US Policies in Bangladesh:
The Making and the Breaking of Famine?

by

Ben Crow

DPP Working Paper No. 4
US Policies in Bangladesh: The Making and the Breaking of Famine?

by

Ben Crow

DPP Working Paper No. 4
US POLICIES IN BANGLADESH:
THE MAKING AND THE BREAKING OF FAMINE?

by
Ben Crow*

1 Introduction
2 Some notes on the analysis of food crises in Bangladesh
3 The events of 1974
   The US food aid embargo of 1973-4
4 The events of 1984
5 The coerced evolution of food policy between 1974 and 1984
   PL480 Title III agreements with the Bangladesh government.
   The place of Open Market Sales in the food distribution system of Bangladesh
6 Issues: famine, food aid and donor leverage

Ben Crow is a Lecturer in Third World Studies at the Open University and is currently chair of DPP. His current research is on foodgrain traders responses to price stabilisation and incentive procurement in Bangladesh. He has previously studied the development of the rivers Ganges and Brahmaputra and the intergovernmental disputes associated with that development. His publications include papers on these topics and:

Acknowledgements: An early draft of this paper was delivered to the American Economic and Allied Social Science Association Meetings in New York in December 1985.

Helpful comments have been made by Henry Bernstein of Wye College, University of London, Laurence Harris of the Open University and Marty Makinen of Abt Associates, Cambridge, USA.

© Ben Crow
Introduction

This paper tells two stories. The first is a comparison of two food crises in Bangladesh. One food crisis in 1974 led to the death of several hundred thousand people. After an apparently similar sequence of events, ten years later, famine was averted. The first story of this paper is thus an assessment (after Crow, 1984 and Clay, 1985) of the events which contributed to famine in 1974 and to the avoidance of famine in 1984.

The second story concerns the role of the United States government in these events. In Bangladesh and elsewhere the 1974 famine is frequently associated with an apparent US food aid embargo which preceded it. Evidence on the scale, duration and consequences of this embargo is assessed.

Subsequently in the years between 1974 and 1984, the US government has taken a particular interest in the reform of food policy in Bangladesh. The changes in food policy between 1974 and 1984 are outlined, along with a description of the ways in which they have been encouraged. This has primarily been through the use of the conditionality associated with the 'Food for Development' channel (Title III) added to the US food aid law, Public Law 480, in 1977. The second story of the paper is, then, a preliminary account of a set of food policy reforms carried out under the duress of aid conditionality.
Amartya Sen's scholarly analyses (Sen 1981) have brought the insights of an economist of distribution to bear upon the causes of famine. At its simplest, Sen's approach restates that famines have no necessary link with production shortfalls. He focusses on the unit of consumption, generally the household, and all the social relationships through which that unit gains access to food. Famines occur when those social relationships of obligation, trade or direct production (he calls them 'entitlements') are disturbed. In essence, Sen's approach has moved the presumption of famine causation from production to distribution, and has, specifically, placed household purchasing power at the centre of investigation.

Sen's entitlement approach has been widely adopted, but one of his conclusions, of particular relevance for the case of Bangladesh, has generally been overlooked. Sen points out that,

'The phase of economic development after the emergence of a large class of wage labourers but before the development of social security arrangements is potentially a deeply vulnerable one.'

(Sen 1981, p.173)

One might add that this vulnerability is made more acute wherever the growth of industry is slight or erratic. Without a growing industrial sector to provide employment, this class of wage labourers have to seek their 'exchange entitlement' from seasonal (and unreliable) employment in agriculture, petty trading and very small scale production and processing work.
Nearly half of the households in rural Bangladesh, some 45 million people, have to rely primarily upon wage labour and exchange to obtain their food supplies. These households do not have access to enough land to achieve what Sen calls 'trade independent security'. In fact, this partially-proletarianized class is subject to the triple vicissitudes of nature, market and state.

Firstly, the usual climatic sources of agricultural variability influence the ability of the class to obtain food. This happens in three ways, by influencing their own production, their opportunities to obtain employment, and by influencing the availability of food through market distribution channels. In Bangladesh, flooding and drought frequently affect both employment and output.

