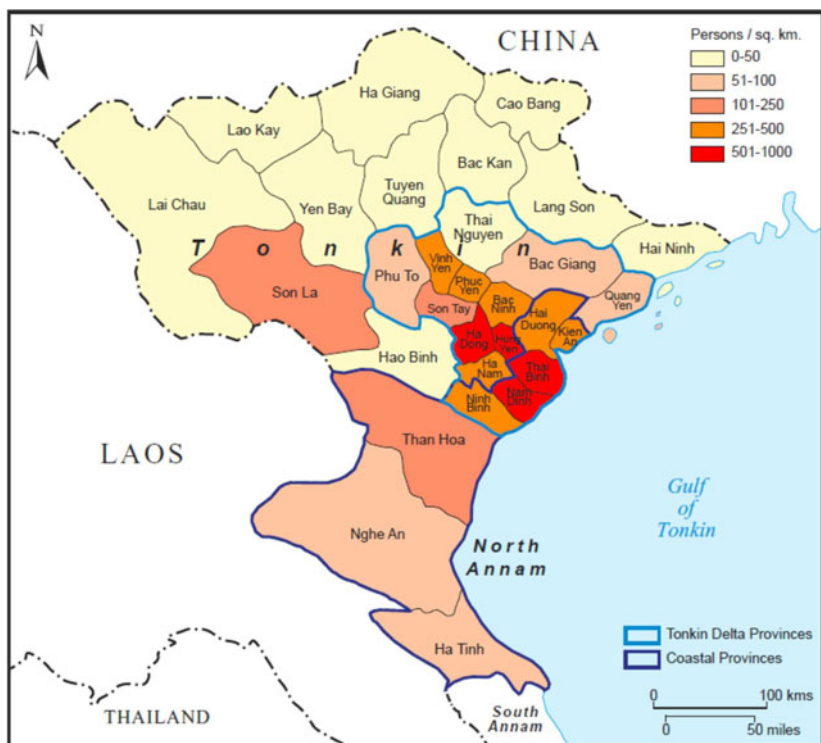


Figure 2. Tonkin and North Annam population density, 1943. *Source:* Indochina, *Atlas de l'Indochine*; Indochina, *Annuaire Statistique*, irregular series covering the years 1913–1946 and published 1927–1948, Hanoi: 1941–1942, p. 87, and 1943–1946, p. 89.

continuously decreasing marginal returns to labour in rice agriculture under prevailing technologies.²¹ For *sawah* cultivation, labour and water were essential inputs, the latter required at an average rate of 3.6 to 5.4 gallons per acre per minute on clay soil and over twice that amount on porous loamy or sandy soils.²²

In the 1890s, Java's population was already seemingly at a natural ceiling and, given the current technology, the island verged on overpopulation. Nevertheless, numbers continue to expand due to

²¹ Cf. P. Gourou, *Tropical World*, Longmans Green, London, 1953, pp. 100–01; C. Geertz, *Agricultural Involvement: The Process of Ecological Change in Indonesia*, University of California Press, Berkeley, 1963, pp. 29–34.

²² Naval Intelligence Division, *Netherlands East Indies*, 2 vols, Naval Intelligence Division of the Admiralty, London, 1944, vol. 2, p. 176.

intricate irrigation, Java's rich volcanic soil, and migration to upland areas. Important to *sawah* expansion were public investment in head works and channels for irrigation, and the time and effort individuals spent on irrigation at terminal levels (farmers' fields which received communal village investment) and the drainage of fields. By the 1930s, population density averaged 318 persons per square kilometre, but in parts of central Java, densities were between 500 to over 750 per square kilometre, comparable to the Tonkin delta and the most thickly populated regions of India and China (see [Figure 3](#)).

Plantation agriculture, which covered some 1,378,000 acres, and, to a much lesser extent, factories provided some outlet for Java's large pool of surplus labour. However, plantation and factory work, including Java's many sugar factories, were mostly seasonal and so unstable.²³ During the war, Javanese estate workers, landless and probably lacking the capital and skills to begin subsistence cultivation, found themselves at serious risk of being unable to obtain food. The problem became more pervasive throughout the war because the Japanese occupation cut off Indonesia from the global economy. Without this market, estate cultivation continuously contracted. By 1944, it had largely ceased.

Rice was the Javanese staple and a favoured food, but by the 1930s per capita daily consumption averaged only about 230 grams, and comprised about two-fifths of the average Javanese diet.²⁴ To complement rice, pre-war Javanese depended on crops such as cassava, sweet potatoes, maize, and cassava (tapioca). Crucially, Java split into rice-surplus and rice-deficit regions, the latter in the east and south of the island (see [Figure 4](#)). Beginning in 1933, although most rice continued to be traded and transported privately, the colonial government initiated a programme of intervention in the rice market to ensure supplies for deficit areas. The flow of rice supplies, and their equalization across provinces, became fundamental to the island's food security. Java's extensive transport network allowed the achievement of a delicate balance of intra-province specialization and interdependence between surplus and deficit regions.²⁵ On the eve of the Second World War, Java had become self-sufficient in rice through carefully gauged incentives and an intricate delivery and storage system. In 1941, supplies

²³ Ibid., pp. 179, 284, 290–91.

²⁴ Ibid., p. 170; van der Eng, *Food Supply*, pp. 3, 8.

²⁵ On pre-war Java's highly integrated rice market, see Pierre van der Eng, 'Market responses to climate stress: rice in Java in the 1930s', *Australian Economic History Review* vol. 50, no. 1, 2010, pp. 62–79.

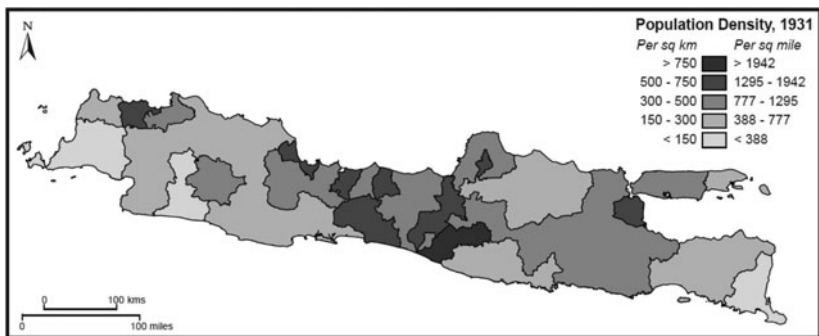


Figure 3. Java population density, 1931. *Source:* Netherlands Indies, *Volkstelling [Population census] 1930*, 8 vols, Departement van Landbouw, Nijverheid en Handel, Batavia, 1933–1934, folding map at end.

between surplus and deficit areas were adjusted through the transport of 900,000 tons of rice by rail, 300,000 tons by truck, and 150,000 tons by water, totalling 29.3 per cent of Java's rice harvest.²⁶

Food availability and famine causation

Vietnam had its own delicate food balance which, at times of shortage in the north, relied on shipments from the rice-surplus south.²⁷ The war upset that balance. Although some famine was already evident in 1943 in northern Vietnam due to a typhoon in September and a decrease in output at the end of the year, food shortages did not become severe until 1944 after the second rice harvest in November, normally the larger of the two. The typhoon season, which occurs along Vietnam's east coast in late summer and early autumn, was extreme in 1944. Coastal provinces were hit by three successive typhoons and a tidal wave. Between August and October 1944, the total rainfall for Hanoi of

²⁶ 'De rijstpositie van Nederlandsch-Indië' [The rice situation in the Dutch Indies], *Economisch Weekblad voor Nederlandsch-Indië* vol. 12, no. 11, 25 May 1946, pp. 81–82; Department of Economic Affairs, Batavia, 'The economic condition of Indonesia in mid-1947', *Economic Review of Indonesia* vol. 1, no. 8, 1947, p. 10; P. van der Eng, 'Regulation and control: explaining the decline of food production in Java, 1940–6', in *Food Supplies and the Japanese Occupation*, P. H. Kratoska (ed.), Macmillan, Houndmills, Hants, 1998, p. 197.

²⁷ The following draws on G. Huff, 'Causes and consequences of the great Vietnam famine, 1944–1945', *Economic History Review* vol. 72, no. 1, 2019.

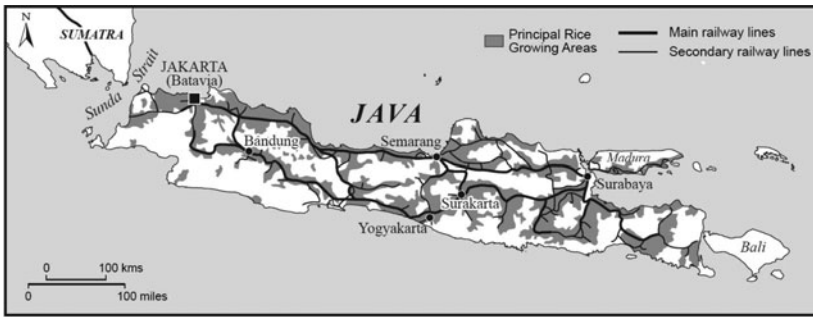


Figure 4. Principal rice-growing areas, Java, 1940. Source: C. Robequain, *Malaya, Indonesia, Borneo and the Philippines: A Geographical, Political and Economic Description of Malaya, the East Indies and the Philippines*, Longman, London, 1959, p. 203.

