Poverty and Famines

An Essay on Entitlement and Deprivation

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Chapter 6

The Great Bengal Famine

6.1 A BRIEF OUTLINE

The official Famine Inquiry Commission reporting on the Bengal famine of 1943 put its death toll at 'about 1.5 million'.[1] W. R. Aykroyd, who as a member of the Commission was primarily responsible for the estimation, has said recently: 'I now think it was an under-estimate, especially in that it took little account of roadside deaths, but not as gross an under-estimate as some critics of the Commission's report, who preferred three to four million, declared it to be' (Aykroyd, 1974, p. 77). In fact, it can be shown that the Commission's own method of calculation does lead to a figure around three million deaths, and there will be an occasion to go into this demographic issue in Appendix D. But for the present purpose it does not really matter which of the estimates we accept. Our chief concern here is with the causation of the Bengal famine, and in particular with the role of food supply and that of exchange entitlements in the genesis of the famine.[2]

First, a bit of background. There are three rice crops in Bengal: (1) *aman*, sown in May and June, harvested in November and December (the winter crop); (2) *aus*, sown around April and harvested in August and September (the autumn crop); and (3) *boro*, planted in November and harvested in February and March (the spring crop). The winter crop is by far the most important, and the respective shares of the three crops during the five years 1939–43 were: 73, 24, and 3 per cent. In 1942 the autumn crop was a little less than normal (97 per cent of the preceding four years), and the winter crop quite a bit less (83 per cent of the average preceding four years). This was largely the result of a cyclone in October, followed by torrential rain in some parts of Bengal and a subsequent fungus disease. Further, the Japanese occupation of Burma in 1942—Rangoon fell on 10 March 1942—cut off rice imports from there, which affected the

[1] Famine Inquiry Commission, India (1945a), pp. 109–10.

[2] This chapter relies heavily on an earlier paper, viz. Sen (1977b).

supply to Bengal. Since the famine hit Bengal in 1943, it is quite natural, in view of the cyclone, flooding, fungus diseases, the disruption of the war, and the loss of Burma rice, that its primary cause should be seen in 'the serious shortage in the total supply of rice available for consumption in Bengal as compared with the total supply normally available' (Famine Inquiry Commission, India, 1945a, p. 77). This thesis will be examined presently.

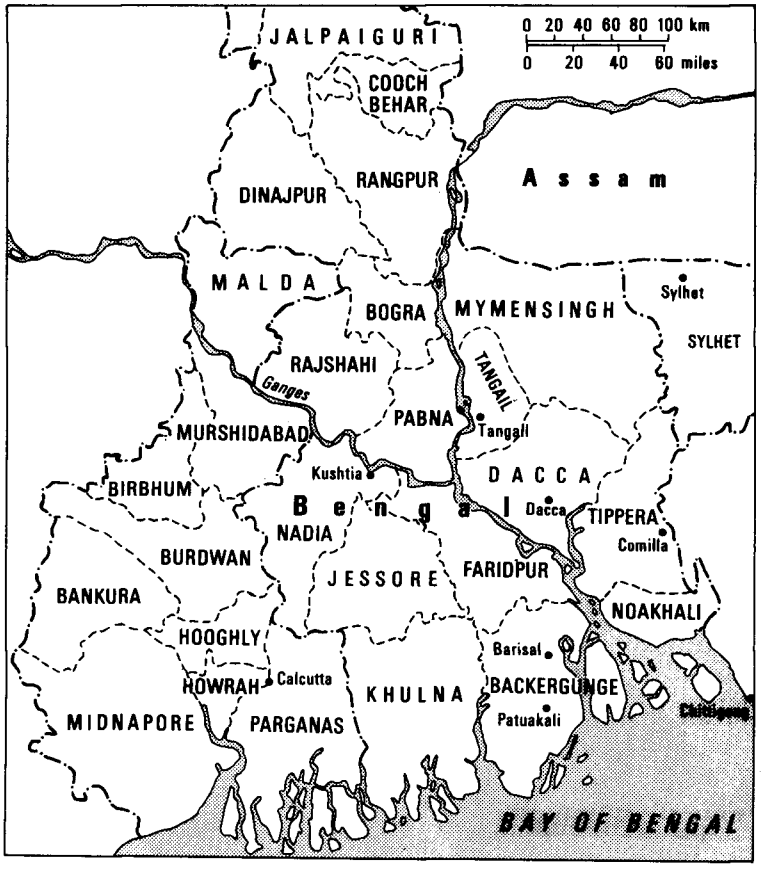

FIG. 6.1 Bengal, 1943

The wholesale price of rice, which had been between Rs. 13 and Rs. 14 per 'maund' (about 82.3 lbs.) on 11 December 1942, rose to Rs. 21 by 12 March 1943 and to above Rs. 30 by 21 May; by 20 August it had risen to Rs. 37 (see Table 6.1). Because of a government order fixing a maximum price, quotations for rice transactions are difficult to obtain from September 1943

TABLE 6.1
Wholesale Price of Rice in Calcutta, 1942 and 1943
(rupees per maund)

Date	*Ballam no. 1* *Price (Rs.)*	*Index*	*Kalma no. 1* *Price (Rs.)*	*(mill-cleaned)* *Index*
1941				
19 December	7.00–7.25	100	(not quoted)	
1942				
16 January	6.25–6.50	90	(not quoted)	
20 February	6.13–6.38	88	(not quoted)	
20 March	6.13–6.38	88	(not quoted)	
17 April	6.25	88	(not quoted)	
15 May	6.25–6.38	89	(not quoted)	
19 June	8.00	112	(not quoted)	
31 July	7.75–8.00	111	(not quoted)	
21 August	9.25	130	(not quoted)	
18 September	9.88–10.38	142	(not quoted)	
30 October	9.88–10.38	142	(not quoted)	
13 November	9.25–9.75	133	(not quoted)	
11 December	13.00–14.00	190	(not quoted)	
1943				
15 January	14.00–15.00	204	(not quoted)	
12 February	14.00–15.00	204	(not quoted)	
12 March	21.00	295	(not quoted)	
16 April	(not quoted)		22.00–23.00	306
21 May	30.00–31.00	428	31.00	428
18 June	(not quoted)		32.00–33.00	442
16 July	(not quoted)		32.00–33.00	442
20 August	(not quoted)		37.00	503

Notes

1 The price quotations are taken from the respective numbers of the *Indian Trade Journal*, a weekly publication, for 1942 and 1943.

2 Price data are given in the *Indian Trade Journal* typically either for Ballam no. 1 variety or for Kalma no. 1 variety, and very rarely for both. The index for Ballam no. 1 is constructed by setting the price on 19 December 1941 as 100. Since there is no quotation for Kalma no. 1 at that time, the index value of Kalma is equated to that of Ballam on 21 May 1943, when *both* prices are reported *for the first time* in the period covered. This provides the base for the Kalma index.

onwards, but there are non-official reports of further rises, especially in retail markets, such as in October that rice was being sold in Chittagong at Rs. 80 per maund (see *The Statesman*, 5 November 1943; Bhatia, 1967, p. 323), and in Dacca at Rs. 105 per maund (see Ghosh, 1944, p. 42).

The economic experience of Bengal leading to and during the famine can be split into three phases:

Phase I: from the beginning of 1942 to March 1943;

Phase II: from March 1943 to November 1943;

Phase III: From November 1943 through most of 1944.

The death rate reached its peak only in Phase III, but the most acute period of starvation had by then passed; epidemics were raging in a famine-devastated country. Phase II is when starvation death reached its peak. In contrast, what I am calling Phase I is usually taken to be a period when the famine had not yet begun. In a sense that view is correct, since starvation deaths were still relatively rare, but the economic distress that paved the way for the famine had already gripped a substantial part of the population.