Secondly, although the detailed workings of food markets in Bangladesh are not well understood, it is clear that marked seasonal fluctuations, and occasional dramatic perturbations of food prices are a significant factor in the food entitlement of rural, wage-labouring households.

Thirdly, there is in Bangladesh a public food distribution system (PFDS) which provides 'ration' food at subsidized prices to selected groups of mostly urban households, 'Food for Work' to rural public works gangs, and free 'relief' food to selected groups of mostly rural households. This state distribution system has both a direct effect on the entitlement of different classes and various repercussions on market channels. It influences market channels through its affects on demand, through 'leakages' (legitimate resale and illegitimate diversion of relief food), and through state selling and purchasing operations intended to influence producer and consumer prices in various ways.
In other words, the entitlements of landless rural households are set by a complex interaction of nature, market and state. Climatically-induced reductions in output may affect a household's ability to get food by:

(i) reducing their own production (and any sales thereof);
(ii) reducing their ability to get cash or kind wages through work;
(iii) reducing the purchasing power of what wages they do get (and assets they have accumulated) by raising the price they have to pay for food.

Both private (market) and public (state) food distribution systems may act to ease or exacerbate the effects of climatically-induced reductions in output.

If traders and large producers decide to sell stored grain, that selling can ease prices. If, on the other hand, they decide that prices may continue rising, then they may delay selling their stocks, or even decide to increase their stocks. Such activity would tend to exacerbate any price rise originating in expectations of climatically-reduced output.

The public food distribution system operates according to different principles (which have not been systematically investigated). Principal determinants of national decisions on the operation of the PFDS (and there are also marked regional variations in how these decisions are implemented) include:

(i) the level of stocks;
(ii) expectations of the level of food imports (in most years, the PFDS relies upon imported wheat);

(iii) the need to maintain revenue from PFDS sales;

(iv) some estimate of the effect that PFDS decisions and capability will have upon market prices.

Thus, in the wake of heavy crop loss due to flooding (say), the food and relief ministries may increase their distribution of food through 'Food for Work' channels (thereby increasing employment), through relief channels (to get to the most vulnerable households), through 'ration' channels (to reduce demand, and ensure preferential supplies, particularly in urban areas) and it may engage in sales to selected merchants in an attempt to keep food prices steady. If, however, government stocks are low and cannot readily be replenished from imports, then the government may not be able to respond in those ways. In such a situation of limited stocks the government may be forced to prioritise one of the PFDS channels (say, ration distribution to urban areas) with the consequence of reducing the normal flow in another channel (say, relief to rural areas or Food for Work). In that case, the operation of the public system may exacerbate the response of the private (market) system to climatically induced variation in output. Those who would normally have obtained part of their food through the PFDS distribution channel which has been reduced will now seek food on the open market (if they have the purchasing power) and, in addition, traders may change their plans in the light of the government's inability to act to influence prices. The government's impotence may be a good indication that prices will continue to rise.
This (fairly schematic) explanation indicates some of the ways in which nature, state and market interact to influence the food entitlement of households in Bangladesh. Finally, before examining the food crises of 1974 and 1984, a note is required on some of the complexities of the response of crop output to climatic variation.

In Bangladesh, years of high crop losses due to flooding are sometimes also years of high total crop output (Sen 1981 137; Montgomery 1984; Clay 1985 202). The explanation for this paradox lies in the differing responses to climatic variation of

(i) crops on high and low land
(ii) crops in different seasons
(iii) farmers' planting decisions

There are four major rice growing seasons in Bangladesh:

- **Aus** from March/April to July/August
- **Broadcast Aman** (planted on land normally flooded to a considerable depth) from March/May to October/December.
- **Transplanted Aman** (grown in seedbeds with assured water supplies and then transplanted to land which is flooded only to a shallow depth) from July/September to November/December.
- **Boro** (grown in the dry season and generally requiring irrigation) from November/February to April/June.

Boro crops are affected more by drought and other factors than by flood. Years of high flood loss, therefore, may or may not correspond with high
Boro output. Early rainfall encourages Aus planting on an extended area, some of which is particularly flood-prone. If floods are severe in a year of early rainfall, Aus losses and output may be high. The broadcast Aman crop, on the other hand, reflects flood losses, generally, in reduced overall output. The most important crop, transplanted Aman, providing 45% of total rice output, exhibits the most striking relationship between large flood losses and increased production. Rainfall conditions which are associated with abnormal flooding of lower-lying Aman fields provide ideal conditions for high yields in more elevated fields (Montgomery 1985).