1,180 millimetres was 53.7 per cent above the 1931–1944 average.²⁸ While rainfall is one effect of typhoons, it does not capture their consequences in causing rainfall intensity over a short period, high tides to which coastal areas are particularly vulnerable in the rainy season, and, above all, major ruptures in the dykes, the preservation of which was fundamental to preventing large parts of the delta from flooding. As the Red River flowed six to seven metres above the surrounding land, serious breaches in dykes led to severe flooding, and in the coastal provinces 230,000 hectares of rice was destroyed, equivalent to a loss of not far short of 200,000 tons of rice at 1942 yields.²⁹ According to a contemporary report from Nam Dinh province, due to the earlier bad weather, the November ‘harvest was almost completely lost’ and 558,383 people were left destitute: ‘[T]hese poor people have absolutely nothing to eat.’³⁰

Two main features of the wartime falls in rice output are evident from Table 1. The first is that, overall, they were not large. Between 1942 and 1944, in Tonkin and North Annam output was down 12.5 per cent on the 1942 figure of 1,467 thousand tons.

The impact of the decline must, however, be assessed in light of the precarious margins of subsistence at which so many peasants in the two provinces lived. Further important considerations are the sudden and seemingly unanticipated nature of the falls, the apparent lack of rice

²⁸ Indochina, *Annuaire Statistique, 1943–1946*, p. 14.

²⁹ D. Catling, *Rice in Deep Water*, Palgrave Macmillan/International Rice Research Institute, London, 1992, p. 350.

³⁰ AOM GF/6, Le Tông-dôc, ‘Namdinh’, 20 March 1945, p. 1.

TABLE I.
Vietnam, Tonkin, and North Annam rice output and exports, 1941–1945.

000 metric tons						
	Vietnam rice output	Tonkin and North Annam rice output	Eight coastal provinces rice output	Eight coastal provinces fall in rice output as % of total fall in Tonkin and North Annam	Total Vietnam rice exports	Total Vietnam rice exports to Japan
1941	6,944.0				944.5	583.3
1942	7,222.0	1,466.7	856.2		974.2	961.9
1943	7,071.0	1,422.8	818.4	86.1	1,023.5	1,007.8
1944	5,971.0	1,283.8	643.3	126.0	498.5	497.1
1945	4,871.0				44.8	44.8

Notes: (1) For 1941 data on rice output by province were not published. (2) The eight coastal provinces are Kien An, Hai Duong, Thai Binh, Nam Dinh, and Ninh Binh in Tonkin, and Than Hoa, Nghe An, and Ha Tinh in Annam. Paddy output is converted to rice at a conversion rate of .6349 which is the conversion given in Gourou, *Standard of Living*, p. 13. Data for 1944 are for 1943–1944, for 1945 for 1944–1945, and so forth. (3) Rice output and export figures are for Indochina as a whole but the contribution of its non-Vietnam constituents was negligible. (4) Rice exports to Japan include paddy and cargo rice but the great majority of exports was whole white rice. These last were (in tons): 1942: 581,099; 1943: 833,134; 1944: 418,267; 1945: 41,352.

Sources: 'Rice output and exports: Indochina', Indochina, *Annuaire Statistique, 1941–1942*, pp. 87, 176, 188, 283; *1943–1946*, pp. 90–91, 188, 277. Data for rice exports to Japan in: NA WO203/2647 S. A.C., S.E.A., Economic Intelligence Division, 'The rice situation in Cochin China', p. 3, are close to the same as in the *Annuaire Statistique*. For shipments of southern rice, see A. Gaudel, *L'Indochine Française en Face du Japon*, J. Susse, Paris, 1947, p. 230.

stocks available to peasants and their practice of relying on being able to somehow obtain rice during a large part of the year, and the exceptionally cold 1944–1945 winter, with temperatures dropping to around 6°C. Rice stocks were low partly because peasants had been ordered to sell rice surpluses to the French government in the autumn of 1943, while the bad winter of 1944–1945 ruined a large quantity of subordinate (non-rice) crops and prevented additional planting of some secondary crops.³¹ The effect of the cold weather was intensified by the scant clothing available to many people. Japan sent almost no textiles to Vietnam to make up for pre-war imports and the country produced only a fraction of its textile

³¹ T. A. Nguyễn, 'La famine de 1945 au Nord-Viêt-Nam', *Vietnam Forum*, no. 5, 1985, pp. 89–91; N. C. Vu, 'The other side of the 1945 Vietnamese revolution: the empire of Viet-Nam (March–August 1945)', *Journal of Asian Studies* vol. 45, no. 2, 1986, pp. 297–98.

requirements. Tonkin peasants were almost entirely dependent on buying their clothing.³² By 1944, large numbers of people, as well having little to eat, had few, if any, clothes to wear.

Those lacking food in the countryside tried to eat anything: paddy husks, roots of banana trees, clover, tree bark. People walked from the countryside in 'unending lines together with their whole families' along the 'starvation roads' that led to the provincial towns and cities. Many died along the way. Others stopped occasionally to close the eyes of the dead or to pick up a piece of rag left on bodies.³³ Enough people succeeded in reaching the cities so that both populations and deaths in large urban areas rose markedly.³⁴

A second, crucial, feature of decreases in the harvest between 1942 and 1943, and again between 1943 and 1944, was their high degree of localization. Output declines were concentrated in eight coastal provinces. Five were in Tonkin's delta (Hai Duong, Kien An, Nam Dinh, Ninh Binh, and Thai Binh) and the other three in North Annam (see Figure 2). Between 1942 and 1944, the drop in output of 24.9 per cent in these eight coastal provinces more than accounted for the overall decrease in output in all of Tonkin and North Annam; output in other, non-coastal provinces rose (see Table 1). Declines in coastal rice output are almost entirely explained by sharp drops in yields rather than in area planted in rice.

The eight provinces were not necessarily those which were most densely populated (see Figure 2). The imperfect association between population density and output declines, but strong correlation between output declines and coastal provinces, point to the importance of the weather shock of the typhoons, a tidal wave, and floods in triggering the great famine. If output in the eight coastal provinces had been the same in 1944 as in 1942, or probably even in 1943, it seems likely that famine would not have occurred or at least would certainly have been less severe.

Data for Tonkin, although not Annam, allow the calculation of average daily grams of rice available for consumption per capita. Table 2 uses these data to show available rice from 1942 through to 1944 if it had been distributed equally in each province. As explained in the Notes, availability calculations adopt Marr's figure of consumption of 85 per

³² P. Gourou, *Les paysans du delta tonkinois, étude de géographie humaine*, Les Éditions d'Art et d'Histoire, Paris, 1936, p. 561.

³³ Nguyễn, 'La famine', pp. 83–84; Le Manh Hung, *The Impact of World War II on the Economy of Vietnam 1939–45*, Eastern Universities Press, Singapore, 2004, p. 253.

³⁴ Marr, *Vietnam 1945*, p. 101.

cent of rice harvested to allow for rice held back for seed and lost to rodents and spoilage (which compares to an average of under 80 per cent consumption of harvested rice from 1918–1930) and Gourou's conversion of a ton of paddy as equal to 0.6449 of a ton of milled rice.³⁵ Under normal transport conditions, rice shipments from the south to the north would probably have been instituted.

Although requisitions may have acted to decrease the total of available rice, availability appears to have depended chiefly on the harvest. However, requisitions would have affected distribution and, among the Vietnamese, would probably have disproportionately favoured those in large cities. Rice was distributed, largely to urban areas, as rations; confiscated by the Japanese military; and used against eventual need. In August 1945, after a build-up of forces, although the Japanese still had just 30,000 troops in northern Vietnam, they also stored rice. The main Japanese storage, however, appears to have been in Cochinchina where there were 70,000 Japanese troops and, by the end of the war, rice stocks of some 60,000 tons.³⁶

The key points shown in Table 2 are the percentage changes in rice available for consumption in Tonkin's provinces and the distribution across 14 provinces of 401,271 deaths between January and May 1945 which a government survey attributed to famine. Although data exclude 10 Tonkin provinces, these were all, except Quang Yen, outside the delta and accounted for just 15.6 per cent of Tonkin's 1943 population. Between 1942 and 1944 in the five Tonkin coastal provinces, rice availability, measured as grams per day, fell by between 18.2 per cent and 43.1 per cent. On a population weighted basis, the fall averaged 27.1 per cent. Declines in available rice in Tonkin's coastal provinces—with one exception not matched in any of Tonkin's other provinces—correlated closely with deaths as a percentage of population but not with population density. During the first five months of 1945, Tonkin's five delta coastal provinces accounted for over four-fifths of deaths ascribed to famine. Death rates were between 7.2 per cent and 10.4 per cent of the population in all the provinces except Hai Duong, where the rate was 4.8 per cent. A death rate in Haiphong of 9.4 per cent of the city's population is consistent with mortality data for surrounding coastal provinces but mainly reflects famine victims from elsewhere. Death rates

³⁵ Gourou, *Standard of Living*, p. 1; Marr, *Vietnam 1945*, p. 97; Office of Population Research, 'French Indo-China', p. 74.

³⁶ National Archives, Kew [hereafter NA], FO371/53959, Lt. Colonel T. H. Sweeny, 'Second report on Japanese financial manipulations in French Indo China', pp. 2–3.

TABLE 2.
Tonkin rice availability and famine deaths by province, Jan. to May 1945.

