

Fig. 8.1 Map of Sahel Countries

## Chapter 9

## Famine in Bangladesh

## 9.1 FLOODS AND FAMINE

First the floods; then the famine. So runs the capsule story of the Bangladesh famine of 1974. Gilbert Etienne describes the 1974 floods thus:

The floods of 1974 caused severe damage in the Northern districts. In normal years, the Brahmaputra encroaches on its Western bank by 30–60 m during peak floods. In 1974, over a distance of 100 km, it flooded land on a strip 300 m wide in areas having a density of 800 per sq. km. 24,000 people suffered heavy losses. Moreover alluvial deposits, while fertile in some areas, have such a high sand content in others that they are sterile. . . . Severe floods occurred at the end of June, taking away part of the *aus* [rice crop harvested in July–August]. A fortnight later the Brahmaputra again crossed the danger level just at the time of *aus* harvesting. After another fortnight the level of river rose again and seedlings of *aman* [rice crop transplanted in July–September and harvested in November–January] in their nurseries were in danger. Then, by the middle of August, floods reached their maximum for the year, affecting recently transplanted *aman*. It was not the end. At the beginning of September the Brahmaputra again crossed the danger line, hitting once more what was left of paddy which has been transplanted after the previous floods.<sup>1</sup>

The price of rice rocketed during and immediately after the floods, as Table 9.1 shows. In some of the most affected districts, the rice price doubled in the three months between July and October. Reports of starvation could be heard immediately following the flood, and grew in severity. The government of Bangladesh officially declared famine in late September. Some *langarkhanas*, providing modest amounts of free cooked food to destitutes, were opened under private initiative early in September, and government-sponsored *langarkhanas* went into full operation in early October. At one stage nearly six thousand *langarkhanas* were providing cooked food relief to 4.35 million people—more than 6 per cent of the total population of the

<sup>1</sup> Etienne (1977a), pp. 113–4.

country. By November rice prices were beginning to come down, and the need for relief seemed less intense. By the end of the month the *langarkhanas* were closed down.

TABLE 9.1

*Rise in the Price of Rice in Bangladesh following the 1974 Floods*

Month in 1974	Bangladesh average	Index of retail price of coarse rice		
		Mymensingh	Rangpur	Sylhet
July	100	100	100	100
August	121	130	116	129
September	150	169	184	160
October	178	202	183	204
November	151	162	113	167
December	133	132	85	155

Source: Calculated from Table 3.3 of Alamgir *et al.* (1977), p. 58.

TABLE 9.2

*Number Obtaining Food Relief in Langarkhanas:  
Bangladesh Famine, 1974*

District	Number of persons fed daily (thousands)	Number fed as proportion of total population (%)
Rangpur	935.6	17.18
Mymensingh	899.0	11.88
Dinajpur	221.0	8.60
Sylhet	362.7	7.62
Barisal	281.0	7.15
Khulna	245.7	6.91
Bogra	123.0	5.51
Noakhali	178.4	5.50
Patuakhali	65.8	4.39
Jessore	128.5	3.86
Faridpur	148.2	3.65
Comilla	205.1	3.52
Rajshahi	147.5	3.46
Kushtia	64.9	3.45
Tangail	70.5	3.39
Pabna	57.9	2.06
Dacca	155.7	2.05
Chittagong	54.7	1.27
Chittagong Hill Tracts	0	0

Source: Data provided by Alamgir (1979).

The severity of the famine varied from region to region. Table 9.2 presents the proportion of a district's population that