These are not idle correlations of climate and agricultural output. Recent years of food crisis, notably the two years which are the subject of this paper, have exhibited this paradox of high flood losses followed by bumper crops. The 1974 Bangladesh famine, in addition, provides Sen with his most striking refutation of the association between famine and food availability decline because of this paradox. (This is not an argument against Sen's refutation, more a comment that his use of aggregated data allows the coincidence of high losses and high output to bolster this case.)
The events of 1974

In 1974 there was a severe famine in Bangladesh which killed several hundred thousand people. At the time, the famine was attributed to a sequence of unusual flooding which destroyed significant proportions of the four rice crops. Table 1 lists the crop losses in each season, in 1974. In total these losses amount to approximately 12% of trend production.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SOURCE OF ESTIMATE</th>
<th>CROP LOSS BY SEASON</th>
<th>TOTAL LOSS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>BORO</td>
<td>AUS</td>
</tr>
<tr>
<td>1974</td>
<td>BDG</td>
<td>187</td>
<td>613</td>
</tr>
<tr>
<td>1984</td>
<td>BDG</td>
<td>373</td>
<td>475</td>
</tr>
<tr>
<td></td>
<td>USAID</td>
<td>331</td>
<td>308</td>
</tr>
<tr>
<td></td>
<td>World Bank</td>
<td>NA</td>
<td>300</td>
</tr>
</tbody>
</table>

Sources: Montgomery 1985
World Bank 1985 II-34

Note: Montgomery 1985 contains a detailed and valuable discussion of the historical losses and sources of variability for each crop.

The 1974 famine was socially and spatially concentrated. It was most severe in the three northern most districts of Bangladesh and it hit hardest the rural population most dependant on purchased food, the agricultural labouring households. A theory of causation concentrating
on production or food availability is not able to explain these concentrations. Sen has shown that production of rice increased between 1973 and 1974 in those districts most severely affected by famine and that per capita food availability was highest in those districts (Sen 1981 Tables 9.6 and 9.7). The variation of rice prices on the other hand does show some correspondence with the social and spatial distribution of the famine. An index comparing the rice purchasing power of wages indicates that the decline was largest in those districts where famine was most severe (Sen 1981 Table 9.13, Sen terms this index the rice-wage exchange rate).

What seems to have happened in 1974 was that households dependant on wage labour for their livelihood were 'squeezed' between, on the one hand, rising food prices (see Figure 1) and, on the other, falling wages and falling employment. These latter can be, at least in part, attributed to the floods washing out crops.

We lack, however, a fully convincing explanation of the unusually severe rates by which rice prices rose. Sen notes:

'We haven't got the data that would permit a satisfactory casual analysis of the factors affecting the [rice-wage] exchange rates ...'

but he goes on to note the following factors:

(i) anticipation of a reduced aman crop influenced the price;

(ii) however, the beginning of the price slope started some months before the floods;
Figure 1  MOVEMENT OF RICE PRICES (UNDEPLETED)
1971-2 to 1975-6

Source: Alamgir 1980 p 265.

Notes: Wholesale price of coarse quality rice.
8 Taka was worth US $1 (Until 1975)
1 Mound is 92 kg 37.
(iii) absolute money wages, as well as exchange entitlements fell in some of the famine districts.

Many influences upon rice prices have been noted in the literature describing the 1974 famine, notably:

(i) anticipation of shortfall;

(ii) the effect of reduced food aid;

(iii) the effect of inflated food grain prices elsewhere, on Indian and international markets;

(iv) the effect of an increase in the money supply and a general price inflation, leading to uncertainty about future prices and anticipatory stocking.

Attempts to correlate price rises and anticipated shortfall have been made by Ravallion (1984, 1985) (and, for later events, by Montgomery (1983)). Ravallion's econometric model, using newspaper reports of crop damage as a proxy for estimates of shortfall, is able to match, approximately, the pattern of national rice prices for the period November 1972 to April 1975, but subject to the caveat that 'rice hoarding prior to anticipated production losses was excessive when compared to the likely outcome under competitive conditions ...' (Ravallion 1985a 28). The caveat suggests much remains to be explained.