	1943 population thousands	Area 1,000 km ²	1943 population density persons per km ²	1942 rice output grams per capita per day	1943 rice output grams per capita per day	1944 rice output grams per capita per day	% fall rice available 1944 compared to 1942	Jan.–May 1945 401,271 famine deaths as % of province population
<i>Coastal provinces</i>								
Hai Duong	843.5	2.3	366.7	429.4	411.9	321.3	25.2	4.8
Kien An	428.7	0.9	476.3	300.1	262.1	245.6	18.2	7.8
Nam Dinh	1,233.4	1.5	822.3	256.5	224.2	176.3	31.3	10.4
Ninh Binh	406.2	1.6	253.9	455.0	327.6	258.8	43.1	10.1
Thai Binh	1,139.8	1.5	759.9	324.3	288.0	257.5	20.6	7.2
Total and averages	4,051.6	7.8	519.4	336.1	295.6	244.9	27.1	8.3
<i>Other Tonkin delta</i>								
Bac Giang	311.8	5.2	60.0	460.0	507.4	495.5	−7.7	
Bac Ninh	543.5	1.1	494.1	285.6	322.6	274.8	3.8	0.9
Ha Dong	961.4	1.7	565.5	238.4	258.4	264.1	−10.8	1.3
Ha Nam	596.2	1.2	496.8	220.7	186.0	173.8	21.2	2.7
Hung Yen	533.3	0.9	592.6	316.1	254.5	283.6	10.3	1.9
Phuc Yen	202.1	0.7	288.7	334.3	318.2	341.7	−2.2	1.1
Phu Tho	351.7	3.7	95.1	141.7	105.1	174.0	−22.8	1.5
Son Tay	210.6	1.0	210.6	491.4	502.0	487.9	0.7	2.7
Thai Nguyen	153.5	3.5	43.9	298.6	250.4	506.7	−69.7	1.8
Vinh Yen	296.2	1.1	269.3	398.3	391.8	390.3	2.0	1.2
Other Tonkin delta	4160.3	20.1	207.0	291.5	286.1	297.8	−2.2	1.5
Total Tonkin	8,211.9	27.9	294.3	313.5	290.8	271.7	13.3	4.8

Notes: (1) Available data are for 8,211,900 persons out of a total Tonkin population of 9,851,200 in 1943, which includes 119,700 in Hanoi and 65,100 in Haiphong. The delta province for which no data exist is Quang Yen. (2) Population data for 1942 are the population for 1943 and per capita output may therefore be somewhat understated. Similarly, population data for 1944 are the 1943 population and per capita output may be overstated or, possibly more likely, somewhat understated because famine deaths may have caused the total population to fall between 1943 and 1944. (3) Paddy output is adjusted for rice on the basis that one ton of paddy equals 0.6349 ton of milled rice, as given in Gourou, *Standard of Living*, p. 13. (4) Available grams per day assumes consumption of 85 per cent of rice output, as assumed in Marr, *Vietnam 1945*, p. 97. In comparison, in Tonkin from 1918 to 1930 average human consumption was 80 per cent of total rice production (Office of Population Research, 'Indo-China', p. 74). (5) Marr, *Vietnam 1945*, p. 97, argues that 297 grams per day would have been 'perhaps barely enough for everyone to survive until June 1945'. (6) For coastal provinces, the percentage of deaths shown for total and averages includes Hanoi where deaths were 2.7 per cent of the population and Haiphong where the percentage was 9.4 per cent. (7) The source lists Phy-ly which was the county town of Ha Nam province. Data for Phy-ly have been included for Ha Nam. *Sources:* Indochina, *Annuaire Statistique, 1941–1942*, p. 87, and *1943–1946*, pp. 27, 89; AOM GF/3, Provincial Head, Hai Duong to Kham Sai of Tonkin, 4th day, 6th month (probably 4 June) 1945.

for coastal provinces apparently hide even more catastrophic effects of the famine on poor villages. In some, half or more than half of all inhabitants died during the famine.³⁷

Marr suggests that if available rice in Tonkin and North Annam had been shared absolutely equally, famine would have been avoided. He stipulates the 'barely enough' amount of rice for subsistence as 297 grams per day between November and the May–June (or fifth month) harvest.³⁸ Consumption of 297 grams equates to 1,065 calories. That intake was below or, at best, not much above the basal metabolic rate (the level at which no surplus for physical activity exists) which, as a benchmark, is around 1,080 calories for women aged 18 to 30 and 1,450 for men aged 18 to 60.

Table 2 indicates that by 1944 per capita available rice exceeded Marr's subsistence threshold in only one Tonkin coastal province. Even with totally equal sharing, almost none of the coastal areas would have had available as much as a daily average of 297 grams of rice. To obtain subsistence quantities of rice, most coastal provinces would have had to trade with neighbouring provinces or obtain supplies from outside Tonkin and North Annam. Trade with neighbouring provinces was, however, not permitted by the French government, apparently partly so that the authorities could secure any surplus so as to supply urban centres.³⁹ In any case, precious little surplus for exchange existed elsewhere in Tonkin. Even supposing that consumption for everyone of 297 grams a day had been possible, this would probably still have had to be supplemented by potatoes, maize, or taros, which, by the time famine struck, could not be grown because of the exceptionally cold winter. In comparison to a subsistence level of 297 grams, Gourou identified 400, and Nguyen 500, grams as the average daily rice ration for a Tonkinese, but stressed this as being insufficient for a working man.⁴⁰

Although famine reached its peak during the winter and spring of 1944–1945 preceding the June harvest, it continued to claim lives

³⁷ *Than Nghi* (Clear Opinion, a Hanoi weekly publication), no. 110, 26 May 1945, p. 105; K. K. Huynh 'The Vietnamese August revolution reinterpreted', *Journal of Asian Studies* vol. 30, no. 4, 1971, p. 769.

³⁸ Marr, *Vietnam 1945*, p. 97.

³⁹ AOM Fonds conseiller politique (hereafter CP)/226, 'Mémoires personnelles sur les événements en Indochine en mars 1945 par Marc Masayuki Yokoyama', p. 90. These memoirs, written soon after the end of the war in response to a request from the French, represent a first-hand account of events surrounding the famine. Yokoyama was perhaps the most important Japanese economic and political adviser in Indochina.

⁴⁰ Gourou, *Standard of Living*, p. 13; Nguyen, *Le Problème*, pp. 7, 11.

throughout the summer and autumn of 1945 and into 1946. Finally, in June 1946, helped by good weather and a good harvest, the spectre of mass famine was banished. In November 1946, the north had a good rice crop.⁴¹

Neither 1940 nor 1941 were unusually good years for the harvest in Java, but both 1942 and 1943 were, which helped to mitigate declining food availability in these years. In 1944, abnormally low rainfall is likely to have adversely affected rice output.⁴² Rice, however, normally accounted for no more than 45 per cent of Javanese calorie consumption and, furthermore, rice crop failures would typically have been offset by dry season production of non-rice food crops, particularly sweet potatoes and cassava. The revealing statistic—and one that is necessary to understand in order to explain Java's famine—is that in 1944 the harvested area was almost a quarter less than it was in 1941 and by 1945, 29.2 per cent less (see Table 3). Taking 1937–41 as 100, paddy production was 81.2 in 1944 and 65.9 in 1945, while the index numbers for maize were 57.1 and 42.9.⁴³ Between 1941 and 1945, sweet potatoes, planted as a quick and easily obtained source of calories and a crop that was not commandeered by the Japanese, were the only main food crop for which harvested hectareage rose. The expansion was, however, far too small to make up for sharp contractions in harvested areas of other food crops (see Table 3).

The wartime contraction in harvested areas was accompanied by a catastrophic decrease in average per capita food availability. In this regard, however, official data probably overstate the actual drop in yields because of an under-reporting strategy by local authorities in order to reduce the chance of farmers being compelled to hand over surplus production for token compensation and, possibly, also owing to an attempt to try to lower farmers' land tax liabilities by enabling them to claim compensation due to crop failure. To estimate likely yields, van der Eng applies acreage average yields from earlier years to 1944–1946 and uses these to arrive at total output and average per capita calorie supply. The results show that during the Japanese occupation average yields of all food crops fell continuously and significantly.⁴⁴ However, average per capita daily calorie supply per Residency, shown by Table 4 and Figure 5, does not take into account trade between

⁴¹ Marr, *Vietnam: State, War*, pp. 321, 327, 329, 382.

⁴² L. Brennan, L. Heathcote and A. Lucas, 'War and famine around the Indian Ocean during the Second World War', *Research in Ethical Issues in Organizations* vol. 18, 2017, pp. 25–30.

⁴³ Department of Economic Affairs, 'Economic condition', p. 117.

⁴⁴ van der Eng, 'Regulation and control', p. 193.

TABLE 3.
Java: harvested area of main food crops, 1940–1950.