The famine revealed itself first in the districts away from Calcutta, starting early in 1943. Its progress can be watched in the reports of the commissioners and district officers all over the province. Beginning with descriptions of 'hunger marches organized by communists' on 28 December 1942, a selection of the reports include: 'people having to go without food' (10 February); 'indications of distress among local people' (27 February); 'acute distress prevails' (26 March); 'crime against property increasing and paddy looting cases have become frequent' (28 March); 'major economic catastrophe apprehended' (27 April); 'economic conditions approach a crisis' (13 May); 'bands of people moving about in search of rice' (12 June); 'deaths in streets' (12 June); 'town filled with thousands of beggars who are starving' (17 July); 'passing through the most acute stage of distress' (10 August); 'deaths still occurring' (9 September); 'disposal of dead bodies . . . a problem' (27 September); 'supplies arriving but no hope of saving those who are starving' (25 October).[3] Mortality reached its peak only in December 1943 and stayed up for quite a while longer, but this was mostly the result of famine-induced epidemics, e.g. of

[3] See Famine Inquiry Commission (1945a), Appendix VI.

cholera, malaria, and smallpox. Death directly from starvation and 'famine diarrhoea' had passed its peak in late summer and autumn of 1943.[4]

The experience was quite different in Calcutta. The official policy was based on the firm conviction that 'the maintenance of essential food supplies to the industrial area of Calcutta must be ranked on a very high priority among their [the government's] war time obligations', and as early as August 1942 the Bengal government had explained to the Bengal Chamber of Commerce that as far as Calcutta was concerned the government promised to do 'all in their power to create conditions under which essential supplies may be obtainable in adequate quantities and at reasonable prices'.[5] The 'Bengal Chamber of Commerce Foodstuffs Scheme', guaranteeing essential items of food to the grain shops of industrial concerns connected with the Chamber, came into existence with the government's help in August 1942; it covered 620,000 employees by December of that year. The other chambers of commerce developed similar schemes with government backing, covering another 170,000 employees. Public arrangements for provision of supplies to those employed by the central and provincial governments, the railways, the Port Trust, and the Calcutta Corporation covered another 300,000 employees. These schemes guaranteed freedom from starvation to more than a million employees and their dependants. In addition, 'controlled shops' were started in Calcutta in August and September 1942, supplemented in 1943 by a scheme of 'approved markets' by which government stocks were made available to selected private shops for sale to the public. The government helped to feed Calcutta through three successive schemes of procurement at controlled prices between December 1942 and March 1943, but since they did not prove to be very successful, free purchase at market prices was resumed in the districts from March 1943, leading to very sharp rises in the price of rice in the districts.[6]

[4] See Sen (1977b, 1980b). An illuminating and insightful account of the Bengal famine in the economic, social and cultural perspective of Bengal has recently been provided by Greenough (1979).

[5] Famine Inquiry Commission (1945a), p. 30.

[6] See *The Calcutta Gazette* Supplements over this period; also Famine Inquiry Commission (1945a), p. 40.

Calcutta saw the famine mainly in the form of masses of rural destitutes, who trekked from the districts into the city; by July 1943 the streets were full. To start with, relief was confined to personal charity and to kitchens organized by charitable organizations, but by August relief for destitutes in Calcutta was accepted as an official policy. While cautious parsimony prevailed—meals were given 'at the same time of day in all kitchens, to prevent destitutes from getting more than one meal'[7]—there is little doubt that a destitute who had found his way into Calcutta had a much better chance of survival than anywhere else in Bengal. Nevertheless, since the relief offered was quite inadequate, unattended dead bodies could be found everywhere in the city—3,363 had to be disposed of by relief organizations in October alone.[8]

The number of starving and sick destitutes in Calcutta was estimated to be 'at least 100,000' in October. A decision was taken by the end of the month to remove the destitutes from the city. The Bengal Destitute Persons (Repatriation and Relief) Ordinance, passed on 28 October, was a rather controversial piece of legislation, since it was alleged that 'repatriation' was rather more firmly achieved than 'relief' in the many 'destitute homes' and 'camps' set up outside Calcutta.[9] For Calcutta, however, the worst of the famine was over, and the death rate came down sharply.[10] In fact, the situation in the districts also eased as some relief reached there directly, and with the harvesting of a good autumn crop and an outstanding winter one. The continued increase in the death rates in the districts was largely the result of famine-induced epidemics (see Appendix D).

6.2 A FOOD SUPPLY CRISIS?

The most common approach to famines is to propose explanations in terms of *food availability decline* (FAD). This FAD approach has been extensively used to analyse and explain the Bengal famine. The Famine Inquiry Commission's view that the primary cause of the famine was 'a serious shortage in the total supply of rice available for consumption in Bengal' provides the

[7] Famine Inquiry Commission (1945a), p. 71.
[8] See Ghosh (1944), pp. 119–20.
[9] See Famine Inquiry Commission (1945a), p. 71–2.
[10] See Ghosh (1944), p. 121.

standard explanation of the famine. As Blyn notes in his authoritative account of 'agricultural trends in India' (1966), referring to the Report of the Famine Inquiry Commission and to the *Census of India 1951*:[11] 'In 1942–43 cyclones and floods reduced the Bengal rice crop by about a third; this, coupled with the absence of exports from Japanese-controlled Burma, and inadequate relief, led to famines, epidemics (malaria, cholera and smallpox), aggravated by widespread starvation' (p. 98).

But is this explanation really supported by the facts—even by data to be found in the body of the *Report* of the Famine Inquiry Commission itself? First, consider what the Commission calls the 'current supply' for a given year, obtained by adding the winter crop of the *preceding* year (harvested in December, and usually sold in the following three months) to the spring and autumn crops of the year in question, plus net imports. Calculated from data given in the *Report* of the Famine Inquiry Commission (1945a), these are presented in columns (2), (3), and (4) of Table 6.2 below. While 1943 was not a very good year in terms of crop availability, it was not by any means a disastrous year either. The current supply for 1943 was only about 5 per cent lower than the average of the preceding five years. It was, in fact, 13 per cent *higher* than in 1941, and there was, of course, no famine in 1941.

However, certain further calculations are needed before the FAD view can be rejected.

Correction 1: Adjustment of official production estimates

The official estimates of agricultural production in India have been criticized for a long time, e.g. by P. C. Mahalanobis. Among recent contributions, Blyn (1966) provides fairly comprehensive estimates of agricultural trends in India, though yield data are not given separately for Bengal, only for 'Greater Bengal', including Bengal, Bihar, and Orissa. But the picture of a better food production situation in 1943 compared with 1941 is confirmed (see his Appendices 3A and 4C). Even the rice yield *per acre*, which is given separately for the Bengal province (Appendix Table 7A), is shown to have been higher in the year 1942–3 than in 1940–1, despite the fact that the acreage in 1942–3 was known to be much higher than in 1940–1.

[11] *Census of India*, 1951, vol. 1, pp. 291–92. See also the *Census of Pakistan*, 1951, vol. 3; and Bhatia's well-known book on Indian famines (1967), pp. 231–4.

Some corrections to the official estimates were carried out by the Famine Inquiry Commission itself, on the lines suggested by Mahalanobis and others. These included corrections also to the trade data, to increase coverage of 'movements across the frontier by road or by country-boat'. The Commission's 'adjusted' figures from their Statement III (p. 215) are presented in columns (5) and (6) in Table 6.2 below. Once again, the 1943 figure for current supply is not exceptionally low, and is higher than that for 1941.

Correction 2: Changes in wheat imports

While rice is by far the dominant food in Bengal, wheat is also consumed in considerable amounts, so that foodgrains availability should reflect variations in both rice and wheat. Very little wheat is grown in Bengal, but a fair amount is imported. The net imports of wheat and wheat flour into Bengal by rail and river-borne trade for 1938 to 1943 are calculated from *Accounts Relating to the Inland (Rail and Riverborne) Trade of India*, a then-current monthly publication of the Department of Commercial Intelligence and Statistics, Government of India.[12] These statistics do not, however, include road-based trade. The Famine Inquiry Commission's (1945a) figure of net arrivals in Bengal in 1943 (p. 54) is 36 per cent higher than the rail and river net imports, and its statement that in the 'five years ending 1941–42, [Bengal] imported from outside the province an average of 21,000 tons a month' (p. 3) makes the total for this period 33 per cent higher than the total of the rail and river net imports. To cover the gaps in the trade statistics from the rail and river data, these amounts have been raised by 36 per cent to get the total net imports of wheat into Bengal. This is almost certainly an overestimate for 1941 *vis-à-vis* 1943, but this is an acceptable bias as it favours the thesis we are rejecting.

The rice and wheat current supply figures are given in column (7) together with indices based on 1941 = 100 in column (8) in Table 6.2 below. The supply in 1943 was 11 per cent higher than in 1941.

[12] The figures for Calcutta are given separately from Bengal in these *Accounts* and the net figures presented here are computed as 'imports into Bengal' plus 'imports into Calcutta', less 'exports out of Bengal' and 'exports out of Calcutta'. Note also that 'wheat' and 'wheat flour' are given separately and have to be added together for each month.