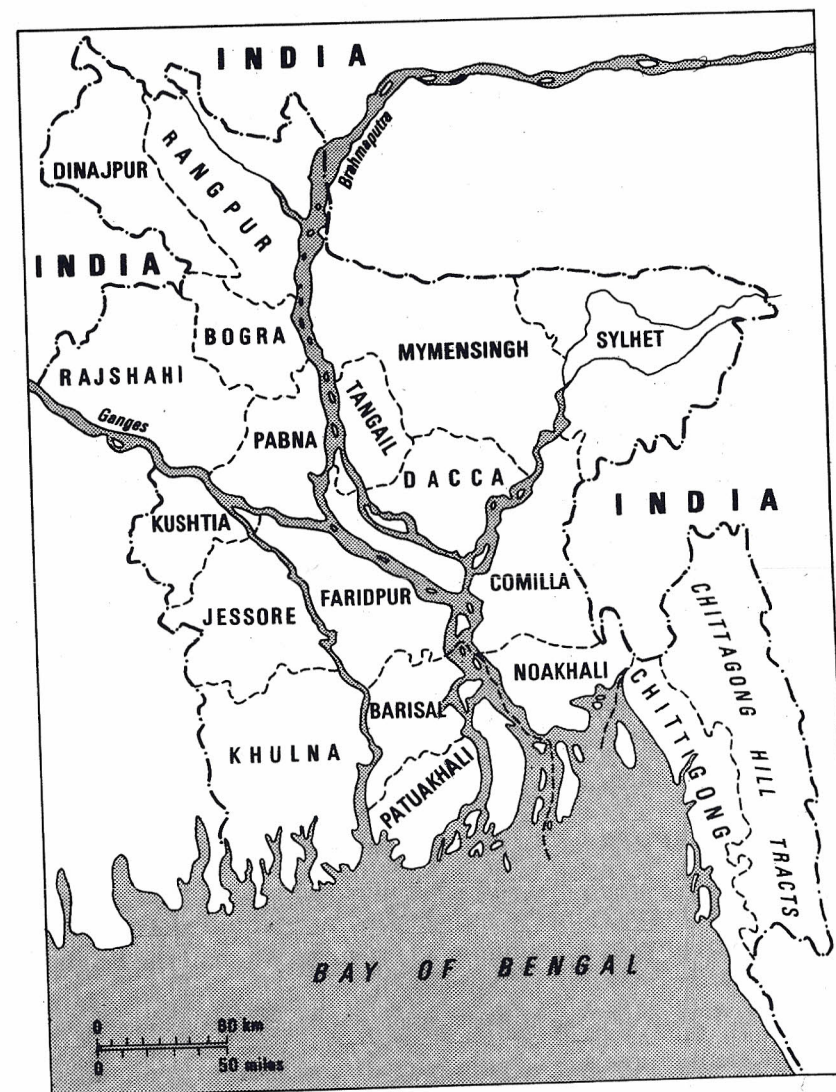


FIG. 9.1 Map of Bangladesh



obtained relief from the *langarkhanas*, varying from 17 per cent in Rangpur to none in Chittagong Hill Tracts. Judged by this criterion, the five most affected districts were Rangpur, Mymensingh, Dinajpur, Sylhet, and Barisal, in that order. In the famine survey carried out by the Bangladesh Institute of Development Studies<sup>2</sup> in November 1974, Mymensingh, Rangpur, and Sylhet were selected as the 'famine districts'. The choice was based on the 'maximum depth of inundation' being '6 feet and above in a period of 3 months and above', along with 'the proportion of population seeking relief in *langarkhanas* being 5 per cent and above'.<sup>3</sup> Dinajpur, which is some distance from the raging Brahmaputra and other rivers (see the map of Bangladesh, Fig. 8.1), did not figure in this list despite having a higher percentage seeking relief than Sylhet, but it appears that 'a considerable proportion of *langarkhana* inmates in this district came from the adjoining district of Rangpur.'

Mortality estimates vary widely. The official figure of death due to the famine is 26,000.<sup>4</sup> Other estimates indicate much higher mortality, including the estimation that in Rangpur district alone '80 to 100 thousand persons died of starvation and malnutrition in 2-3 months'.<sup>5</sup> There is little doubt that the mortality figure would have been a good deal higher but for the massive relief operation, inadequate as it was. In addition to government-sponsored relief, voluntary organizations played an important part, both in providing relief outside the distressed villages and in the form of movements of self-reliance within many of the villages.<sup>6</sup>

## 9.2 FOOD IMPORTS AND GOVERNMENT STOCKS

There is little doubt that the government of Bangladesh found itself severely constrained by the lack of an adequate food stock, and that this prevented running a larger operation at the height of the famine.<sup>7</sup> By 1974 Bangladesh was already chronically

<sup>2</sup> See Alamgir *et al.* (1977), and Alamgir (1980). As will be clear, this chapter draws heavily on the information provided by this survey, and on other data, analyses, and insights provided by Alamgir (1978a, 1980).

<sup>3</sup> Alamgir (1980).

<sup>4</sup> Alamgir (1978a, p. 2).

<sup>5</sup> Haque, Mehta, Rahman and Wignaraja (1975), p. 43. Alamgir (1980) suggests an excess-death figure around one million between August 1974 and January 1975, and a further half a million in the year following (pp. 142-3).

<sup>6</sup> See Rahman (1974a, 1974b).

<sup>7</sup> See N. Islam (1977).

dependent on import of food from abroad, and despite the famine conditions the government succeeded in importing less foodgrains in 1974 than in 1973 (see Table 9.3). In fact, in the crucial months of September and October the imports fell to a trickle, and the amount of foodgrains imported during these two months, rather than being larger, was less than one-fifth of the imports in those months in the preceding year. In constraining the operations of the Bangladesh government, the shortage of food stock clearly did play an important negative part.

TABLE 9.3  
*Import of Foodgrains into Bangladesh, 1973 and 1974*

Month	1973	1974
January	228	38
February	194	90
March	467	99
April	212	147
May	179	224
June	126	135
July	83	291
August	159	225
September	263	29
October	287	76
November	59	190
December	83	149
Total	2,340	1,693

Source: Table 6.18 in Alamgir (1980).

Note

Unit = 1,000 tons

It is worth mentioning in this context that Bangladesh, like many other countries in the world, had been receiving regular food aid from the United States. But the US food aid came under severe threat precisely at this point of time, since the United States decided to seek stoppage of Bangladesh's trade with Cuba. This apparently came shortly after a desperately dollar-short Bangladesh government had to cancel two purchase orders from American grain companies for delivery in autumn.