	1940	1941	1942	1943	1944	1945	1946	1950
(a) Hectares 000								
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
Soya beans	418	440	481	384	185	141	246	325
Total	<u>7993</u>	<u>8237</u>	<u>8139</u>	<u>7749</u>	<u>6419</u>	<u>5833</u>	<u>5729</u>	<u>6610</u>
(b) 1941 = 100								
Irrigated paddy	99.5	100.0	98.5	101.2	88.4	76.9	80.6	89.6
Upland paddy	102.2	100.0	94.7	96.1	73.4	67.5	68.3	62.5
Maize	89.0	100.0	99.3	81.3	62.8	66.8	51.6	72.8
Cassava	103.8	100.0	97.3	94.7	82.7	54.9	62.4	70.9
Sweet potatoes	102.0	100.0	92.2	87.8	126.3	170.2	110.7	75.1
Peanuts	96.9	100.0	97.7	112.4	67.6	38.2	55.6	86.1
Soya beans	<u>95.0</u>	<u>100.0</u>	<u>109.3</u>	<u>87.3</u>	<u>42.0</u>	<u>32.0</u>	<u>55.9</u>	<u>73.9</u>
Total	<u>97.0</u>	<u>100.0</u>	<u>98.8</u>	<u>94.1</u>	<u>77.9</u>	<u>70.8</u>	<u>69.6</u>	<u>80.2</u>

Source: van der Eng, 'Regulation and control', p. 195.

Residencies, calories potentially available from sources other than the five main food crops or foreign trade (although this was seriously curtailed during the war).⁴⁵ As against this, and not factored into Table 4, is that in 1944, yields of rice, but not dry season crops, were probably compromised by drought in that year and so dropped in comparison to a harvest under normal rainfall conditions.⁴⁶

Calorie counting by Residency emphasizes Java's geographically unequal food production. In 1941, while calorie supply per head over the island as a whole averaged 2,068 calories, five Residencies had over 2,600 calories and six, under 1,700 calories per head. At that time, trade between Residencies and colonial government policy worked to equalize calorie supply. During the war, however, the Japanese banned inter-Residency rice trade which greatly impeded an equalization of supplies, magnifying the seriousness of wartime falls in production.

⁴⁵ Calories from food crops other than the main crops may have averaged as much as 230 to 250 calories per person per day. See van der Eng, 'Regulation and control', p. 193.

⁴⁶ van der Eng, 'Regulation and control', p. 193; Department of Economic Affairs, Batavia, 'The export of pre-war agrarian produce during the Japanese occupation', *Economic Review of Indonesia* vol. 1, no. 10, 1947, p. 167.

TABLE 4.
Java per capita daily calorie supply, 1940–1946.

		1940	1941	1942	1943	1944	1945	1946	1944 as % of 1941	1945 as % of 1941
<i>West Java</i>	Bariten	1,647	1,642	1,505	1,538	1,363	1,139	1,217	83.0	69.4
	Jakarta	1,327	1,409	1,349	1,175	991	896	1,148	70.3	63.6
	Bogor	1,436	1,341	1,413	1,295	1,007	973	976	75.1	72.6
	Priangan	1,626	1,565	1,416	1,408	1,161	1,288	1,263	74.2	82.3
	Cirebon	1,917	1,804	1,700	1,526	1,205	1,377	1,216	66.8	76.3
<i>Central Java</i>	Pekalongan	1,758	1,920	1,824	1,498	1,049	1,024	1,132	54.6	53.3
	Semarang	2,373	2,624	2,344	2,015	1,997	1,869	1,592	76.1	71.2
	Pati	2,217	2,439	2,118	1,944	1,242	1,473	1,337	50.9	60.4
	Banyumas	2,440	2,688	2,295	2,059	1,478	1,577	1,449	55.0	58.7
	Kedu	2,375	2,705	2,468	2,017	1,568	1,690	1,511	58.0	62.5
<i>East Java</i>	Principalities	1,944	2,036	2,093	1,720	1,298	1,621	1,450	63.8	79.6
	Madium	1,839	1,980	1,868	1,560	835	975	1,295	42.2	49.2
	Bojonegoro	1,664	1,748	1,394	1,199	899	690	735	51.4	39.5
	Surabaya	1,493	1,561	1,430	1,465	1,231	1,053	1,027	78.9	67.5
	Kediri	2,093	2,370	2,172	1,748	1,167	1,224	1,399	49.2	51.6
	Malang	2,250	2,603	2,377	1,866	1,405	1,237	1,227	54.0	47.5
	Besuki	3,354	3,245	2,971	2,762	2,502	2,386	2,228	77.1	73.5
	Madura	2,049	2,105	2,033	1,893	1,892	1,508	1,359	89.9	71.6
	Java average	1,989	2,099	1,932	1,705	1,349	1,333	1,309	64.3	63.5
	Coefficient of variation	0.23	0.25	0.23	0.22	0.30	0.30	0.23		

Notes: (1) Data do not take into account trade across Residency borders nor imports and exports of rice to or from Java. (2) Calories from rice varied considerably between areas of Java and between Residencies. In West Java, rice provided about two-thirds of calories, while in Central Java, almost two-fifths, and in East Java between about a third and two-fifths.

Source: van der Eng, *Food Supply*, p. 79; http://leokeukens.com/wp-content/uploads/2013/04/java_new_map_medium_colordots.jpg, [accessed 31 May 2019].

Between 1941 and 1944, the net supply of calories per person per day from the main crops (calculated as total estimated production in Java divided by the island's total population) fell from the 2,068 indicated above to 1,316. Every Residency had a drop in calorie consumption. The average fall across all Residencies was 35.7 per cent. During 1945 supplies remained at the same low level. Decline was markedly uneven among Residencies, as suggested by an increase in the coefficient of variation from 0.25 in 1941 to 0.30 in 1944.⁴⁷ There were large drops in many of the most deprived Residencies. By 1944, five of Java's 17 Residencies had average per capita calorie supplies of less than 1,100 calories per head and a further six had under 1,400 calories per head (see Table 4 and Figure 5). These figures compare with a basal metabolic rate of around 1,080 calories for women aged 18 to 30 and 1,450 for men aged 18 to 60. In eight Residencies, average calorie availability in 1944 was less than 60 per cent of its 1941 level. The markedly uneven decline between provinces, shown in Table 4, emphasizes why Japanese policies, discussed below, to outlaw the movement of rice between Residencies and ruthlessly suppress black market trade in rice exacerbated Java's famine. Depending on how much and to whom it was distributed, the Japanese stores of 154,000 tons of rice in 1944 may have worsened the famine but do not explain it.⁴⁸

Falls in calorie availability were so great that, even if all food had been more or less equally shared, famine would still have occurred. Java's wartime drop in food availability would be dramatic in any country, but in Java, it can only be described as disastrous. Starting from an already low nutritional base and continuing throughout the war, by 1944 food availability was already near its lowest level. Furthermore, availability was uneven and hard to ameliorate by switching other expenditure in favour of food, since it already accounted for the bulk of almost everyone's household budget. Although the slaughter of animals increased, per capita calories from meat remained minimal and, furthermore, benefited only those with livestock.

Entitlements and famine selectivity

Even though famines in both Vietnam and Java arose from a decline in rice availability, the incidence of famine was uneven and discriminate.

⁴⁷ The coefficient of variation is the standard deviation divided by the mean and so a measure of dispersion.

⁴⁸ Java Military Administration, *Gunseika ni okeru Java-Madura no shokuryō jijō to sono taisaku* (The Food Conditions and its Measure in Java and Madura under the Military Administration), Java Military Administration, Jakarta, Oct. 1943, p. 16.

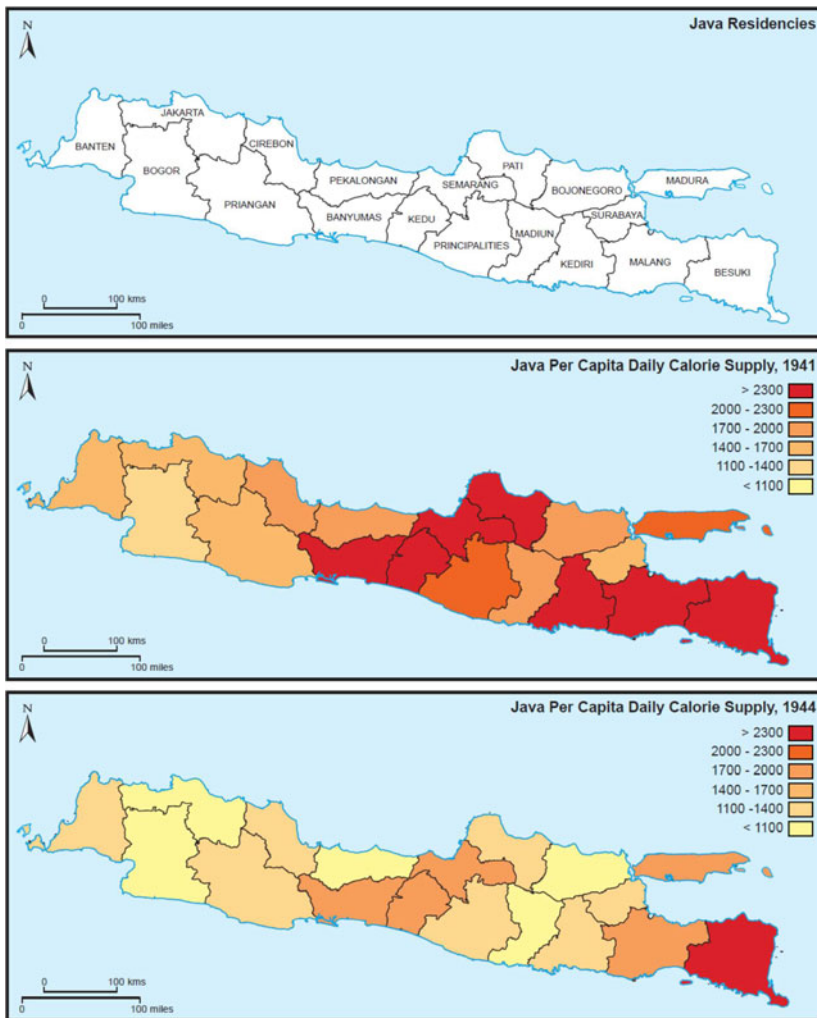


Figure 5. Java per capita daily calorie supply, 1941 and 1944. *Source:* van der Eng, *Food Supply*, p. 79; http://leokeukens.com/wp-content/uploads/2013/04/java_new_map_medium_colordots.jpg, [accessed 31 May 2019].