Correction 3: Per capita supply

Since population of Bengal was growing over this period, the availability figure must be scaled down correspondingly to arrive at an index of *per capita* availability. The annual rate of *natural increase* in population in West Bengal was calculated to be 0.46 per cent per year during 1941–50 in the *Census of India* 1951 (vol. VI, part 1B, p. 2). But this is an underestimate for our period since the decade average reflects the impact of the famine itself; also, the 1941 figure was acknowledged to have been overstated owing to excessive registration of both the Hindu and Muslim communities to exaggerate their respective strengths in pre-partition India. A figure of 1 per cent per year is, however, a reasonably safe overestimate, and it is chosen here with a bias *in favour* of the thesis to be rejected. In the last column of Table 6.2, the *per capita* indices of food availability (rice and wheat) are presented with an assumed population growth of 1 per cent per year, again with 1941 being taken as 100. The *per capita* availability index for 1943 is higher by about 9 per cent than that for 1941.

Correction 4: Late availability of imported food in 1943

It can be argued that the availability of foodgrains was particularly bad in the earlier part of 1943; imports of rice and wheat were rather lower then and rose sharply in the last quarter of 1943. While the death rate seems to have reached its peak only in December 1943, there is evidence that starvation was at its peak in the third quarter of 1943.

During the last quarter of 1943, Bengal imported 100 thousand tons of rice (as opposed to an average of 55 thousand tons per quarter earlier in the year), and 176 thousand tons of wheat (as opposed to an earlier average of 54 thousand tons).[13] To bias the figures as much as possible against 1943, the extra amounts of rice and wheat imports during the last quarter of 1943 over the averages for the three previous quarters may be simply deducted from the total 1943 figure. This yields a current supply of rice and wheat of 9.068 million tons in 1943, with an index value of 109 of foodgrains supply and of 107 of *per capita* food grains availability. The former is, thus, fully 9 per cent higher and the latter nearly 7

[13] See Famine Inquiry Commission, India (1945a), p. 54.

TABLE 6.2
Foodgrains Availability in Bengal, 1938–43

Period	*Output of rice (official estimates)*	*Net imports of rice (official estimates)*	*Current supply of rice (official)*	*Adjusted output of rice*	*Adjusted current supply of rice*	*Rice and wheat: adjusted current supply*	*Index of total foodgrains supply*	*Index of per capita foodgrains availability*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I Annual data								
1938	8.474	0.033	8.507	9.848	9.981	10.217	123	127
1939	7.922	0.382	8.304	9.114	9.596	9.787	118	120
1940	8.223	0.258	8.481	9.524	9.882	10.196	122	123
1941	6.768	0.223	6.991	7.631	7.954	8.332	100	100
1942	9.296	−0.102	9.194	10.776	10.774	10.947	131	130
1943	7.628	0.264	7.892	8.632	8.896	9.235	111	109
II Moving averages: 2 years								
1938–39			8.406		9.789	10.002	120	123
1939–40			8.393		9.739	9.992	120	122
1940–41			7.736		8.918	9.264	111	112
1941–42			8.093		9.364	9.640	116	115
1942–43			8.543		9.835	10.091	121	119
III Moving averages: 3 years								
1938–40			8.431		9.820	10.067	121	123
1939–41			7.925		9.144	9.438	113	114
1940–42			8.222		9.537	9.825	118	118
1941–43			8.026		9.208	9.505	114	113

Note
Unit = 1 million tons for columns (1)–(6); 1941 value = 100 for columns (7) and (8).

per cent larger than the values for 1941, for which no deduction whatsoever for the last quarter is made.

Correction 5: The so-called 'carry-over' of old rice

The figures presented so far take no account of the 'carry-over' stock from before the December harvest of the previous year. The Famine Inquiry Commission (1945a) thought that one cause of the famine was 'a shortage in the stock of old rice carried forward from 1942 to 1943' (p. 77). Indeed, it argued that the 'carry-over' was substantially smaller than in 1941 (p. 15), and gave this an important role in precipitating the famine (p. 77). But it gave no data on this, and as Mr M. Afzal Hussain, a member of the Commission, noted in his 'Minute', 'absolutely no data are available regarding the stock position of rice (or any other food grain) from month to month, or year to year, in Bengal, or any other part of India' (p. 179). The Commission's majority view that 'the carry-over at the beginning of 1943 was probably sufficient for about six weeks' requirements' (p.15) is just as much a pure surmise as is Husain's view that 'a carry-over in the sense of surplus over consumption must have vanished years ago' (p. 182).[14]

A reasonable way of looking at the carry-over problem in the absence of direct information is to examine moving averages over two or three years ending in the year in question. This will indicate the build-up to the year under examination. Moving averages for two-year and three-year periods are given in rows under II and III for the main columns in Table 6.2. As it happens, the two-year average ending in 1943 is the *highest* in the series for total foodgrains availability—hardly the build-up for a famine. The three-year average ending in 1943 takes a dip from the preceding average, but it is still of the same order of magnitude as the average ending in 1941—indeed, it is just a bit higher. For *per capita* figures, even with our deliberately raised population growth assumption, the three-year average ending in 1943 is only just a shade lower than that ending in 1941, and the two-year average ending in 1943 is, in fact, quite a bit higher than that for 1941.

[14] Husain's scepticism regarding carry-over was directed towards arguing that the *absolute* shortage in 1943 was larger that the Commission thought. The scepticism, however, naturally extends to *relative* positions in 1943 *vis-à-vis* 1941.

It seems safe to conclude that the disastrous Bengal famine was not the reflection of a remarkable over-all shortage of foodgrains in Bengal.[15]

6.3 EXCHANGE ENTITLEMENTS

The Bengal famine was essentially a rural phenomenon. Urban areas, especially Calcutta, substantially insulated from rising food prices by subsidized distribution schemes, saw it mainly in the form of an influx of rural destitutes. Is the growth of rural destitution understandable in terms of shifting exchange entitlements? In what follows exchange entitlements will be

[15] This general conclusion, presented earlier in Sen (1977b), has been questioned by Alamgir (1980), pp. 81–3. His arguments seem to centre on three points: (1) *regional* distribution: 'many districts suffered more relative to others' (p. 81); (2) *temporal* distribution: 'between April and October of 1943, many parts of Bengal witnessed a drastic shortfall in foodgrain availability per capita, which is not entirely captured by the aggregate annual index of per capita foodgrain availability calculated by Sen' (p. 82); and (3) *redefinition* of availability: 'foodgrain availability' can be 'defined broadly' so as to 'subsume the contending hypotheses presented by Sen and others' (p. 83). These are all important issues, but I do not believe they affect my general conclusion and the rejection of FAD. First, so far as (1) is concerned, while there were inter-regional variations, the famine was a comprehensive one affecting every region of Bengal. Alamgir (1980) himself notes that 'all subdivisions of Bangladesh were affected with various intensities' (p. 92), and this is true of all regions of the rest of Bengal also, as is readily checked from Table D. 4 below (Appendix D). Of course, food moved out of rural Bengal into urban areas, notably Calcutta, but that is not a question of over-all availability but of the operation of market and political forces affecting 'entitlements' and they were analysed as such in Sen (1977b), and are further analysed below. Second, so far as (2) is concerned, the reported shortage during April to October, i. e., during the famine, is of course a picture of shortage for some but not for others, and that is indeed how entitlement forces operate. How regions like Calcutta with greater market command pulled foodgrains out of the rest of Bengal over this period is a part of the economic analysis of the famine. The over-all availability did, of course, also have some variations over the year. But the annual availability figures calculated and presented in Sen (1977b), and here, include the *aman* harvest of December-January 1942–43 and excludes that of December-January 1943–44 (as already explained) and thus the issue of 'late arrival' would not arise with production. So far as import of foodgrains from *outside* Bengal is concerned, there was indeed 'late arrival' of central supplies, but that has already been corrected under 'Correction 4' above, without changing the general conclusion. Finally, the general conclusion I have put forward here (and in Sen, 1977b) deals with 'availability' as conventionally defined (e.g., as used in Malthus's analyses), viz., total available supply, rather than with marketing and disposal of the over-all availability. Alamgir (1980) is certainly right in emphasizing such issues as 'panic hoarding by producers, consumers and traders', 'favourable treatment of Calcutta as opposed to the rest of Bengal', 'inefficiency of the administration in storage and distribution of foodgrains to districts', 'delayed action since there was emphasis on a "wait and see" policy', etc. (pp. 81–3), but it seems unhelpful to lump them all together in some redefined figure of 'food availability'. FAD is a specific hypothesis—much used in the literature—and deserves to be examined on its own terms, rather than being rescued by *redefinition*. On its own terms, FAD stands rejected.

viewed in terms of entitlement to rice—the main source (indeed, the overwhelmingly dominant source) of calories to the population of Bengal. (It can be checked that the entitlement trends would be substantially similar if the exchange entitlements were calculated for other cereals, e.g. wheat.)