The U.S. threatened to cut off food aid in September 1974. At that time the American ambassador called upon Dr. Nurul Islam, Chairman of Bangladesh's Planning Commission, under instructions from the State



Department, to formally request that Bangladesh cease exporting jute to Cuba. Under PL480, a recipient country cannot trade with blacklisted countries such as Cuba. Islam retorted by expressing surprise and shock that the United States would actually insist that a destitute Bangladesh should restrict its exports. The government of Bangladesh cancelled further exports of jute to Cuba at a time when competition from Indian jute and low world market prices had substantially eroded its foreign exchange earnings.<sup>8</sup>

Only after Bangladesh gave in and sacrificed its trade with Cuba was the flow of American food resumed. By then the autumn famine was largely over.<sup>9</sup>

The problem of import planning had been compounded by rise of international prices of grains and shortage of credit. The government's expectation of a much larger food output in 1974 also led to disappointment. It can be seen that the import of food in the early months of 1974 was also substantially short of the corresponding figures for the year before. Furthermore, internal procurement had been less successful than planned; and, with a total foodgrains production of 11.8 million tons in 1974, the government stock varied from month to month between 347 thousand and 130 thousand over the year.<sup>10</sup> This affected the scale of relief operations not merely in terms of the number that could be covered, but also—and more importantly—in terms of the amount of food that could be given to each destitute.<sup>11</sup>

That food availability served as a constraint in government relief operations is not in dispute. But this would establish nothing about the causation of the famine itself. Was the famine caused by a decline of food availability resulting from the floods? Was there a general shortage of food? Does the FAD explanation hold? I take up these questions next.

<sup>8</sup> McHenry and Bird (1977), p. 82.

<sup>9</sup> For further details of this episode, see McHenry and Bird (1977); also Sobhan (1979). For more general discussions of negative features of food aid, see George (1976) and Lappé and Collins (1977, 1978).

<sup>10</sup> Table 6.2 of Alamgir (1980). However, Alamgir argues that even with the import problems the government was unduly conservative in its relief operations, with the disbursement of food in the crucial famine months being a small proportion of the government stock. See also Rahman (1974a, 1974b) for a critique of the scale and organization of government relief operations.

<sup>11</sup> See Table 5.15 of Alamgir (1979).

### 9.3 FOOD AVAILABILITY DECLINE?

As was mentioned in Chapter 6 when analysing the great Bengal famine of 1943, there are three main rice crops in Bengal: *aman*, *aus*, and *boro*. The relative importance of these crops in Bangladesh now as well as their exact timing, are not however quite the same as in Bengal 1943, partly because of the fact that Bangladesh does not cover the whole of undivided Bengal, but also because of changes in the types of seeds and cropping methods over the years since 1943. In Bangladesh for the period 1971–6, the relative shares were the following: *aman* (harvested in November–January), 56 per cent; *aus* (harvested in July–August), 25 per cent; and *boro* (harvested in April–June), 19 per cent.

Like the Bengal famine of 1943, the peak of the Bangladesh famine of 1974 coincided with the *aus* harvesting time and preceded the time of *aman* harvesting. It is thus best to define the production-based supply of 1974 by adding the *aman* crop of 1973–4 (November–January) to the *boro* and *aus* crops of 1974. Indeed, as in Chapter 6, that is how the production of a particular year will be defined, i.e. including the *aman* crop harvested during the *preceding* November to January of that year. Table 9.4 presents the yearly rice output from 1971 to 1975. It also presents the index of *per capita* rice output. It can be seen that 1974 was a local peak year in terms of both total output and *per capita* output of rice.<sup>12</sup>

TABLE 9.4  
*Rice Output of Bangladesh, 1971–5*

Year	Production of rice (thousand tons)	Index of rice production	Per capita rice output (tons)	Index of per capita rice output
1971	10,445	100	0.133	100
1972	9,706	93	0.120	90
1973	10,459	100	0.126	95
1974	11,778	113	0.139	105
1975	11,480	110	0.132	99

Basis: Data taken from Table 6.4 of Alamgir (1980).

<sup>12</sup> It is, however, worth remarking that, as far as *per capita* output is concerned, this is a local peak, and the highest levels achieved in the 1960s were not quite matched in these



In moving from rice production to foodgrains availability, wheat output, though tiny, has to be added and international trade must be taken into account. This is done in Table 9.5. It is found, once again, that 1974 was a local peak.<sup>13</sup> If one went by over-all food availability, one would expect a famine less in 1974 than in any of the other years. And yet the famine did occur precisely in 1974.

TABLE 9.5  
*Foodgrains Availability in Bangladesh, 1971-5*

Year	Total available foodgrains for consumption (million tons)	Population (millions)	Per capita availability (oz./day)	Index of per capita availability
1971	10.740	70.679	14.9	100
1972	11.271	72.535	15.3	103
1973	11.572	74.441	15.3	103
1974	12.355	76.398	15.9	107
1975	12.022	78.405	14.9	100

Source: Data taken from Table 6.23 of Alamgir (1980).

It is, however, necessary to consider the possibility that the decline in food availability was a regional one, and that it could not get sorted out within Bangladesh because of problems of food movement including the inter-district barriers imposed officially (mainly to help procurement). Was there an exceptional decline in the districts most affected by the famine?

Table 9.6 presents the amounts of rice produced in the different districts, and also the percentage change in output between 1973 and 1974. It appears from it that output declined only in two districts, whereas the famine was much more widespread. It also appears that the most famine-affected

years in the 1970s. Nevertheless, two-year and three-year moving averages also rise rather than dip as we take up periods ending in 1974 (following one method used, among others, in Chapter 6), and it is difficult to deny that the output picture improved rather than worsened as the 'famine year' 1974 came.