In each area, a large section of society—the poorest 50 to 60 per cent identified by Gourou in Tonkin and Java as estate and factory workers, together with anyone without land—risked, in the terminology of Sen, an entitlements failure.⁴⁹ Failures in endowments and exchange

⁴⁹ Gourou, *Standard of Living*; Sen, *Poverty and Famines*.

entitlements could have been anticipated from the highly unequal distribution of land ownership in Tonkin and North Annam, and from the wartime collapse in Java's estate economy. Although in Java the Japanese turned over a number of plantations to workers for the cultivation of food crops, attempts to grow enough for subsistence were often unsuccessful.

Before the war, the majority of Vietnamese peasants and Javanese estate labourers and factory workers were landless and lived on the edge of subsistence. They lacked entitlements and with labour as their only endowment, relied on earning enough from it to trade for rice or other food and on whatever subsistence cultivation or scavenging could be managed. High wartime inflation put even the individuals in these groups who had been able to find some form of employment in an increasingly difficult position, since wages tended to be quite inflexible and lagged far behind price rises. For many rural dwellers in both Vietnam and Java, migration to cities offered the best possibilities: the chance of work, begging, or somehow gaining an entitlement to rations. In Vietnam, any entitlement to rations, private relief efforts, and various attempts at price control existed chiefly in the cities. But even in Hanoi rice rations were inadequate and their distribution, irregular.⁵⁰

The Vietnamese famine dead were disproportionately the landless. Farmers and anyone who owned land had a good chance of surviving the famine. There was high mortality among fishermen as well because in northern Vietnam, fish was not a staple but functioned more as a garnish. Fishermen had to trade for rice and were in a weak position when a rise in its price turned the terms of trade against fish. Furthermore, Vietnamese fisherman mainly harvested small fish, shrimp, crabs, and frogs; the famine occurred outside the fishing season; and fishing was hindered by flooding in the coastal provinces due to the typhoons.⁵¹

The intra-household effects of famine are typically unevenly borne. Usually, famine disproportionately kills the young, the elderly, and men rather than women. For Java, in the absence of quantitative data, little

⁵⁰ Vietnam National Archives Center I, Hanoi (hereafter VNA), Fonds de la Mairie de Hanoi 3499 'Rapports journaliers du Chef des Affaires Annamites de Hanoi sur la situation sociale de la ville de Hanoi du 15 Mars au 29 Mai 1945', pp. 46, 94, 97; and VNA, Le Commissaire de Police du 2^e arrondissement 3616 'Etat d'esprit despopulations', 29 Jan. 1944.

⁵¹ F. Motoo, 'A survey of village conditions during the 1945 famine in Vietnam', in *Food Supplies and the Japanese Occupation*, Kratoska (ed.), pp. 227–37.

can be said about which age and sex groups were most affected by the famine or whether if, as might be expected due to the migration to cities of displaced estate workers in search of food, many of the dead were working-age males.

The only available intra-household information for Vietnam is for 40,230 deaths in Hai Duong province between January and May 1945.⁵² Data are inexact: they divide deaths only into the broad categories of working-age men, women, children, and elderly. On this evidence, mortality seems generally to have conformed to expected patterns. Disproportionate deaths among children—almost a quarter of the total—are unsurprising, since even in normal years child mortality was high. During the famine, reports exist of parents, confronted with insufficient food to go round, abandoning someone, usually a child, to death or possibly offering children for adoption or sale.⁵³ There were also reports and rumours of cannibalism.⁵⁴

In Vietnam the division in famine deaths between outright starvation and illness is not altogether clear. In twentieth-century famines, starvation has tended to predominate and available evidence indicates that Tonkin and North Annam may fit this ‘modern’ pattern.⁵⁵ Even so, and despite the absence of major epidemics, sickness and disease were clearly not absent.⁵⁶ Food shortages during the 1930s and inadequate clothing in the later stages of the war would have left a large share of the population in a weak and debilitated state.

In both Vietnam and Java, famine occurred very largely in the countryside. However, cities were greatly affected since many people in famine areas tried to reach large urban areas in the hope of finding food or even some form of work. Beginning in 1944, destitute and dying people flooded into Hanoi and Haiphong. The flow greatly increased after the March 1945 coup because the Japanese, now in control, abandoned the French policy of blocking access to the two cities. In June 1945 in Hanoi, where famine deaths were estimated at between 100 and 200 a day, corpses were buried by the hundred in shallow pits

⁵² AOM GF/3, Provincial Head, Hai Duong to Kham Sai of Tonkin, 4th day, 6th month (probably 4 June) 1945.

⁵³ N. V. Long, *Before the Revolution: The Vietnamese Peasants under the French*, Columbia University Press, New York, 1991, pp. 248–49.

⁵⁴ AOM GF/51, Ha Dong to Kam Sai, 17 May 1945. See also Kien An to Kam Sai, 7 May 1945, cited in Marr, *Vietnam 1945*, p. 106, n. 144; Nguyễn, ‘La famine’.

⁵⁵ Ó Gráda, *Famine*, pp. 120–21.

⁵⁶ AOM GF/3, pp. 3–6, 9–10, 16, 18–27, 29–32, 34–35, 37, 43–44, 47–48.

of about two metres square in the Hop Thien Cemetery. The pits, covering an area of about two *mâu* (7,200 metres²), emitted a stench that hung over parts of the city.⁵⁷

In Java in April 1944, the Japanese ordered a population registration with the aim of establishing how best to distribute rice after the 1943/44 harvest. By then, however, many Javanese, no longer employed on plantations or in factories, had drifted to the cities and, on the margins of society, are likely to have been omitted from the registration and so also to any entitlement to rice rations. A careful estimation of demographic data found that the registration may have missed as many as 5.66 million people, either by mistake, or perhaps often deliberately, by the neighbourhood associations in charge of local counts and unwilling to share available food among more people. Those left out of the distribution system in major cities in Residencies formed a large destitute group and probably account for many of the famine dead in Java's cities.⁵⁸ According to a different estimate, some 9.5 million people, about 20 per cent of Java's population, were left to somehow find food because they neither lived in cities of 10,000 or more and shared in a distribution there nor made a living in indigenous agriculture.⁵⁹

Writing in 1944, an Indo-European woman in Jakarta reported her kampong 'flooded with people with people from the *oedik* (interior). They can barely walk. In the *oedik* each family got one *batok* (coconut shell) of rice every two weeks.' She describes how, in one instance, a family's father, then both children and finally the mother died on successive days in the kampong.⁶⁰ In Jakarta, famine dead became a common sight, especially in the lower town where trucks came to take corpses away.⁶¹

⁵⁷ AOM GF/58, Nishimura, Délégation Impériale au Tonkin, to Mayor of Hanoi, 26 June 1945, and reply from the Mayor, 9 July 1945.

⁵⁸ Nishijima Collection, Waseda University, Japan, A. Soebardjo, 'The life conditions of the population with regard to the requisition of paddy by the government', 1944, pp. 8–9; P. van der Eng, 'Bridging a gap: a reconstruction of population patterns in Indonesia, 1930–61', *Asian Studies Review* vol. 26, no. 4, 2002, pp. 489–92.

⁵⁹ Centraal Bureau voor de Statistiek, 'De economische toestand van Nederlandsch-Indië tijdens de Japanse bezetting, 1942–45' (The economic situation of the Dutch Indies during the Japanese Occupation 1942–45), *Statistische en Econometrische Onderzoekingen* vol. 2, no. 4, 1947, pp. 123–24.

⁶⁰ I. J. Brugmans, *Nederlandsch-Indië onder Japanse Bezetting: Gegevens en Documenten over de Jaren 1942–1945*, Uitgave T. Wever, Franker, 1960, p. 451.

⁶¹ S. Abeyasekere, *Jakarta: A History*, Oxford University Press, Singapore, 1989, p. 141.

FAD₁ and FAD₂ famines and the institutional response

In this section, I focus on the relationships between famine, government, and institutions in Vietnam and Java. Dramatic drops in food availability need not have led to famine in Vietnam, nor was famine inevitable in Java. In both instances, famine could have been avoided by appropriate institutional policies. However, French, Japanese, and American responses not only failed to effectively counter famine but often worsened it.