Consider first the class of agricultural labourers. While agricultural wage data are not available on a regular basis over this period, in the Final Report of the Famine Inquiry Commission (1945b) some indices were given for 'the province generally' (p. 484–5). These are presented in Table 6.3 below along with indices of exchange rates of agricultural labour *vis-à-vis* foodgrains. The wages, however, are given for financial years (April–March), while food prices refer to calendar years. Since wages earned are typically spent subsequently, and the main peak period of earning is around December, the exchange rates have been calculated with the wage in each financial year (ending in March) being related to the price of the calendar year (ending in the following December)—except for 1943–4, where the wage of the first six months of the financial year (April–September) has been related to the price in that calendar year.

TABLE 6.3

Indices of Exchange Rates between Agricultural Labour and Foodgrains in Bengal, 1939–44

Year	*Wage index*	*Foodgrains price index*	*Index of exchange rate*
1939–40 (1940)	100	100	100
1940–1 (1941)	110	109	101
1941–2 (1942)	115	160	72
1942–3 (1943)	125	385	32
1st half of 1943–4 (1943)	130	385	34

Source: Based on the data presented in Appendix IV of Famine Inquiry Commission (1945b).

This is not satisfactory, but no other information on this is given by the Commission.

A dramatic decline in the exchange rate against labour emerges from Table 6.3. It is quite clear that agricultural labour did not share in the inflationary rise enjoyed by many other sections of the community in the war economy of Bengal. Table 6.3 is, however, somewhat inconclusive, since the level of aggregation involved and the difference in the periods covered make the exchange rate indices difficult to interpret. One would have preferred a monthly series with data on wages and prices contemporary to each other. This the Famine Inquiry Commission did not provide.

While the Agro-Economic Research Centre for East India (1960) gives wage data in Birbhum from January 1939 to December 1941, and again from January 1946, the data for the intermediate period are not presented. But the sources of the wage data—the log books of the Sriniketan Farm and the Sriniketan Dairy—are still available for certain parts of the period, and using these it has been possible to obtain the local daily wage rate for male unskilled labour from September 1942 to January 1944. Treating the figures of unskilled male wage and the price of rice (no. 2 quality) for December 1941 as 100 respectively, the indices of both prices and of the exchange rate for labour against rice are given in Table 6.4.

While in September 1942 the wage stood where it was in December 1941 and the price of rice stood only a bit higher, a wild upsurge in the rice price followed thereafter, without a matching movement of the wage rate. In fact, while the price index of rice rose to 221 by November, the wage rate actually fell in absolute terms—against the usual seasonal pattern—and the index of the exchange rate declined to 38. After a partial recovery during the harvest months and immediately thereafter, the exchange rate fell some more and stood at 24 in May 1943. By July the index of the exchange rate had been below 30 for three months in succession.

In understanding the significance of the wage price data in Table 6.4, it is also worth bearing in mind that agricultural labourers tend to earn a great part of their incomes in the peak seasons of planting and harvesting of the main crop; and even if

TABLE 6.4

Daily Wage of Agricultural, Male, Unskilled Labour and the Price of Rice and Indices of Exchange Rates: Birbhum District around Bolpur

Mid-month	*Rice (no. 2): Rs. per seer*	*Rice: price index*	*Wage: Rs. per day*	*Wage index*	*Exchange rate index: labour* vis-à-vis *rice*
1941					
December	0.14	100	0.37	100	100
1942					
September	0.16	114	0.37	100	88
October	0.25	179	0.37	100	56
November	0.31	221	0.31	84	38
December	0.25	179	0.44	119	66
1943					
January	0.27	193	0.50	135	70
February	0.25	179	0.50	135	75
March	0.38	271	0.44	119	44
April	0.52	371	0.50	135	36
May	0.78	557	0.50	135	24
June	0.72	514	0.50	135	26
July	0.73	521	0.53	143	27
August	0.75	536	0.62	168	31
September	0.50	357	0.50	135	38
October	0.56	400	0.56	151	38
November	0.44	314	0.56	151	48
December	0.33	236	0.69	186	79
1944					
January	0.36	257	0.62	168	65

Sources: (1) Log books of contemporary wage records in Sriniketan Dairy and Sriniketan Farm;

(2) Log books of contemporary retail prices kept at the Agro-Economic Research Centre for East India;

(3) Agro-Economic Research Centre for East India (1960); the rice price in August 1943 is, however, corrected using (2). See also Sen (1977b).

wages had kept pace with the current rice prices, there would have been distress owing to the failure of the peak wages to anticipate the rise of food prices following the peak. The system of wage payments in Bengal had been geared to the experience of largely stable prices over the preceding decades, and there was no reflection at all in the peak wage rate of December–January of the tripling of rice prices that was to follow before the next peak in May–June.

We have rather little direct information on employment. The counter-seasonal decline in money wages in November 1942 and the low level of real wages through the winter harvesting period and post-harvest months may reflect some decline in employment. This would have been natural given the partial destruction of the winter crop of 1942 from cyclone, floods, and fungus disease. However, the lack of solid data on employment makes this part of the analysis rather speculative, even though there is some direct evidence of a fall in employment compared with the normal pattern (see Mahalanobis, Mukherjea and Ghosh, 1946, pp. 33–4; and Das, 1949, pp. 65–6).

Turning now from agricultural labour to other occupations, the exchange rates *vis-à-vis* rice of a number of commodities are presented in Table 6.5 based on retail prices in Bolpur in the Birbhum district, obtained from contemporary records. While some items, e.g. wheat flour, cloth, and mustard oil, more or less kept pace with rice in terms of price movements in Phase I, fish and bamboo umbrellas fell behind, and milk and haircuts declined sharply in value *vis-à-vis* rice.[16] In Phase II, these declines became more dramatic; for example, by summer the value of a haircut in units of rice had dropped to less than a fifth of what it was in December 1941.

As far as fish is concerned, after an early decline it seems to recover in the middle of Phase I (June–September 1942), to slump again. The temporary recovery was due partly to seasonal factors in the catching of fish (see June–September prices for other years in Agro-Economic Research Centre for East India, 1960, p. 49 onwards), but it may have also been connected with the general rise in fish price in Bengal as a consequence of the 'boat denial' policy carried through for military reasons. By Orders issued in May boats capable of carrying more than ten passengers were removed from a vast area of river-based Bengal to 'deny' them to the possibly-arriving Japanese, and this interfered with both river transport and fishing (see Famine Inquiry Commission, 1945a, pp. 26–7).[17] Thus the distress of

[16] See also the relative prices of other commodities covered in Agro-Economic Research Centre for East India (1960), pp. 73–4.

[17] The 'boat denial' policy was coupled with a 'rice denial' policy initiated in May 1942, aimed also at the elusive Japanese; rice stocks were removed from certain coastal districts (viz. Bakarganj, Khulna, and Midnapore). While the amount involved was not very large—about 40,000 tons altogether—and the rice thus bought and removed was later sold mostly within Bengal (chiefly in Calcutta), it did contribute to local scarcities.

TABLE 6.5

Indices of Exchange Rates vis-à-vis *Rice at Retail Prices: Bolpur in Birbhum District*

Mid-Month	*Wheat flour*	*Mustard oil*	*Cloth*	*Bamboo umbrellas*	*Milk*	*Fish (pona)*	*Haircut*
1941							
December	100	100	100	100	100	100	100
1942							
January	121	93	108	114	108	95	108
February	112	93	108	127	108	95	108
March	121	100	108	152	108	95	108
April	109	88	113	145	88	88	88
May	91	74	142	134	74	74	74
June	98	89	169	160	88	132	88
July	92	82	165	150	83	124	83
August	83	94	165	129	74	110	74
September	130	125	197	145	88	132	88
October	99	80	126	92	56	84	56
November	79	71	102	69	45	68	45
December	125	95	134	85	66	84	56
1943							
January	116	88	132	85	61	65	52
February	168	95	142	98	66	70	56
March	111	74	94	69	44	46	37
April	108	59	68	60	32	34	27
May	72	51	46	43	21	27	18
June	78	50	49	48	23	39	19
July	77	49	49	47	23	38	19
August	75	64	47	44	22	37	19
September	112	95	76	66	33	56	28
October	100	85	68	57	30	50	25
November	95	118	86	73	47	80	32
December	75	145	118	90	62	106	42
1944							
January	64	127	111	91	57	97	58

Sources: As in Table 6.4, (2) and (3). Note that the cloth index is based on the price of rural handwoven towels (*gamcha*), the only cotton good for which data are available.

fishermen cannot be judged by looking only at the fish–rice exchange rate. However, even that exchange rate declined sharply afterwards. Since Bolpur is a rather small market for fish, the fish–rice exchange rates in Calcutta are presented in Table 6.6; here the decline took place a bit later and somewhat less severely than in Bolpur.