<sup>13</sup> One area of some uncertainty is the extent of smuggling of foodgrains into India from Bangladesh. Some accounts suggest that this would have been very small indeed (see Reddaway and Rahman, 1975), while others suggest the possibility of the figures being substantially higher. Whatever the truth about these absolute magnitudes, there is no reason to expect that the smuggling of rice out of Bangladesh would have increased in the famine year when the relative price of rice in Bangladesh *vis-à-vis* that in India rose sharply.

TABLE 9.6  
*Production of Rice in Bangladesh Districts, 1973 and 1974*

District	1974	1973	Change from 1973 to 1974 (%)
Khulna	462	325	+42.2
Chittagong Hill Tracts	93	67	+38.8
Dinajpur	666	504	+32.1
Bogra	478	380	+25.8
Jessore	531	426	+24.6
Kushtia	221	180	+22.8
Mymensingh	1,065	871	+22.3
Tangail	322	264	+22.0
Faridpur	484	403	+20.1
Rangpur	1,122	958	+17.1
Chittagong	725	644	+12.6
Pabna	282	251	+12.4
Sylhet	1,068	968	+10.3
Dacca	675	625	+8.0
Noakhali	538	505	+6.5
Rajshahi	679	638	+6.4
Comilla	836	805	+3.9
Barisal	600	664	-9.6
Patuakhali	229	342	-33.0

Source: Data taken from Table 6.28 of Alamgir (1980); the percentage change figure for Dinajpur is corrected.

Note

Unit = 1,000 tons

districts, namely Mymensingh, Rangpur, Sylhet, had substantial increases in output (22, 17, and 10 per cent respectively). Looking instead at the three top-ranked districts in terms of lowness of output growth, we obtain Patuakhali, Barisal, and Comilla, which together account for only 12.7 per cent of the destitutes receiving relief in *langarkhanas*. In general, the ranking of inter-district indicators of famine intensity (Table 9.2) and the ranking of lowness of output growth (Table 9.6) hardly relate to each other, and the rank correlation coefficient between the two is minus .5.

The corresponding availability estimates of foodgrains *per capita* are presented in Table 9.7. The three so-called famine districts typically had comfortable rises in availability per head: 3 per cent in Sylhet, 10 per cent in Rangpur, and 11 per cent in Mymensingh. If, on the other hand, we look at the three top-



TABLE 9.7  
*Per capita Availability of Foodgrains in Bangladesh Districts,  
 1973 and 1974*  
 (oz./day)

District	1974	1973	Change (%)
Dinajpur	25.1	20.4	+23.0
Mymensingh	22.8	20.6	+10.7
Sylhet	22.1	21.4	+3.3
Bogra	20.8	19.3	+7.8
Rangpur	20.1	18.3	+9.8
Chittagong	19.7	18.4	+7.1
Noakhali	16.7	17.8	-6.2
Jessore	16.3	14.6	+11.6
Khulna	16.2	13.8	+17.4
Barisal	16.0	18.6	-14.0
Rajshahi	15.8	15.6	+1.3
Patuakhali	15.7	24.1	-34.9
Tangail	15.3	14.7	+4.1
Comilla	14.9	16.1	-7.5
Chittagong Hill Tracts	14.4	14.8	-2.7
Dacca	13.8	14.5	-4.6
Faridpur	13.5	12.0	+12.5
Kushtia	12.8	12.0	+6.7
Pabna	10.8	10.4	+3.8

Source: Table 6.29, Alamgir (1980) based on figures of the Directorate of Procurement, Distribution, and Rationing of the Government of Bangladesh.

ranked districts in terms of lowness of availability change (Patuakhali, Barisal, and Comilla), this again would account for only about 13 per cent of the destitutes in the *langarkhanas*. The rank correlation coefficient between inter-district famine intensity and the lowness of availability change is *minus* .33, hardly an encouraging piece of statistics.

If, instead of looking at the *change* of availability, the districts are ranked according to the lowness of *absolute* availability *per capita*, again the explanation of famine conditions is not enhanced. The so-called famine districts come at the *other* end—the ranks of Rangpur, Sylhet, and Mymensingh being respectively 15, 17 and 18 out of nineteen states—each with relatively high availability of foodgrains per head.<sup>14</sup> The top-ranked low-availability districts (Pabna, Kushtia, and Faridpur) account for

<sup>14</sup> Even the estimates of July–October availability put these three states among the relatively better supplied; see Table 6.37 of Alamgir (1980).

only about 6 per cent of the *langarkhana* destitutes. Finally, the rank correlation coefficient of inter-district famine intensity and lowness of availability is *minus* .73, which does little in favour of the FAD view.

Undoubtedly, these high and significant negative rank correlations may be partly influenced by the fact that the famine-stricken districts received preferential treatment in the governmental allocation of foodgrains, but that would have hardly transformed shortages into relative opulence. Indeed, as was shown already, the output figures also give no comfort to the FAD view. The relief-oriented distributions were a relatively small part of total food consumption, and furthermore the amount of food given per destitute was—as noted before—*lower* in the more severely stricken districts.<sup>15</sup>

The food availability approach offers very little in the way of explanation of the Bangladesh famine of 1974. The total output, as well as availability figures for Bangladesh as a whole, point precisely in the opposite direction, as do the inter-district figures of production as well as availability. Whatever the Bangladesh famine of 1974 might have been, it wasn't a FAD famine.