Falls in food production in Java are largely explained by the destruction of incentives to plant food crops. This, in turn, was the direct consequence of the Japanese policy of setting the prices at which rice mills were expected to purchase paddy from farmers at levels soon outdistanced by wartime inflation. Price rises spiralled upwards towards hyper-inflation due to a near total abandonment of Japanese control over Indonesia's money supply. An index of Indonesian prices rose from 100 in 1941 to 261 at the end of 1943, reached 913 a year later, and stood at 6,635 at the outset of 1945.⁶² High inflation, growing food shortages, and rice rations that were either small or altogether lacking led to escalating black market rice prices and a brisk trade in 'illegal' rice, much of it taken to large urban areas and in Jakarta organized in no small part by the city's underworld.⁶³ However, a substantial part of the incentive that price disparities would have provided to grow and trade in rice was dissipated by Japanese suppression of the black market. Penalties were severe and extended to execution for trafficking in rice.

The pre-war colonial government system was to buy rice in areas where there was a surplus, arrange transport, and sell in deficit regions. In contrast, the Japanese requisitioned rice, but at first were not involved in its purchase.⁶⁴ Beginning in September 1943, however, the Office of Food Supply (initially the Shokuryō Kanri Jimusho but later often renamed) ordered mills to buy rice and sell it to the Food Office. When this proved unsuccessful, Japanese administrators turned to a rigorous

⁶² G. Huff and S. Majima, 'Financing Japan's World War II occupation of Southeast Asia', *Journal of Economic History* vol. 73, no. 4, 2013, pp. 953–59.

⁶³ 'Rijstpellerijen in midden-Java gedurende de Japansche bezetting' [Rice mills in central Java during the Japanese occupation], *Economisch Weekblad voor Nederlandsch-Indië* vol. 12, no. 21, 3 Aug. 1946, p. 94; R. Cribb, *Gangsters and Revolutionaries: The Jakarta People's Militia and the Indonesian Revolution 1945–1949*, University of Hawai'i Press, Honolulu, 1991, p. 42.

⁶⁴ The remainder of this paragraph draws on van der Eng, 'Regulation and control', pp. 196–99; van der Eng, *Food Supply*, pp. 8–20.

system of quotas and controlled prices. Farmers were instructed to deliver paddy only to *kumiai* (Japanese-organized cooperatives). Deliveries were meant to contribute to a quota for paddy assigned (although far from systematically or rationally) to all Residencies. They, in turn, were to sell paddy to Java's rice mills at controlled prices. The mills, now under the Food Office's jurisdiction, were prevented from operating in the market. They had, instead, to sell to the Food Office at a controlled price. In practice, rice production fell not merely far short of quotas but, crucially, of actual needs. Towards the end of the Japanese occupation, a number of factors combined to accentuate food shortages on top of the widening gap between free market and controlled prices. These included a poor 1944/45 cropping year, a near total absence of any consumer goods for farmers to buy, and acute transport shortages and consequent heavy reliance by black market traders on carts or bicycles.⁶⁵

Because Java's highly integrated rice market tended to equalize supplies and iron out price rises due to crop failures, a decision towards the end of 1944 to close Residency boundaries for food crops and order Residencies to become self-sufficient in food production was a badly misguided policy. It further stifled the intra-island movement of food, which had been fundamental to Javanese food security, and discouraged the planting of maize and cassava to make up for shortfalls in rice availability.⁶⁶ According to Lucas, the Japanese policy of self-sufficiency 'tipped the balance of undernourishment into famine'. A contemporary observer reported that while some 'living corpses' walked about, many more dead ones were to be seen everywhere.⁶⁷

If one supposes that somehow in Java, despite the Second World War and Japanese occupation of the rest of Southeast Asia, the pre-war colonial administrative system for rice (including, crucially, control over prices) had been left in place, the Javanese famine would probably have been largely, perhaps even entirely, avoided. The situation would have been different because, unlike Indonesia's wartime Japanese rulers, the colonial government appreciated both the central role of prices in securing rice

⁶⁵ On transport shortages and small-scale black-market trade, including transport by bicycles, see Centraal Bureau voor de Statistiek, 'De economische toestand', pp. 123–24; P. Y. Twang, *The Chinese Business Élite in Indonesia and the Transition to Independence*, Oxford University Press, Kuala Lumpur, 1998, pp. 100–03.

⁶⁶ 'Rijstpellerijen in midden-Java' (Rice mills in central Java), p. 94.

⁶⁷ A. Lucas, *One Soul One Struggle: Region and Revolution in Indonesia*, Asian Studies Association of Australia in association with Allen and Unwin, Sydney, 1991, pp. 36–37.

production and the need to transport large quantities of rice from surplus to deficit areas. Different Japanese policies, perhaps even a willingness in early 1943 to change policy, might also have prevented famine. Instead, Japanese officials and policymakers showed little understanding of the Javanese rice economy and the importance to it of market mechanisms and incentives. That may have been because of an inflexible, military government; because the Japanese lacked Javanese experience; or, most likely, because it was thought best to adopt a system like that which existed in Japan. When things began to go wrong, Japanese administrators relentlessly moved away from market solutions and, as described above, enforced ever more restrictions: 'the more the Japanese tried to control rice marketing, the more it slipped out of control'.⁶⁸ By the latter part of 1943 it was probably too late to avoid major famine.

For Vietnam, it is more difficult to know whose different actions might have avoided, or at least greatly reduced, famine. Cochinchina in the south had large rice surpluses which could have fed the north. Transport was the main problem that needed to be resolved. Normally, coastal shipping carried rice south to north, but it could also have been moved along the Transindochinois railway which linked Saigon and Hanoi. The 1,600 to 1,800 kilometres between rice-producing areas in Cochinchina and Hanoi made shipment by road unrealistic. In 1937, the provincial government in Tonkin, aware of the constant danger of famine, suggested a plan for 'Création des offices de l'alimentation indigène' which would have strengthened existing defences against food shortages. Its proposals were, however, rejected by the French colonial government in Hanoi on the grounds that if famine threatened, rice could always be taken quickly northwards by rail.⁶⁹

The French, apart from vetoing the 1937 Tonkin plan to stockpile rice and put in place more comprehensive relief measures, had some responsibility for not averting the 1944–1945 famine for four possible reasons. The first three reflect French inflexibility. One was a French ban on inter-provincial trade which ruled out shipments that could have contributed to an equalization of supplies, for example, from the

⁶⁸ Sato, *War, Nationalism*, p. 203.

⁶⁹ VNA, Fonds de la résidence supérieur au Tonkin 75782 'Création des offices provinciaux ou régionaux d'alimentation indigène en Indochine pour la lutte contre les crises alimentaires et la famine'; see especially *ibid.*, Inspection Générale du Travail, Saigon, to Résident Supérieure au Tonkin, 20 Aug. 1937. See Gunn, *Rice Wars*, pp. 120–25, for an extensive discussion of the 1936–37 near-famine.

normally rice surplus region of South Annam.⁷⁰ A second was that the possibility of moving rice to famine areas was stifled by requirements for bureaucratic forms and restrictions on flows of the grain imposed by French administrators. As the war went on and shortages of rice and other goods increased, 'the colonial government's prior penchant for paperwork increased relentlessly ... by early 1945, the control system was clogged by huge quantities of telegrams, letters, commodity samples, price lists, internal memos and formal complaints requiring investigation'.⁷¹ Third, although the French tried to organize a junk fleet to take rice northwards, their regulations 'stipulated that 85% of cargo be sold at the official price, and that only 15% would be at the disposal of the junk owners. Under these conditions there was not enough benefit for the owners to undertake voyages that had [due to risk of American bombs and mines] become more and more dangerous'.⁷²

Fourth, in 1944 the French increased a rice levy on growers to 186,000 tons from 130,000 the previous year. Whether the levy was effectively enforced is, however, questionable. By the November 1944 harvest, the wholesale printing of money by the Japanese to finance Indochina's occupation had fuelled rapid inflation. Due to this and a lack of French pricing adjustment to the inflationary economy, prices paid for levy rice had fallen so far below market prices that peasants had no interest in delivering rice and would have resisted doing so. By 1944, the main Japanese economic adviser found that 'the levy system was no longer giving satisfactory results as it had before'.⁷³ November 1944 harvest quotas would have become difficult to collect not only because of low prices but also because of the sharp fall in output and worsening famine. Together, these strategies would have encouraged growers to retain rice, if at all possible. And the Japanese would not have had the same strong motive as earlier in the war to enforce collections, since, desperately short of shipping, they could not carry back to Japan even the rice piled up in Saigon (see [Table 1](#)). Although North Vietnamese peasants without rice were meant to find it from somewhere, whether they would have had the cash to buy rice at escalating black market

⁷⁰ AOM CP 226, 'Mémoires Yokoyama', p. 90.

⁷¹ Marr, *Vietnam: State, War*, p. 318.

⁷² AOM CP 226, 'Mémoires Yokoyama', p. 90; Gunn, *Rice Wars*, pp. 246–48, discusses in some detail French plans to mobilize a junk fleet to take rice to Tonkin, but concludes of failed mobilization at the time of the famine: 'What went wrong with Chauvet's [the Frenchman attempting to organize junks] timetable? Well, we don't know.'

⁷³ AOM CP 226, 'Mémoires Yokoyama', p. 88.

prices seems doubtful. Insofar as the French collected levy rice, a substantial part of it was meant for distribution to the cities, which helps to explain why urbanites were less affected by the famine than their rural counterparts.

The Japanese could have done more than the French to avoid the famine—or at least to lessen its impact. Before the March 1945 coup against the French, the Japanese were in a position to be more proactive than they were. After the coup, Japan was in total charge of Indochina. Throughout the war, Japan's military largely controlled transport which, reserved as it was for military purposes, could have been used in 1944 and 1945 to carry rice to the famine-stricken north. Even so, transportation of rice northwards would have been difficult because of American bombing and mining of coastal waters.