TABLE 6.6
Indices of Retail Prices of Rice and Fish and of Fish–Rice Exchange Rates: College Street Market in Calcutta

	Price of rice (dhekichata)	*Price of fish: rohi (cut pieces)*	*Price of whole fish*	*Exchange rate index: rohi fish* vis-à-vis *rice*	*Exchange rate index: whole fish* vis-à-vis *rice*
1941					
December	100	100	100	100	100
1942					
January	100	100	100	100	100
February	100	100	100	100	100
March	100	100	100	100	100
April	100	100	100	100	100
May	100	110	140	110	140
June	119	110	140	92	118
July	130	130	180	100	138
August	137	150	160	109	117
September	133	150	180	113	135
October	147	140	180	95	122
November	154	170	180	110	117
December	170	170	180	100	106
1943					
January	228	150	180	66	79
February	218	150	180	69	83
March	219	150	180	68	82
April	330	n.a	n.a		
May	435	210	180	48	41
June	435	220	240	51	55
July	435	300	280	69	64
August	491	280	320	57	65

Sources: Calculated from data collected from the weekly *Calcutta Municipal Gazette* during 1941–3. The data refer to the mid-range value for the last observation in each month. Rice prices are discontinued from September, when 'price control' made higher market quotations illegal.

One group that could not have suffered a deterioration of exchange entitlement *vis-à-vis* rice would have been the rice producers. This category would include large farmers as well as peasants. To some extent this would apply to share-croppers as well, since the share is fixed as a proportion of the output, which in this case is rice. There can, of course, be a decline in employment opportunities of share-croppers, but in terms of exchange rates their position would have been distinctly less

vulnerable than that of wage labourers, especially since most wages were fixed in money terms. The exchange entitlement approach would, therefore, tend to predict a lower impact of the famine on peasants and share-croppers than on agricultural labourers and sellers of certain commodities and services (fishermen, craftsmen, barbers, etc., who suffered sharp deteriorations of exchange entitlements).

6.4 THE CLASS BASIS OF DESTITUTION

Who were the famine victims? From which occupation categories did the destitutes come?

Data about famines are never plentiful. However, there are at least three important surveys of famine victims conducted during and just after the Bengal famine. First, P. C. Mahalanobis, R. Mukherjea and A. Ghosh (1946) have published the results of a detailed sample survey conducted in collaboration with K. P. Chattopadhyaya during 1944–5 covering 20 per cent of the families in 386 villages in rural Bengal.[18] The subdivisions of Bengal were chosen for the survey with an eye to the 'intensity of incidence' of the famine (41 subdivisions out of a total of 86), and then the villages in each subdivision, and 20 per cent of the population in each village, were chosen on a random basis. The occupational status of the families were recorded for three points of time: in January 1939 (before the famine), January 1943 (immediately preceding the famine—in fact, in terms of our phase structure towards the end of Phase I of the famine), and in May 1944 (after the famine). Second, K. Mukerji (1965) studied the economic conditions of five villages in the Faridpur district immediately after the famine in early 1944, and the results of that survey are of relevance to that particular region of East Bengal much affected by the famine. Third, while these two studies were conducted after the famine was over, a study of the destitutes in Calcutta during the famine was carried out in September 1943 by T. Das (1949), with the help of others, covering 820 destitute family units.

Data from the study by Mahalanobis, Mukherjea and Ghosh (1946) can be used to construct transition matrices in the period immediately preceding the famine, including Phase I of it (January 1939–January 1943), as well as over the severe phase of

[18] See also Chattopadhyaya and Mukherjea (1946).

the famine (January 1943–May 1944), and these are presented in Tables 6.9 and 6.10 at the end of the chapter. It should be observed that there is a fairly close relation between the inter-occupational orderings of pauperization in the 'immediate pre-famine' and the 'famine' periods.[19] (The value of Spearman's rank correlation happens to be 0.75.) It seems possible to argue that the destitution that took place during the famine was similar to what had been happening in the immediate pre-famine period. The extent of the pauperization rose sharply during the famine, and every occupation category—other than paupers themselves—experienced greater destitution in the period than in the four years preceding it (see Table 6.7, columns marked A), but the ranking of occupations in terms of pauperization rates remained similar.

In the famine period, the worst affected groups seem to have been fishermen, transport workers, paddy huskers, agricultural labourers, those in 'other productive occupations', craftsmen,

TABLE 6.7
Transition to (A) Destitution and (B) Destitution or Husking Paddy for Different Occupations

	Between January 1939 and January 1943		*Between January 1943 and May 1944*	
	A	*B*	*A*	*B*
	%	%	%	%
Peasant cultivation and share-cropping	0.7	0.9	1.3	1.5
Part peasant, part labour	0.9	1.1	1.4	2.0
Non-cultivating owners	0.7	1.3	1.6	2.4
Profession and services	1.4	1.9	2.1	2.6
Trade	1.1	1.5	2.2	2.6
Craft	3.0	3.1	3.8	4.3
Non-agricultural labour	1.8	1.8	3.7	4.5
Other productive occupations	1.9	2.2	4.6	4.6
Agricultural labour	1.7	2.5	4.6	6.1
Transport	2.4	30.6	6.0	6.9
Fishing	1.6	1.6	9.6	10.5
Husking paddy	3.6	–	4.7	–

Source: Calculated from the data presented in Mahalanobis, Mukherjea and Ghosh (1946).

[19] As explained earlier, these terms are somewhat deceptive since the 'immediate pre-famine period' includes much of Phase I of it.

and non-agricultural labourers, in that order. The least affected were peasant cultivators and share-croppers. They were also the least affected group in the pre-famine period (including what we have been calling Phase I of the famine).

One of the occupation categories,—'paddy husking'—displays certain interesting features. It happens to be one of those marginal occupations that many rural families pass through on the way to total destitution. It has rather easy entry, and it is a lowly paid occupation done almost exclusively by women.[20] While—the destitution rates in husking paddy are so high—3.6 and 4.7 per cent respectively in the pre-famine and famine periods—the proportion of rural families dependent on these activities *rose* substantially both in the immediate pre-famine period as well as during the famine. It is interesting, in this connection, to note that, on the basis of the detailed information on sex, family status, and personal history obtained from the survey, Chattopadhyaya and Mukherjea (1946) observed that, while 'many of these women husking paddy are unattached persons . . . who have been following this occupation for making a livelihood for themselves', others with 'children dependent on them have been reduced to rely entirely on this occupation through death of earners and finally brought to destitution' (p. 7). Despite a high rate of destitution during 1939–43 as well as 1943–4, the number of families dependent on husking paddy showed a net increase by a little over 66 per cent between January 1939 and May 1944.

Treating entry into paddy husking as typically a sign of distress, columns marked B in Table 6.7 present the proportions of each occupation group moving to destitution *or* to living on husking paddy, in the immediate pre-famine period and during the famine. Again, the rank-ordering of this redefined index of distress in the pre-famine period is quite close to that during the famine (e.g., Spearman's rank correlation coefficient of the two series works out at 0.78).

In terms of recruitment to economic distress (defined as destitution or husking paddy), 'fishing', 'transport' and

[20] See Chattopadhyaya and Mukherjea (1946), p. 7. Note also that in a period of rice shortage, paddy husking also becomes a more lucrative occupation (in relative terms), permitting entry of labour thrown out from other walks of life. The fact that husking can be carried out on an extremely small scale is also relevant to this phenomenon of easy entry.

'agricultural labour' have the highest frequencies among the occupations. It is a bit difficult to conclude anything firmly about transport workers since the sample size was rather small, and there is also some relation between the distress of the fishermen and that of rural transport workers, since river transport 'is largely looked after by members of the fishermen caste' (Chattopadhyaya and Mukherjea, 1946, p. 7). But there is little doubt about fishermen and agricultural labourers being among the hardest hit by the famine. Other hard-hit groups were 'other productive occupations', 'non-agricultural labour', and 'craft'.

In absolute numbers, by far the largest group of destitutes came from the category of agricultural labourers, according to the data presented by Mahalanobis, Mukherjea and Ghosh (1946). Similarly, in his survey of the destitutes who had trekked to Calcutta at the height of the famine, conducted in September 1943, it was found by T. Das (1949) that about 41 per cent of those destitutes—the largest group—were from families of agricultural labour. It is not, however, possible to calculate the proportionate incidence of destitution from Das's data.