#### 9.4 OCCUPATIONAL DISTRIBUTION AND INTENSITY OF DESTITUTION

Who were the famine victims? Thanks to the survey of *langarkhana* inmates conducted by the Bangladesh Institute of Development Studies in November 1974, it is possible to give some kind of an answer to this question (even though the sample was not quite randomly chosen). Table 9.8 presents a broad occupational breakdown according to the major source of income. The largest group of destitutes in the *langarkhanas* were labourers (45 per cent), followed closely by farmers (39 per cent). If the labourers are split into agricultural and non-agricultural workers, the groups of farmers would appear to be the single largest category. This fact has been widely noted, and rightly so. On the other hand, it must not be forgotten that farmers as defined for the surveys were also the largest single group of rural households.

To get an idea of the relative intensity of destitution, the

<sup>15</sup> See Table 5.15 of Alamgir (1980). The calorie equivalent of daily wheat ration in October 1974 varied between 452 in *langarkhanas* in the famine districts of Mymensingh and Rangpur to 2,069 in the non-famine district of Pabna.



TABLE 9.8  
Occupational Distribution of Destitution in Bangladesh 1974

Occupation	Number of langarkhana inmates	Percentage of total langarkhana inmates
Labourers	351	44.5
of whom:		
(1) agricultural labourers	190	24.1
(2) other labourers	161	20.4
Farmers	305	38.7
Others	132	16.8
Total	788	100.0

Source: Table 5.3 of Alamgir (1980).

occupational distribution of destitutes has to be compared with the occupational distribution of the population from which the destitutes were drawn. This isn't easy to do since there is no survey that covers exactly the population from which the destitutes came. However, to get some idea it is possible to use Mia's (1976) study of the occupational distribution of rural heads of households and also the study by the Bangladesh Institute of occupational distribution of rural households by major sources of income. These are used in Table 9.9 to calculate two indices of intensity of destitution.

According to both indices, labourers do stand out as the most affected group by substantial margins. While it will be a mistake to attach too much importance to the exact values of these indices, the relative ordering of labourers *vis-à-vis* others including farmers is clear enough.

A similar conclusion emerges from the estimates of occupation-specific death rates during the famine months as obtained by the survey of selected villages by the Bangladesh Institute. These are presented in Table 9.10. While the small group of transport workers had a higher mortality rate than general wage labourers, the latter came close to the top and exceeded considerably the mortality rate of other groups—including farmers.

The land ownership statistics of *langarkhana* inmates are also worth noting. Table 9.11 presents the available information on

TABLE 9.9  
Intensity of Destitution by Occupation in Bangladesh, 1974

Occupation	Percentage of total langarkhana inmates	Percentage of heads of rural households in Bangladesh	Percentage of rural households by major sources of income in Bangladesh	Intensity index I	Intensity index II
	(1)	(2)	(3)	(4) = (1)/(2)	(5) = (1)/(3)
Labourers	44.5	27.9	23.4	1.59	1.90
Farmers	38.7	41.8	59.7	0.93	0.65
Others	16.8	30.3	17.0	0.55	0.99
All	100.0	100.0	100.0	1.00	1.00

Source: Column (1) from Table 9.8 above; Column (2) from Mia (1976) and Alamgir (1978a), Table XII; Column (3) from Alamgir (1980), Table 8.12.



TABLE 9.10  
Occupation-specific Mortality Rates in  
Selected Bangladeshi Villages during  
August–October 1974

Occupation	Death rate per 1,000	Death rate among children 10 years and below per 1,000
Transport	100	286
Wage labour	88	128
Trade	53	80
Farming	38	64
'Others'	29	n.a.
Service	16	12
Total	47	74

Source: Table 5.5 of Alamgir (1980).

this from the *langarkhana* survey by the Bangladesh Institute. Of the inmate households, 32 per cent owned no land at all. Perhaps more importantly, 81 per cent owned less than half an acre of land if they owned any land at all. This compares with 33 per cent of rural households owning half an acre or less of land in the

TABLE 9.11  
Land Ownership of Langarkhana Inmates, Bangladesh, 1974

Size group of land	Number of inmate households	Percentage of inmate households	Percentage of rural population households	Incidence of destitution
	(1)	(2)	(3)	(4) = (2)/(3)
Less than $\frac{1}{2}$ acre	639	81.09	32.69	2.481
$\frac{1}{2}$ acre or more;				
less than 1 acre	57	7.23	13.13	0.551
1 acre or more;				
less than $2\frac{1}{2}$ acres	81	10.28	28.80	0.357
$2\frac{1}{2}$ acres or more;				
less than 5 acres	10	1.27	16.74	0.076
5 acres or more	1	0.13	8.62	0.015
Total	788	100.0	100.0	1.000

Source: Calculated from Table 5.2 of Alamgir (1980), and Table 6.11 of Alamgir *et al.* (1977). The 'rural population' refers to the households sampled in eight villages in the latter work.

villages surveyed by the Bangladesh Institute. It is the landless end of the village spectrum that is caught firmly at the *langarkhanas*. The average chance of ending up in *langarkhanas* for those with less than half an acre of land was  $4\frac{1}{2}$  times that of those owning between half an acre and one acre of land, and 165 times that of those with five acres or more. This corroborates the picture based on occupational statistics, and asserts in addition that quite a few of the farmers who are distinguished from landless labourers among the *langarkhana* inmates are, in fact, very tiny farmers indeed.