A Japanese requirement in Tonkin and Annam to plant land with fibre and oil seed crops in place of rice is often cited as an important cause of the famine. In fact, the overall effect of a shift in cultivation towards non-rice crops, shown by Table 5, was marginal because the acreage involved was relatively small and some of it was in areas of Tonkin and Annam outside the coastal provinces. If between 1942 and 1944, rice had been planted on this land, in 1944 it would have added 1,792 tons of rice in Annam and 18,600 tons in Tonkin. These totals are an upper bound because they assume that all the non-rice land would instead have been used for rice and that the yields would have been the same as the 1944 average in Tonkin and Annam. However, insofar as land converted to oil seed and fibre crops had previously been used for root crops, the calorific and tonnage loss of conversion would have exceeded that of rice.

In official Vietnamese accounts, the United States is accorded little or no blame for the famine. It would, however, have been much easier to bring rice to the north without the relentless American mining and bombing campaigns, beginning in mid-1943, conducted by the US 14th Air Force based in China. As early as mid-April 1944, a French official reported that the American bombing had effected a 'brutal reduction' in north-south trade.⁷⁴ Just as the full effects of the famine were taking hold, between December 1944 and January 1945, the French archives reveal badly damaged railway routes, often rendered unusable.⁷⁵ In

⁷⁴ VNA, Fonds des Finances 15154 'Programme de l'utilisation de transports en Indochine 1944', p. 20.

⁷⁵ AOM Indochine Nouveau Fonds (hereafter INF), c123d1108, pp. 23, 32 and *passim*; AOM INF, c141d1267 'Rapport sur les principaux problèmes économiques depuis

December 1944, Japanese intelligence in Vietnam informed Tokyo that stretching northwards through Tonkin and North Annam, 10 bridges were damaged or destroyed, at Vinh, Yen Ly, Ninh Khoi, Yen Thai, Than Hoa, Hanrong, Dolen, Ninh Binh, Phu Ly, and Hanoi (see Figure 1).⁷⁶ During 1944, the Japanese, known as speedy rebuilders, repaired some bridges and the colonial Public Works Department (with less of a reputation), others. However, throughout the worst of the famine, the US Air Force relentlessly targeted the main line of the Transindochinois to maintain cuts in bridges and open new ones.⁷⁷

The Americans, with the benefit of extensive aerial photographic reconnaissance, did not doubt the effectiveness of their air campaign: 'the French Indochina rail system, north from Vinh to the China border, was attacked in strength and rendered largely unserviceable'.⁷⁸ American bombing and the laying of mines in coastal waters badly affected other aspects of Vietnamese infrastructure. In December 1943, the port of Haiphong was no longer considered safe and during 1944 was practically abandoned because of American air attacks.⁷⁹ Mines laid along the coast, along with the constant danger of strafing by American aircraft, 'extremely reduced' coastal navigation.⁸⁰ By early 1945, any possibilities of shipping rice and corn from the south to the north had almost been eliminated.⁸¹

In May 1945, the Americans unquestionably knew of the devastating impact of Vietnam's famine, but it is unclear how long before this they had been aware of it. During the first part of 1945, efforts were made

l'armistice', 3 Feb. 1945, pp. 15–25; see also A. Gaudel, *L'Indochine Française en Face du Japon*, J. Susse, Paris, 1947, p. 229.

⁷⁶ Liddell Hart Centre for Military Archives, King's College, London [hereafter LHC], MAGIC, 12 Dec. 1944, p. 2. MAGIC are wartime Japanese diplomatic messages intercepted and decoded by the Allies.

⁷⁷ AOM INF 2749, 'Situation en Indochine, situation économiques, 1944', p. 3.

⁷⁸ United States Strategic Bombing Survey, *Air Campaigns of the Pacific War*, Military Analysis Division, United States Strategic Bombing Survey, Washington, DC, 1946, p. 34, and see p. 23.

⁷⁹ AOM INF 2749, 'Situation en Indochine, situation économiques, 1944', p. 3; AOM INF, c141d1267 'Rapport sur les principaux problèmes économiques depuis l'armistice', 3 Feb. 1945, pp. 14–15; LHC, MAGIC, 11 Dec. 1943.

⁸⁰ AOM INF 2740, 'Situation en Indochine, situation économiques, 1944', p. 3, and see AOM GF 34, 'Rapport au conseil de l'Indochine', 3 Feb. 1945, which discusses the transport situation in some detail.

⁸¹ S. Tønnesson, *The Vietnamese Revolution of 1945: Roosevelt, Ho Chi Minh and de Gaulle in a World at War*, Sage, London, 1991, p. 294.

TABLE 5.
Tonkin and Annam rice, cotton, jute, Ramie, and oil seed cultivation, 1942–1944.

	000 hectares		
	1942	1943	1944
<i>Tonkin</i>			
Rice	1,487	1,386	1,427
Cotton	1.0	3.2	3.0
Jute	3.0	14.2	13.0
Ramie	0.4	1.0	1.2
Oil seeds	14.5	21.9	26.5
Total non-rice	<u>18.9</u>	<u>40.3</u>	<u>43.7</u>
<i>Annam</i>			
Rice	946	1,045	1,146
Cotton	4.5	7.0	9.7
Jute	0.2	0.4	0.7
Ramie	0.8	0.8	0.9
Oil seeds	27.8	26.7	25.2
Total non-rice	<u>33.3</u>	<u>34.9</u>	<u>36.5</u>

Notes: (1) Oil seeds include peanuts, castor oil, and sesame. (2) For 1941 data are available only for the whole of Indochina. Comparison of 1941 and 1942 data suggests significant increases in the cultivation of the non-rice crops of jute and peanuts but the location of this increase in Indochina cannot be identified. (3) In 1944 in Annam, average rice productivity was 0.56 tons per hectare, and between 1942 and 1944 an additional 3,200 hectares was devoted to non-rice fibre and oil seed crops. That implies a possible loss of rice output of 1,792 tons, equivalent to 0.83 per cent of rice output in the coastal provinces of North Annam in 1944. Repeating the same calculation for Tonkin indicates a possible loss in hectares of 24,800. Average rice productivity per hectare in 1944 was 0.75 tons per hectare. That implies a possible loss in rice output of 18,600 tons in Tonkin, equivalent to 1.7 per cent of rice output in Tonkin in 1944. Adding North Annam and Tonkin suggests a maximum loss in potential rice output of 20,392 tons from increased cultivation of fibre and oil seed crops. That assumes, however, that land chosen for fibre and oil seed crops had at least the average productivity of rice land as a whole. The possible loss of rice in 1944 of 20,392 tons compares with a total decline between 1942 and 1944 in rice output in the coastal provinces of Tonkin and Annam of 212,900 tons.

Sources: Indochina, *Annuaire Statistique, 1941–1942*, pp. 87–89, and *1943–1946*, pp. 89–93.

to alert American officials to the famine, one through the International Red Cross and another by the Comité de Secours in Cochinchina, a famine relief committee which hoped to go through the Swiss Consul in Saigon. However, contact with the Red Cross was decisively blocked by the Japanese military and the famine relief committee's initiative seems to have come to nothing.⁸² Additionally, on 8 March 1945, General

⁸² AOM CP 226, Mémoires Yokoyama, pp. 91–92. It is possible, but perhaps unlikely, that the Comité de Secours was linked to famine relief efforts in Saigon described in

Mordant, commander of the French Indochina Army, cabled Paris to request that the United States stop bombing north of Vinh because of the famine.⁸³ Even if no third party had informed the United States, however, American intelligence in China had extensive links in northern Vietnam, with both the French and, especially after March 1945, with the Viet Minh. It seems likely that at least one of these sources would have advised the Americans of Vietnamese starvation and the influx of many of its victims into the cities.⁸⁴ By May 1945, the US State Department possessed clear evidence of the famine because Archimedes Patti, in his official capacity as an officer in the Office of Strategic Services, the United States intelligence agency, sent Washington a dossier of photos.⁸⁵ Subsequently, the United States remained intent only on the pursuit of war and the continued destruction of Vietnam's communication system. It is quite possible that this would also have been the American reaction even if they had had prior knowledge of the famine before Patti's May 1945 dossier. The United States aimed to deny the Japanese army in the north resupply from the south and to encourage the population to turn against the Japanese.⁸⁶

The Viet Minh, of course, had its own goals. While understanding the famine's use as a weapon of revolution, discussed below, the Viet Minh also saw the opportunity to enlist the famine to try to gain American support against the French. Judging from Patti's account of his interaction with Ho Chi Minh, an alliance with the Americans, not aid for famine sufferers, appears to have been the principal motivation behind the 'Black Book' of photographic famine evidence that Ho gave Patti.

Conclusion and famine consequences

In both northern Vietnam and Java, the balance between population and food was historically precarious, erratic weather put the population

T. Huong, 'Famine in 1945 northern Việt Nam', *Vietnamese Studies* vol. 1, no. 183, 2012, pp. 82–84.

⁸³ Tønnesson, *Vietnamese Revolution*, p. 292.

⁸⁴ R. Spector, 'Allied intelligence and Indochina, 1943–1945', *Pacific Historical Review* vol. 51, no. 1, 1982, pp. 38–41; D. R. Bartholomew-Feis, *The OSS and Ho Chi Minh: Unexpected Allies in the War against Japan*, University Press of Kansas, Lawrence, 2006, pp. 85–86, 237.