Finally, in Mukherji's survey of Faridpur villages, the highest rate of proportionate destitution is observed among agricultural labourers (a destitution rate of 52 per cent compared with an over-all average destitution rate of 29 per cent). The proportion of families 'wiped off during 1943' is also the highest among the agricultural labourers (40 per cent compared with an over-all average of 15 per cent; indeed, 77 per cent of those agricultural labourers who were destituted by the famine got 'wiped off'). The relative rates for the different occupation categories are given in Table 6.8. Next to agricultural labourers, the highest destitution rate is displayed in a category named 'unproductive', which is a bit decepetive since it includes people who traditionally live by beggary in these villages, and of course were easily destituted further. The next highest group is 'artisan' (35 per cent destitution and 10 per cent 'wiped off'). The peasant cultivators and share-croppers had a relatively lower famine incidence (18 per cent destitution and 6 per cent wiped off), higher only than office employees and landlords.

The picture that emerges from these data seems to be entirely in line with what one would expect from the use of the entitlement approach. The high incidence among agricultural

TABLE 6.8
Destitution in Five Surveyed Villages in Faridpur

Occupation on 1/1/43	*Total nos. of families on1/1/43*	*Nos. of destitute families in each group on 1/1/43*	*Proportion of destitution* (%)	*Nos. of families in each group 'wiped off during 1943'*	*Proportion being 'wiped off during 1943'* (%)
Peasant cultivation and share-cropping	266	49	18.4	17	6.4
Agricultural labour	124	65	52.4	50	40.3
Artisan	20	7	35.0	2	10.0
Petty trader	107	34	31.8	15	14.0
Crop-sharing landlord	16	1	6.3	0	0.0
Priest and petty employee	11	3	27.3	3	27.3
Office employee	20	2	10.0	0	0.0
Landlord	10	0	0.0	0	0.0
'Unproductive'	18	8	44.4	3	16.7
Total	592	169	28.5	90	15.2

Source: Based on Mukerji (1965), Table 63, p. 178.

labourers *vis-à-vis* the low impact on peasants and share-croppers was to be expected. The food entitlements had, indeed, deteriorated sharply for the former, but not so much for the latter.[21] The relatively large effects on fishermen, non-agricultural labour, craftsmen, etc., are also consistent with the observed pattern of shifts in entitlement relations.

6.5 CAUSES OF THE SHARP MOVEMENTS OF EXCHANGE ENTITLEMENTS

What caused the exchange entitlements to move so violently? While data limitations rule out definitive discrimination between alternative causal hypotheses, some tentative diagnoses seem possible.

First, the increase in rice price in Phase I was essentially related to demand factors; supply was exceptionally high in 1942 (see Table 6.2). The price increase in the Phase I period, while not confined to Bengal, was much more acute in Bengal than elsewhere (see Singh, 1965, pp. 95–9; Palekar, 1962). This was, to a great extent, a result of general inflationary pressure in a war economy. Bengal saw military and civil construction at a totally unprecedented scale, and the war expenditures were financed to a great extent by printing notes. While a substantial part—indeed, more than half from 1941 to 1942—of the total war expenditure incurred by India was 'recoverable' as sterling balances owed by Britain, this did not reduce the immediate inflationary pressure, since the 'recovery' took place much later. Indeed, given the Indian monetary system, these sterling balances were treated as assets against which the Reserve Bank of India was 'entitled to print notes worth about two and a half times their total value', so that the recoverable war expenditure tended to have a *stronger* inflationary impact than expenditure on India's own account (see Gadgil and Sovani, 1943, pp. 12–14). The 1943 famine can indeed be described as a 'boom famine' related to powerful inflationary pressures initiated by public expenditure expansion.

[21] Indeed, peasants growing rice and living on exchanging rice for other commodities might be thought to have had an *improvement* in exchange entitlements in terms of other commodities. But the high retail price of food was often not correspondingly reflected in the price paid to the peasant. Furthermore, at the initial post-harvest high price many peasants sold off more rice than their surplus and had to repurchase some rice later at a very much higher price still.

Second, in Phase II the demand forces were reinforced by the 'indifferent' winter crop and by vigorous speculation and panic hoardings. The hoarding was financially profitable on the basis of even 'static expectations': rice prices had more than doubled in the preceding year, while the 'bazar bill rate' in Calcutta still stood around 7 per cent per year (the bank deposit rate was below 2 per cent per annum).[22] There was a abnormally higher withholding of rice stock by farmers and traders from the winter harvest of 1942–3; the normal release following the harvest did not take place.[23] A moderate short-fall in *production* had by then been translated into an exceptional short-fall in *market release*. The 'current supply' figures of the Famine Inquiry Commission no longer reflected supply to the market.

Third, speculative withdrawal and panic purchase of rice stocks was encouraged by administrative chaos,[24] especially the inept handling of three procurement schemes, tried and hurriedly abandoned between December and March, ending with the sudden abolition of price control in the wholesale market on 11 March.[25] But the expectation of a famine and further price rises were most forcefully fed by the sight of distress and hunger that had already developed by the end of Phase I and the beginning of Phase II.[26] Many of the groups had already suffered severe declines in exchange entitlements in Phase I itself (see Tables 6.3–6.5) and had helped to fill the distress reports of commissioners and district officers (discussed earlier). The speculative price increase in rice in Phase II led to further deterioration of exchange entitlements, covering additional occupation groups. The Bengal government's propaganda drive that 'the supply position did not justify the high prices prevailing' failed totally.[27]

[22] Gadgil and Sovani (1943), p. 24.

[23] See Ghosh (1944), pp. 33–48; Famine Inquiry Commission, India (1945a), pp. 33–4, 38–41 and 83–5; and Das (1949), p. 119.

[24] Including a change of ministry in Bengal. The old Bengal government under the premiership of Fazlul Haq fell on 31 March, and a new ministry under Khwaza Nazimmuddin was sworn in on 23 April.

[25] See Famine Inquiry Commission (1945a), pp. 36–50. Similarly, the scheme to requisition traders' stocks in Calcutta a few months earlier had yielded little except the belief that not much stock existed to be requisitioned.

[26] See Ghosh (1944), Das (1949), and Famine Inquiry Commission, India (1945a), Appendix VI.

[27] The ineptness of the propaganda drive was exceptional. On 18 May the Finance Minister, T. C. Goswami, offered the following remarkable explanation of events,

Fourth, the prohibition of export of cereals in general and of rice in particular from each province, which had come into operation during 1942 with the consent of the government of India, prevented the price spiral in Bengal being broken by imports from the other provinces.[28] After much fumbling with various all-India schemes of food distribution, the government of India eventually ordered free trade in the eastern region of the country towards the middle of May 1943. But this was abandoned in July since the prices in these neighbouring provinces soon reached the 'maximum' levels laid down by the provincial governments. A 'Basic Plan' of centralized inter-state grain movements eventually came into operation in late summer, improving the supply position in Bengal in the last quarter of 1943.

Fifth, an important aspect of the famine was its association with an uneven expansion in incomes and purchasing powers. Those involved in military and civil defence works, in the army, in industries and commerce stimulated by war activities, and almost the entire normal population of Calcutta covered by distribution arrangements at subsidized prices (see Section 6.1) could exercise strong demand pressures on food, while others excluded from this expansion or protection simply had to take the consequences of the rise in food prices. Agricultural labour did not in general share in the war-based expansion, except 'in certain areas . . . where military or civil defence works were in progress'.[29] The abundance of labour in the agricultural sector (see Mahalanobis, Mukherjea and Ghosh, 1946; and Chattopadhyaya and Mukherjea, 1946) made the economic position of the labourers in the agricultural sector weak. The weakness of their position is also reflected in the fact that, while the famine killed millions, with agricultural labourers forming by far the

backing up a cheerful prediction: 'Before long the price will come down. The speculators were in their last grasp [*sic*] and the reason why the prices were not coming down could be assigned to their last desperate attempt to keep prices up' (quoted in Ghosh, 1944, pp. 40–1). See also Famine Inquiry Commission, India (1945a), p. 55.

[28] The price difference between Bengal and its neighbouring provinces had already become substantial by the end of 1942. Compared with a mean harvest price of winter rice in Assam of Rs. 8.81, in Bihar of Rs. 8.00 and in Orissa of Rs. 6.19, the mean price of winter rice in Bengal was Rs. 14.00, and even the 1942 autumn harvest mean price had been Rs. 13.88 (see *Indian Agricultural Statistics 1939–40 to 1942–43*, Government of India, New Delhi, 1950, vol. 1, Table VII).