### 9.5 EXCHANGE ENTITLEMENT OF LABOUR POWER

Since the typical destitutes had as their endowment only labour power with—at best—little bits of land, the most important part of the entitlement relation to look at is the entitlement based on labour power. In Table 9.12 the indices of rice-exchange for rural labour for each month in 1974 are presented with two alternative bases: (a) December 1973 as 100, and (b) the same month in 1973 as 100. The decline of the  $e_j$  indices in the months just preceding

TABLE 9.12  
Indices of Rice-Exchange Rate  $e_j$  of Rural Labour during the  
Bangladesh Famine, 1974

Base: (a) December 1973 values; (b) Same month 1973 values

Month	Rural wage rate		Price of rice		Index value of rice-exchange rate $e_j$ for 1974 month	
	1973	1974	1973	1974	(a)	(b)
January	4.78	6.22	72.37	92.11	86	102
February	4.91	6.36	76.68	98.93	82	100
March	5.14	7.17	83.84	117.33	78	100
April	5.35	8.22	96.49	136.98	77	108
May	5.47	8.72	96.29	135.68	82	113
June	5.83	8.26	91.11	139.04	76	93
July	6.02	8.61	87.06	141.78	78	88
August	5.81	8.82	85.92	171.25	66	76
September	5.72	8.80	89.47	212.80	53	65
October	5.85	8.64	94.11	251.78	44	55
November	6.00	8.39	89.65	213.73	50	59
December	6.32	8.70	80.90	188.98	59	59

Source: Calculations based on data compiled by the Bangladesh Institute of Development Studies, reported in Alamgir *et al.* (1977), Tables 3.3 and 4.3.



the famine and through the famine months is very sharp indeed. The fall is a bit less if we use the same-month–previous-year base, which does something to eliminate the seasonal drop, but even there the fall is large. At the peak of the famine the fall is 35 to 45 per cent compared with the same month in the previous year, for a group of people already close to subsistence.

The sharpest decline comes just after the floods started, and Table 9.13 presents the fall of the rice-exchange rate of rural labour from June to October. There was no such decline in the preceding year (see Table 9.12), and data for earlier years also show no substantial seasonal fall over these months.

Turning now to the inter-district picture, the three famine districts also turn out to be precisely the three top ranked districts in terms of decline in the rice-entitlement of wages (see Table

TABLE 9.13  
*Rice Entitlement of Wage Rate: Index Values for October 1974 with June 1974 as 100*

	Wage rate index	Rice price index	Percentage decline of the exchange rate of wage labour with rice in rural Bangladesh
Bangladesh	104.6	181.1	42.2
Mymensingh	69.0	225.9	69.5
Rangpur	80.0	190.3	58.0
Sylhet	100.0	236.0	57.6
Noakhali	100.0	209.8	52.3
Barisal	87.0	177.3	50.9
Chittagong Hill Tracts	100.0	201.3	50.3
Tangail	106.3	211.4	49.7
Pabna	100.0	172.3	42.0
Chittagong	100.0	170.5	41.3
Patuakhali	100.0	167.9	40.4
Dacca	118.9	192.6	38.3
Khulna	96.2	153.9	37.5
Bogra	100.0	158.2	36.8
Dinajpur	114.3	179.1	36.2
Comilla	135.7	205.0	33.8
Jessore	108.3	155.0	30.1
Kushtia	112.0	151.4	26.0
Rajshahi	123.1	156.4	21.3
Faridpur	158.3	164.5	3.8

Source: Calculated from Tables 3.3 and 4.3 of Alamgir *et al.* (1977), pp. 57–8 and 92.

9.13). The entitlement ratio fell by 58 per cent in Rangpur and Sylhet and by 70 per cent in Mymensingh, and with that kind of decline in the entitlement to rice, labourers would be pushed firmly towards starvation and death. The over-all picture for *all* districts considered is a bit muddier, even though the rank correlation coefficient, while not high (.32), is positive and significant, and contrasts sharply with the significantly negative results we obtained with various versions of the FAD approach. The exchange entitlement approach—applied in the simple form of only looking at rice-entitlement of wages—already provides a good bit of the explanation of destitution, even though it leaves room for other factors to be brought in.<sup>16</sup>

Finally, the share of *langarkhana* destitutes accounted for by the three top-ranked states in terms of rice-entitlement decline is over 50 per cent. This contrasts with 6 to 13 per cent in the various versions of the food availability approach, as found in Section 9.3. The difference is partly a matter of district size, but also a matter of district identification. The percentages of destitution in the three 'worst affected' districts under the rice-entitlement approach are (18%, 12%, 8%) as opposed to (7%, 4%, 4%) and (4%, 3%, 2%) under different versions of the FAD approach.