⁸⁵ A. L. A. Patti, *Why Viet Nam?: Prelude to America's Albatross*, University of California Press, Berkeley, 1980, pp. 85–86, 347.

⁸⁶ AOM CP 226, 'Mémoires Yokoyama', p. 92.

constantly at risk, and dramatic absolute reductions in available food account for the famines in 1944–1945. Even a near perfect equal distribution of food within the affected regions—although this might have somewhat reduced deaths to below a combined total of 3.4 million Vietnamese and Javanese—would not have averted either famine. In Vietnam, the identity of the human agency that could have overcome acute food shortages in the north but failed to do so is not clear-cut. Decisions taken by the Japanese, French, and Americans all contributed to hindering rice shipments to the north which could have prevented the starvation of a million people there. In Java, rigid and misguided Japanese pricing policies, together with an autarky that divided the island into numerous semi-watertight zones, led directly to falls in food availability and thus, beginning in 1944, to 2.4 million deaths.

This article has been able to correct some misperceptions in the current literature. One scholar argues that during the Second World War in 'Java, extensive famines were not the result of an overall lack of food, just an inability to organize distribution'.⁸⁷ In fact, by 1944 and throughout 1945, there was insufficient food for everyone on the island, however it might have been distributed. Another scholar attributes the cause of famine in Vietnam to a variety of factors: 'In northern Vietnam, the forcible conversion of large areas of land from rice to jute, and the requisitioning of rice supplies for the war effort, together with American bombing of the railway lines from the south, preventing the shipment of relief food from Cochinchina, brought a famine in 1944–1945 that claimed perhaps 2 million lives.'⁸⁸ In fact, the planting of jute and other fibre crops was of marginal significance. Nor was it requisitions and transport that brought famine. Different transport policies, however, might have averted famine through negating the causal effects of unfavourable weather.

The Vietnamese and Javanese famines, though alike in type and similar in devastation, left remarkably different legacies. The Java famine had minimal political repercussions. Even now, Java's wartime famine has been largely ignored. Indonesian leaders were too implicated in support

⁸⁷ A. Vickers, *A History of Modern Indonesia*, Cambridge University Press, Cambridge, 2005, p. 60.

⁸⁸ I. Brown, *Economic Change in South-East Asia, c. 1830–1980*, Oxford University Press, Kuala Lumpur, 1997, p. 60. This same point about the planting of non-rice crops has often been made, including ten years previously in this journal: Bui Minh Dung, 'Japan's role in the Vietnamese starvation of 1944–45', *Modern Asian Studies* vol. 29, no. 3, 1995, pp. 588–94.

for the Japanese, including supplying them with forced labour, to make the famine an issue. Indonesia's post-war leadership was intent on focusing on Dutch colonialism in pursuit of post-war independence. Drawing attention to the famine did not fit the nationalist agenda and would have served no purpose. Furthermore, it may not have been politically opportune to recall the 1944–1945 famine, since, as a ground-breaking article by van der Eng shows, for two decades after the war, Indonesia had numerous famines about which the government attempted to suppress all news.⁸⁹

In contrast, the famine in Vietnam did much to shape the country's subsequent history. As late as March 1945, the Indochina Communist Party (ICP), led by Ho Chi Minh and the organizing force behind the Viet Minh, was not in a strong position. Nevertheless, the Party identified three opportunities for revolution: the Japanese coup, the climax of the Pacific War, and the famine. This last was, as the Viet Minh well understood, fundamental to the Vietnamese revolution because it created a 'sense of desperation' necessary to give the communists access to the villages and the opportunity to fuel rural insurgency.⁹⁰

Famine served as a weapon of revolution by enabling the Viet Minh to head 'a genuine mass movement'.⁹¹ Mobilized peasants were apparently often not from the worst famine-affected provinces but a report typical of many from civil servants captures the mood of widespread revolt: 'Around eight o'clock on 23 May 1945 the theft of paddy was carried out by a group of people carrying rifles, spears, batons and a red flag inscribed with the words "Viet Minh". An enquiry is underway ...'.⁹²

Vietnam's revolution differed from the Bolshevik (urban-based) and the Chinese (rural-based) revolutions, because it linked urban and rural, with the latter being the more important. Duiker explains: 'Famine, more than anything else, made the [Viet Minh rural] strategy possible'.⁹³ The

⁸⁹ P. van der Eng, 'All lies? Famines in Sukarno's Indonesia, 1950s–1960s' (processed, 2014).

⁹⁰ W. J. Duiker, *The Communist Road to Power in Vietnam*, Westview Press, Boulder, CO, 1996, 2nd edn, p. 104.

⁹¹ T. A. Nguyễn, 'Japanese food policies and the 1945 great famine in Indochina', in *Food Supplies and the Japanese Occupation*, Kratoska (ed.), p. 221; T. A. Nguyễn, 'La campagne nord-vietnamienne de la dépression économique de 1930 à la famine de 1945', *Vietnam Forum*, no. 9, 1987, p. 135.

⁹² AOM GF/62, Nguyen Trong Tan, Trân-Phu de Vinh Yên to Kam Sai, Hanoi, 25 May 1945.

⁹³ Duiker, *Communist Road*, p. 107.

capture of Hanoi and Hue did not depend on Viet Minh military strength nor the overwhelming support of urbanites but upon ‘the mobilization of the peasants’. ‘Out of this rural famine and dislocation,’ Woodside concludes, ‘a communist coalition led by Ho Chi Minh seized power.’⁹⁴ Famine was a fundamental and necessary, though not sufficient, condition for revolution. Able to call on the rural masses and under Ho’s brilliant leadership, the Viet Minh filled the power vacuum that arose from Japan’s sudden surrender on 15 August 1945 and the arrival of Allied troops in some force from around mid-September.

On the night of 19 August 1945, the Viet Minh, with at most 900 men, took control of Hanoi. Tens of thousands of peasants immediately supported the Viet Minh. Activated by famine and revolution, they marched on Hanoi, Haiphong, and Hue, and solidified the initial stage of revolution. Goscha is succinct: ‘famine, more than anything else, ushered in change’.⁹⁵

In the south of Vietnam, the Viet Minh lacked a famine around which to mobilize peasant support and came up against a complexity of political forces among which it was not clearly dominant, even at the time of the Japanese surrender. However, the famine was a cause of distress to middle-class Saigon residents, as evidenced by a large public meeting to support famine relief and the Cochinchina famine relief committee.⁹⁶ More importantly, the Viet Minh, despite a lack of military strength in Saigon and even less in the nearby countryside, gained the support of other major groups in the city. On 22 August, the Vanguard Youth announced it had joined the Viet Minh and the Cao Đài and Hòa Hảo (populist, quasi-mystical movements with private armies) made similar announcements on 24 August. Viet Minh forces, led by ICP member, Trần Văn Giàu, took power in Saigon on the next day.⁹⁷

Pierre Brocheux recalls that revolutionary August day: ‘I was 15 in 1945 when revolution burst out in Saigon and every day I roamed riding my bike. So I can assure you that I saw the popular upsurge, principally on 25 August when there was a big demonstration throughout the town. At least one million people demonstrated but it was not chaos because the

⁹⁴ A. B. Woodside, *Community and Revolution in Modern Vietnam*, Houghton Mifflin, Boston, 1976, pp. 230, 159.

⁹⁵ C. Goscha, *The Penguin History of Modern Vietnam*, Allen Lane, London, 2016, p. 211.

⁹⁶ Huong, ‘Famine in 1945 northern Việt Nam’, pp. 82–83.

⁹⁷ B. Kiernan, *Việt Nam: A History from the Earliest Times to the Present*, Oxford University Press, New York, 2017, p. 381.

crowd was framed and disciplined in their political movements like the communist led youth organization (the Vanguard Youth), the Trotskyists which had a popular support in the south at least in the Saigon urban district, but also the Caodaists, a religious sect ... armed and supported by Japanese army.⁹⁸ Between August and early September, Kiernan summarizes, the Viet Minh 'rode to power on a tide of revolution that swept the country from north to south'.⁹⁹

In Hanoi, Ho Chi Minh publicly proclaimed independence on 2 September 1945. The new regime gained legitimacy in 1946 and 1947 through measures to deal with famine and prevent its reoccurrence; in this were helped by good weather and the initiative of local groups which cultivated vacant land.¹⁰⁰ Famines and revolutions, as is well known, frequently go together. Duiker makes this point: 'famine in the countryside—a factor so familiar to students of the revolutionary process'.¹⁰¹ In contrast to Vietnam, Second World War Java stands as an interesting exception to any clear association between famine and revolution.

⁹⁸ P. Brocheux, private communication, 22 May 2015.

⁹⁹ Kiernan, *Việt Nam*, p. 381.

¹⁰⁰ Hoàng Văn Đức, *Comment la Révolution a Triomphé de la Famine (La Campagne des Cultures Sèches en Novembre 1945–Avril 1946 au Việt-Nam)*, République Démocratique du Viêt-Nam, Service d'information, Hanoi, 1946, pp. 3–11, 14; Marr, *State, War*, pp. 327–28; Marr, *Vietnam 1945*, p. 508.

¹⁰¹ Duiker, *Communist Road*, p. 104.