[29] Famine Inquiry Commission, India (1945b), p. 485.

largest group of those killed, Bengal was producing the largest rice crop in history in 1943. While I resist the temptation to propose a 'test' of the surplus labour hypothesis along Schultzian lines,[30] which rejected the surplus labour hypothesis on grounds of declines in agricultural output following the influenza epidemic of 1918, it is remarkable that agricultural operations could take place on such a gigantic scale despite deaths, debilitating diseases and migration in search of food, affecting a large part of the agricultural labour force.

Sixth, as far as occupation groups involving crafts, services, 'superior' foods (e.g. fish, milk) are concerned, Phase II could have created problems of its own. As distress developed generally in the rural economy of Bengal, the demand for these 'luxury' goods declined sharply—a phenomenon that has been observed in other famines as well.[31] This feedback helped to plunge additional groups of people into destitution.

Finally, it is perhaps significant that the Bengal famine stood exactly at the borderline of two historical price regimes. Prices had been more or less stationary for decades (the 1941 rice price was comparable to that in 1914), and the price rises (especially of food) that started off in 1942 were to become a part of life from then on. Institutional arrangements, including wage systems, were slow to adjust to the new reality.

6.6 THE ROLE OF THEORY IN POLICY FAILURES

The inadequacy of official policy in tackling the Bengal famine has been widely noted and criticized. The Famine Inquiry Commission (1945a) provided a detailed analysis of the policy failures both of the Bengal government as well as of the Indian government (see especially Chapters X and XI). The famine became a focal point of nationalist criticism of British imperial policy in India (for a classic work on this, see Ghosh, 1944), and official complacency came under particular attack. The refusal of the British government to permit more food imports into India through reallocation of shipping as an emergency measure to tackle the famine was severely criticized.[32] Lord Wavell, who

[30] See Schultz (1964); for a critique, see Sen (1967b), followed by Schultz's reply.

[31] See, for example, Wrigley (1969), p. 68, on the seventeenth-century famine in Mouy in France.

[32] For the international—especially American—reaction, see the interesting study of Venkataramani (1973).

became the new Viceroy at the last stage of the famine and who had to battle hard for increasing food imports into India, went on record in this context that he felt that 'the vital problems of India are being treated by His Majesty's Government with neglect, even sometimes with hostility and contempt'.[33]

Does our thesis that the Bengal famine did not arise from a drastic decline in food availability negate these criticisms? I don't believe it does, since no matter how a famine is *caused*, methods of *breaking* it call for a large supply of food in the public distribution system. This applies not only to organizing rationing and control, but also to undertaking work programmes and other methods of increasing purchasing power for those hit by shifts in exchange entitlements in a general inflationary situation. (One curious aspect of the Bengal famine was that it was never officially 'declared' as a famine, which would have brought in an obligation to organize work programmes and relief operations specified by the 'Famine Code', dating from 1883; Sir T. Rutherford, the Governor of Bengal, explained to the Viceroy: 'The Famine Code has not been applied as we simply have not the food to give the prescribed ration.'[34] A large food stock would have also helped in breaking the speculative spiral that ushered in the Phase II of the famine. Thus there is no reason to revise the criticisms made of the official failure to obtain more food in the public distribution system through greater procurement and larger imports from outside Bengal. Nor are there reasons to dispute the Famine Inquiry Commission's indictment of the Bengal government for administrative bungling and of the government of India for its failure to evolve an integrated food policy for India as a whole.

But the conspicuous failure of the Government to anticipate the famine and to recognise its emergence does appear in a new light. When the existence of the famine was eventually acknowledged officially in Parliament by the Secretary of State for India in a statement in October 1943, the influential Calcutta daily *The Statesman* wondered why 'the speech contained no direct admission of grave misjudgement on the higher authorities' part or even of error', overlooking 'previous official assertions in London and New Delhi that there existed virtually no food problem in

[33] Letter to Winston Churchill, dated 24 October 1944; quoted in Wavell (1973), p. 95.

[34] Document no. 158 in Mansergh (1973), p. 363.

India.'[35] In view of what we have discussed earlier (Section 6.2), one can argue that the Raj was, in fact, fairly right in its estimation of overall food availability, but disastrously wrong in its theory of famines.

The government's thinking on the nature of the food problem seems to have been persistently influenced by attempts to estimate the size of the 'real shortage' based on 'requirements' and 'availability'; it was a search in a dark room for a black cat which wasn't there. The approach provided no warning of the development of a gigantic famine arising from shifting exchange entitlements. The approach also contributed to some reluctance to accept the magnitude of the disaster even after the famine had in fact appeared.

Estimates of food shortages were periodically made by the Government of India. An estimate of 'shortage of rice' was made in December 1942, taking full note of 'loss of Burma rice, floods in Sind, cyclones in rice growing areas of Bengal and Orissa and an *indifferent* rice crop generally in Bengal'.[36] But the shortage seemed absorbable, and the Government of India used this 'rice shortage' estimate only to supplement its request to London for shipping allocation to meet the existing 'wheat shortage', viz., shipping facilities to import 'an additional 600,000 tons of wheat'.[37] In his 'memorandum' on this request, the Secretary of State for India observed:

> No account is taken in it of the statistical shortage of 140,000 tons of rice and 650,000 tons of millets which is the background against which the Government of India have to view their wheat difficulties. *These shortages, serious as they are, would not from the statistical standpoint bear a catastrophic proportion of the Indian cereal crop of 60/70 million tons.*[38]

[35] "Seen from a distance", editorial, *The Statesman*, 14 October 1943; see also the editorial on 16 October following, entitled "The death-roll". *The Statesman*, a British-owned newspaper, had carried out a powerful campaign with news reports, photographs and editorial comments on the calamity – a role that would be praised later by the Famine Inquiry Commission. For the editor's account of the campaign and also for an interesting, anecdotal account of the Bengal famine, see Stephens (1966, chs. 13 and 14). Recognition of the reality of the famine seemed to decrease step by step in the move from the local administration via Calcutta and New Delhi to Whitehall.

[36] Document no. 265 in Mansergh (1971), p. 357; italics added. Note that the rice crop in Bengal was recognized to be 'indifferent' rather than exceptionally bad (cf. Section 6.2 above).

[37] Document no. 265 in Mansergh (1971), p. 358; see also Documents nos 282, 297, and 332 in the same volume.

[38] Document no. 330 in Mansergh (1971), p. 474; italics added.

While taking an essentially FAD approach, the Secretary's detailed memorandum went also into 'aggravating factors', particularly the problems of the urban population, who 'are dependent on the marketed part of the crop, who are the first to experience any shortage and . . . on whose labour the Indian munitions and supply industries depend'.[39] The distress of the rural population, especially of agricultural labour, arising from shifting exchange entitlements, which—as we have seen in Section 6.3—had already been quite substantial by then, was not noted. The reference to 'distribution' was only in the context of 'the strain put upon the railways by military and other loadings'.[40] (The tendency to view 'distribution' essentially as a transport problem rather than as one involving purchasing power and exchange was, incidentally, a persistent feature of official thinking on the subject.)[41]

As it happens, even the request for permission to import 600,000 tons of wheat was turned down in London on 16 January, only a small part of it being met.[42] This was received, it appears, with equanimity, since the government itself did not take its 'shortage' estimates too seriously in the context of over-all supply. The government immediately proceeded to decontrol the wholesale price of wheat, set up a government Purchasing Agency, and prohibit 'the export of foodgrains beyond Provincial and State boundaries on private account', and it issued a communiqué promising 'imports from abroad' and confiding that 'the Government of India believed that the food shortages were mainly due to hoarding'.[43]

On 26 January, the Viceroy wrote to the Secretary of State for India: 'Mindful of our difficulties about food I told him [the

[39] ibid. Even when the Bengal countryside was gripped by the famine and rural destitutes were pouring into relatively well-fed Calcutta, the government of India was concentrating chiefly on 'signs that difficulty is likely to arise in the non-rural and industrial districts' (see War Cabinet Paper WP (43) 345, dated 30 July 1943, Document no. 66 in Mansergh (1973), p. 134).

[40] Document no. 330 in Mansergh (1971), p. 476.

[41] See, for example, Document no. 102 in Mansergh (1973); see also Famine Inquiry Commission, India (1945a), pp. 59–62.

[42] See the Secretary of State's telegram to the Viceroy on 16 January 1943, Document no. 350 in Mansergh (1971), pp. 514–15. London continued to turn down requests by the government of India for shipping allocations throughout 1943; see Documents nos. 59, 71, 72, 74, 98, 139, 157, 207, and 219 in Mansergh (1973), and also Wavell (1973), Chapters 2 and 3).

[43] Mansergh (1971), p. 541.