The decline in terms of trade of labour power *vis-à-vis* rice was clearly reinforced by a decline in employment opportunities in the famine year.<sup>17</sup> Here the floods played a part. While the decline in the *aman* crop that got partly washed out in June–September 1974 did not reflect itself in the form of a lower output until after the famine, the decline in employment opportunities was immediate.<sup>18</sup> Table 9.14 presents the normal seasonal

<sup>16</sup> One such factor was the deterioration of the terms of trade of jute *vis-à-vis* rice, which has been commented on in other contexts, mainly the reduced incentive to grow raw jute (see Faaland and Parkinson, 1976, pp. 59–61, 135–6). In terms of entitlement rather than price incentive for production, this meant a drop in the rice-entitlement for jute growers, and would have added to the distress of the farmers producing raw jute. For famine conditions in neighbouring Assam in India in the same period, a sharp decline in the relative price of jute clearly played a major part (see Prabhakar, 1974, p. 1767). There was also a decline in acreage under jute during 1974 leading to some loss of employment (see Alamgir, 1980, p. 304, footnote 9).

<sup>17</sup> See Rahman (1974a, 1974b), Adnan and Rahman (1978), and Alamgir (1978a, 1980), among others.

<sup>18</sup> The 'derived destitution' in the form of reduced demand for rural services and crafts leading to reduction of exchange entitlements of the related occupations was also immediate.

TABLE 9.14  
*Normal Seasonal Pattern of Employment in  
 Cultivation: Char Shamraj Village  
 (days worked)*

Month	Cultivation	Activity rank
Baisak (April–May)	1,872	9
Jaistha (May–June)	2,496	8
Ashar (June–July)	4,804	1
Sravan (July–August)	4,786	2
Bhadra (August–Sept.)	2,665	7
Aswin (Sept.–Oct.)	526	12
Kartik (Oct.–Nov.)	3,181	5
Agrahayan (Nov.–Dec.)	4,667	3
Poush (Dec.–Jan.)	3,239	4
Magh (Jan.–Feb.)	2,811	6
Falgun (Feb.–March)	1,791	10
Chaitra (March–April)	1,243	11

Source: Fieldwork by Village Study Group in Char Samraj reported in Rushidan Islam (1977), p. 12.

rhythm of work, in terms of days worked, in cultivation in a Bengali village (in this case, Char Shamraj). It is seen that peak employment takes place in June–August, and this is of course precisely the time when the floods hit, drastically reducing the scope of employment in cultivation. The decline in the rice-entitlement of wage was thus compounded by the fall in the employment opportunity—a vital determinant of exchange entitlement of labour power.<sup>19</sup>

In understanding the causation of destitution, therefore, one has to go much beyond the statistics of food availability. The output and availability of foodgrains may have peaked in 1974, but the market forces determining the relative wage *vis-à-vis* rice was moving sharply against the former. While we haven't got the data that would permit a satisfactory causal analysis of the factors affecting the exchange rates, it is possible to make a few observations on its general nature.

First, even though the decline in the *aman* crop could not have affected the total amount of foodgrains in Bangladesh during the

<sup>19</sup> Recovery from the famine took place in November as the next season of busy activity began—mercifully free from natural calamities.

famine months (since that crop would not have been harvested until November–January *following* the famine), the expectation of the decline must have had some effect on the level of rice price.<sup>20</sup> In fact, the rumour of decline was rather stronger than the actual fall in *aman* output, but speculative withdrawals can feed comfortably on such rumours.

Second, the rise in rice price could not, however, have been the result of the flood only. Indeed, in the early months of 1974, long before the floods, rice prices were rising sharply—almost as fast as they did during the flood and immediately after. Table 9.15 presents the monthly rise in rice price through 1974, and it is seen that in Bangladesh as a whole, and specifically in the famine districts, there are sharp rises in the earlier part of the year, much before the floods hit. Thus the explanation of the rise in rice price must be sought partly in influences that have nothing to do with

TABLE 9.15  
*Rise in the Price of Rice in Bangladesh in 1974*

Month in 1974	Percentage rise in the retail price of coarse rice in each month over the preceding month			
	Bangladesh average	Mymensingh	Rangpur	Sylhet
January	+14	+14	+16	+6
February	+7	+11	+2	+22
March	+19	+27	+19	+15
April	+17	+16	+16	+19
May	–1	–16	+17	–17
June	+2	–2	0	–2
July	+2	+12	+4	+16
August	+21	+30	+16	+29
September	+24	+29	+58	+24
October	+18	+20	0	+28
November	–15	–20	–38	–18
December	–12	–19	–25	–7

Source: Calculated from Table 3.3 of Alamgir *et al.* (1977), pp. 57–8.

<sup>20</sup> If we replace the *aman* harvested in December 1973 by that harvested in December 1974 in the 1974 production figure in Table 9.4, the index value of 1974 falls from 103 to 97. Re-indexing all the years by replacing the preceding *aman* crop by the *aman* that comes at the end of the relevant year, the index values stand as follows: 1971, 100; 1972, 91; 1972, 107; 1973, 100; 1974, 99; 1975, 108. It has the effect of converting 1974 from a local peak to a local trough.



the floods. And this is where a macroeconomic study dealing with such factors as effective demand, money supply, etc., could contribute substantially.

Third, while the decline in the rice-entitlement of wage is to a great extent the result of the rise in rice price, there was also a decline in absolute money wage rate in a few districts, including the famine districts of Mymensingh and Rangpur, between June and October of 1974 (see Table 9.13). It is quite remarkable that, not merely did the money wage fail to stay in line with rice price; it actually fell in absolute terms in these districts. The weakening of the market strength of labour that this reflects may be partly traceable to the decline in employment opportunities as a result of the flood and related contraction of rural economic activities.

#### 9.6 A QUESTION OF FOCUS

The enormity of economic problems facing Bangladesh has been widely observed. The fear of population running ahead of food production has been regularly voiced. It is not my intention to dismiss these problems and fears. But what emerges irresistibly from the preceding analysis is the danger of concentrating only on the aggregative issues, overlooking the details of the entitlement system on which the survival of millions of Bangladeshi people crucially depends. The focus on population and food supply would have been innocuous but for what it does to hide the realities that determine who can command how much food.

Bangladesh remains a traditional rural economy in many significant respects. Nearly three-quarters of its population live on agriculture and about 90 per cent live in rural areas.<sup>21</sup> Yet the economic organization is not one of market-independent peasant agriculture. About a quarter of the rural population survive by exchanging labour at market wages and commanding food with what they earn. For them a variation of the exchange relationships can spell ruin. There is, in fact, some evidence that in recent years in Bangladesh the wage system itself has moved more towards money wages, away from payments in kind—chiefly food.<sup>22</sup> More modern, perhaps; more vulnerable, certainly.

The process of sale of land by small peasants cuts down not

<sup>21</sup> On the general nature of the Bangladesh economy and various aspects of its economic performance, see Faaland and Parkinson (1976); also Etienne (1977a).

<sup>22</sup> See Clay (1976).

only the peasant's normal income, but also the stability of his earnings—making him more vulnerable to exchange rate shifts. Table 9.16 presents this pattern of land sales in the villages studied by the Bangladesh Institute in the years leading up to the famine. One sees a clear bias towards land alienation on the part of the smaller landholders.<sup>23</sup> The development not merely generally impoverished the group of small peasants;<sup>24</sup> it also increased the ease with which members of the class could sink into starvation even in a year of relative plenty as a result of shifts of rice-entitlement of labour power.

TABLE 9.16  
*Proportion of Owned Land Sold According to Landholding of Sellers, 1972-4*

Landholding group	Percentage of owned land sold		
	1972	1973	1974
Less than 1 acre	39	29	54
1 to less than 2 acres	19	17	24
2 to less than 5 acres	12	18	12
5 acres and above	10	10	11

Source: Table XXVII of Alamgir (1978a).

Other occupation groups also depend on being able to command food by exchanging things that they produce and sell. Boatmen and transport workers had a high mortality in the Bengal famine in 1943; they had again exceptionally high mortality in the famine of 1974. Village craftsmen, producers of services, petty traders, and a whole host of other occupations live by exchange—and from time to time perish by exchange.

There has been a welcome tendency recently to move away from figures of national income per head (and other such national aggregates) to income distribution, in particular to poverty. But even the group of the poor is too broad a category, and it is possible for the proportion of population below the poverty line to fall while those who are in poverty experience a deepening of

<sup>23</sup> See also Rahman (1974a, 1974b), Khan (1977), Abdullah (1976a, 1976b), Adnan and Rahman (1978), and Hartmann and Boyce (1979).

<sup>24</sup> For a global analysis of the relation between rural poverty and land concentration, see Griffin (1976).

their deprivation. This was one of the reasons why it was argued that distribution below the poverty line has to be taken into account in arriving at a fuller picture of poverty (see Chapter 3 and Appendix C).

It seems that an example of a divergent development of this kind can be found in the recent experience of Bangladesh. Some calculations done by Azizur Rahman Khan are presented in Table 9.17. It would appear from this that, while the proportion of people below the poverty line (defined as the level of income at which people meet 90 per cent of the recommended calorie intake) *fell*, or at least rose little, between late 1960s and mid-1970s, the proportion in 'extreme poverty'—defined as having levels of income less than adequate to meet 80 per cent of the recommended calorie intake—*rose* sharply.<sup>25</sup> Thus a general intensification of starvation may have gone hand in hand with a reduction of the head-count measure of poverty for the defined 'poverty line'. Shocking disasters can lie deeply hidden in comforting aggregate magnitudes.

The analysis of exchange entitlements and the study of the

TABLE 9.17  
*Percentage of Rural Population in Poverty and in  
Extreme Poverty*

	Poor	Extremely poor	Change of the percentage of the poor since 1968-9	Change of the percentage of the extremely poor since 1968-9
1968-9	76.0	25.1		
1973-4	78.5	42.1	+ 3.3	+ 67.7
1975 (first quarter)	61.8	41.1	- 18.7	+ 63.7

*Basis:* Table 48 of Khan (1977). 'Poor' people are those with incomes less than adequate for meeting 90 per cent of recommended calorie intake, and 'extremely poor' are those with less than adequate incomes to meet 80 per cent of the recommended calorie intake.

<sup>25</sup> See also Osmani (1978).

famine presented here can be extended in many ways by taking a more detailed view of the relationships that govern people's ability to command food and other essential goods. But even this simple analysis has been sufficient to demonstrate that the FAD view provides no explanation of the Bangladesh famine, and that a better understanding of the famine can be found through the entitlement approach.