Premier of Bengal] that he simply *must* produce some more rice out of Bengal for Ceylon even if Bengal itself went short! He was by no means unsympathetic, and it is possible that I may in the result screw a little out of them'.[44] The estimates of 'shortage' based on production figures (including that of the 'indifferent' winter crop) did not make such a suggestion look preposterous, even though—as we have seen—the forces leading to the famine were already in full swing.

Later in the spring, when the famine was about to reveal itself fully, the Viceroy sent, on 18 March, the cheerful news to the Secretary of State that 'the food situation in India generally is at present much improved'. While 'the situation in Bengal at present is disquieting', the food situation could be 'treated with guarded optimism, with special reference to the recent improvement of ths situation in India generally and the excellent prospects of the *rabi* harvest'.[45]

The severity of the famine when it did surface caused much official surprise; the Viceroy came to the conclusion that the 'chief factor' was 'morale'.[46] But the adherence to the FAD approach was not abandoned; the values of 'shortages' were recalculated specifically for Bengal for the period until the next crop. In a report transmitted to London by the Viceroy, the Governor of Bengal, Sir T. Rutherford, presented on 2 October 1943 a detailed account of the 'present food situation', including a lament about 'the dubiety of all available statistics and therefore lack of accurate knowledge of what the *real shortage* is',[47] without questioning the wisdom of the approach itself. 'Allowing 1 lb. a day' to those above fifteen years and '½ lb. a day to those below 15', and taking note of traders' stocks and estimates of 'carryover from 1941–42', it was now calculated that for the period until the next harvest 'the shortage was in the neighbourhood of 655,000 tons'.[48] This figure had to be revised upwards by the Viceroy within eight days, since an expert 'says my estimate of 655,000 tons as shortage is too low and suggests one million tons'.[49]

[44] Document no. 362 in Mansergh (1971), p. 544.
[45] Document no. 599 in Mansergh (1971), pp. 825–6.
[46] Wavell quoting Linlithgow, in Wavell (1973), p. 34.
[47] Document no. 158 in Mansergh (1973), p. 361; italics added.
[48] ibid., p. 362.
[49] Document no. 174 in Mansergh (1973), p. 390; the expert quoted was A.M.A.H. Ispahani, a businessman much involved in rice trading.

While practical considerations outside the FAD approach were often introduced in an *ad hoc* way in government notes on the food problem,[50] especially after the famine had broken out, the FAD view continued to occupy a pre-eminent position in the government's theory of the food crisis. By January 1944, the government appeared to have worked out a complicated FAD explanation of the famine: 'The experience of the past years has convinced the authorities in India that the loss of imports since 1942 has meant the consumption of the carry-over, and now, reserves having been consumed, is a major cause of shortage, and that, though the exhaustion of a concealed reserve has not been evident till now, its results will persist'.[51] As was noted earlier, not a single piece of serious statistics exists on the 'carry-over', and a study of the moving averages of availability taking note of production and net imports suggests no reason for presuming a sharp decline of carry-over (see Section 6.2).

Finally, when the time came to report on the famine and assess what had happened, the Famine Inquiry Commission also adopted FAD as its main approach—as we have already seen. The occurence of the famine was squared with production and trade figures by assuming a sharp decline of that mysterious—and unobserved—'carry-over from previous years'. Like the Phoenix, the FAD theory arose rejuvenated from the ashes, and it can be found today chirping in the current literature on the food crisis of the world, even making occasional references to the Bengal famine, 'when floods destroyed the rice crop, costing some 2 million to 4 million lives'.[52]

[50] See Mansergh (1971), Chapter 10, and Mansergh (1973), Chapter 4.

[51] Memorandum by the Secretary of State for India, War Cabinet Paper WP (44) 63, Document no. 347 in Mansergh (1973), p. 680.

[52] Brown and Eckholm (1974), p. 27. See also Masefield (1963), p. 14; quoted also in Aziz (1975), p. 27.

TABLE 6.9

Occupational Transition Matrix in Rural Bengal in the Pre-famine Period: January 1939–January 1943

1939	*Peasant cultivation or share-cropping*	*Part-time agricultural labour*	*Agricultural labour*	*Non-cultivating owner*	*Fishing*	*Craft*	*Husking paddy*	*Transport*	*Trade*	*Profession and service*	*Non-agricultural labour*	*Other productive occupations*	*Destitute*
	%	%	%	%	%	%	%	%	%	%	%	%	%
Peasant cultivation and share-cropping	91.8	3.3	1.9	0.9	0.0	0.2	0.2	0.1	0.4	0.3	0.1	0.1	0.7
Part-time agricultural labour	1.7	90.3	3.9	0.4	0.1	1.3	0.2	0.0	0.3	0.5	0.1	0.4	0.9
Agricultural labour	2.6	4.3	87.1	1.0	0.0	0.5	0.8	0.0	0.3	1.0	0.2	0.6	1.7
Non-cultivating owner	3.7	0.7	1.2	90.5	0.0	0.2	0.6	0.0	0.4	1.3	0.3	0.4	0.7
Fishing	3.8	2.8	1.3	0.3	68.3	21.0	0.0	0.0	0.3	0.0	0.3	0.3	1.6
Craft	8.0	0.7	1.6	2.7	0.0	81.1	0.1	0.1	0.6	1.0	0.3	0.7	3.0
Husking paddy	8.8	1.0	2.6	4.1	0.0	1.6	73.7	0.5	0.5	1.0	1.6	1.0	3.6
Transport	5.3	2.9	2.4	4.9	0.0	0.0	28.2	51.0	1.9	0.0	0.5	0.5	2.4
Trade	11.9	1.8	1.9	2.5	0.0	0.7	0.4	0.1	77.1	1.6	0.7	0.3	1.1
Profession and service	7.3	1.6	2.2	5.8	0.0	0.9	0.5	0.0	1.5	77.6	0.7	0.5	1.4
Non-agricultural labour	9.9	1.8	0.0	4.5	0.0	0.9	0.0	0.0	0.9	0.9	79.3	0.0	1.8
Other productive occupations	3.7	1.9	1.5	4.3	0.0	0.3	0.3	0.0	0.9	0.9	0.3	84.0	1.9
Destitute	0.4	0.0	2.2	0.0	0.0	0.4	2.2	0.0	2.9	1.8	1.5	1.1	87.6

TABLE 6.10

Occupational Transition Matrix in Rural Bengal in the Famine Period; January 1943–May 1944

1943	*Peasant cultivation or share cropping*	*Part-time agricultural lobour*	*Agricultural labour*	*Non-cultivating owner*	*Fishing*	*Craft*	*Husking paddy*	*Transport*	*Trade*	*Profession and services*	*Non-agricultural labour*	*Other productive occupations*	*Destitute*
	%	%	%	%	%	%	%	%	%	%	%	%	%
Peasant cultivation or share-cropping	91.6	1.9	2.4	1.3	0.1	0.4	0.2	0.1	0.4	0.2	0.0	0.3	1.3
Part-time agricultural labour	2.6	86.9	6.8	0.5	0.0	0.2	0.6	0.1	0.3	0.3	0.2	0.2	1.4
Agricultural labour	0.9	1.5	88.2	0.0	0.1	0.5	1.5	0.2	0.3	1.2	0.2	0.8	4.6
Non-cultivating owner	0.6	0.1	0.8	92.6	0.0	1.1	0.8	0.1	0.5	1.2	0.2	0.5	1.6
Fishing	0.5	0.0	2.3	0.5	78.6	0.5	0.9	0.5	4.6	0.0	0.9	1.4	9.6
Craft	1.8	0.5	2.9	1.1	0.1	87.4	0.5	0.3	0.3	0.9	0.5	0.1	3.8
Husking paddy	0.0	0.4	0.8	0.0	0.4	0.8	90.6	0.4	0.8	0.0	0.4	0.8	4.7
Transport	0.9	1.7	7.8	0.0	0.0	3.5	0.9	78.5	0.0	0.9	0.0	0.0	6.0
Trade	1.8	0.6	2.8	1.1	0.1	0.6	0.4	17.5	69.6	2.0	0.5	0.8	2.2
Profession and services	1.4	0.4	0.9	1.2	0.0	0.6	0.5	0.3	0.9	91.5	0.1	0.1	2.1
Non-agricultural labour	3.7	2.2	5.2	0.0	0.0	0.0	0.8	0.0	0.0	0.0	82.8	1.5	3.7
Other productive occupations	0.6	1.8	1.5	0.6	0.0	0.6	0.0	0.3	0.3	1.5	0.0	88.4	4.6
Destitute	0.2	0.7	2.8	1.9	0.0	1.9	1.7	0.2	1.4	0.5	1.2	2.1	85.4