In order to undertake his modelling, Ravallion also uses the work of Reddaway and Rahman (1975) to dismiss the importance of the cross border trade (smuggling) with India. Alamgir (1980 235-6) has provided several plausible reasons why too much weight should not be placed on Reddaway
and Rahman's results. Cross-border trade remains as a subject for investigation.

Alamgir, who co-ordinated and analysed the invaluable survey carried out by the Bangladesh Institute of Development Studies, was able in a lengthy account only to list possible influences on the 1974 prices:

'The 1974 "big push" in rice prices came in the wake of flood, shortfall of imports, shortfall in government offtake, leakages due to abnormal storage loss and smuggling, breakdown in the internal distribution system, breakdown of the transportation and communication systems, interference by the government with the internal movement of foodgrains, and speculative hoarding, by traders and surplus farmers.'

(Alamgir 1980 264).

In section 2 of this paper, I outlined some ways in which the operation of public and private food distribution systems can amplify the effects of climatic events on household food entitlement. In essentials this amplification corresponds with factors in Alamgir's list. Foodgrain merchants may respond to exceptional flooding by increasing their stocks in anticipation of high prices. If the volume of offtake of one or more of the public distribution channels is simultaneously reduced, then merchants' expectations of high prices may be reinforced at the same time as the demand of those previously served by public channels is partially diverted to private markets. This sequence of events seems to be an important part of the explanation of what happened in 1974.
Under what circumstances would the offtake through public distribution channels be reduced? If stocks were low and the means for replenishing them were insecure, then the government might have no option but to cut back its total offtake. It might have some freedom to reduce one channel rather than another but its overall freedom to meet crisis conditions might be severely reduced. The principal account of the 1974 events from within the Bangladesh government argues that these constraints prevailed as a direct result of a US embargo on food aid (Sobhan 1979).

The US food aid embargo of 1973-4

The 1974 US food aid embargo has been entered into Bangladesh's history but much about it remains ill-defined.

McHenry and Bird (1977) were the first to document a threat to cut off food aid. They based their article on documents released under the Freedom of Information Act. They contrasted two uses of embargo. In September 1974, Bangladesh was asked to cease exports of jute to Cuba because PL480 recipients were not allowed to trade with blacklisted countries such as Cuba. McHenry and Bird drew a distinction between this 'political' use of food aid and a subsequent 'developmental' use between November 1975 and March 1976. At this latter time the Dhaka ATD Mission decided to withhold a portion of agreed shipments in order to force the Bangladesh government to increase ration prices. Rehman Sobhan followed their account with one alleging that the 1974 'political' embargo had been longer and more covert and suggesting how it had influenced the development of the famine (Sobhan 1979). Sobhan,
now Director of the Bangladesh Institute of Development Studies, was in 1974 a member of the Bangladesh Planning Commission and he was able to base his account on the unpublished minutes of meetings with US representatives and on internal documents of the Bangladesh government. In essence, Sobhan says that an August 1973 request for PL480 food aid was ignored, renewed requests in January 1974 were also ignored, and on 29 May 1974 (rather than in September, as McHenry and Bird thought) the US ambassador told the government that no commitments could be made until Bangladesh's trade (in jute sacks) with Cuba ceased. New PL480 commitments were not made until the last shipments for Cuba had left Bangladesh in October 1974. Sobhan documents some of the requests (relating to the release of Pakistani war prisoners) made by the US government in association with this embargo, and he speculates that the underlying reason was a wish to destabilise the regime of Sheik Mujibur Rahman (who was assassinated in August 1975).

Amongst the questions that remain with respect to this food aid embargo are the following:

(i) Did it really happen?

In correspondence and discussions with current spokespeople for the US government, and US government personnel who were implementing US policy in Bangladesh in 1974, I have encountered disbelief that any embargo occurred. Despite the McHenry and Bird account, there has been no US government inquiry into the events.

(ii) What was the scale of the reduction in food aid?
(iii) How did the embargo relate to the 1974 famine?

(iv) What policy objectives did the US government hope to realise with the embargo?

(v) Did the US policy-makers realize that their embargo might contribute to the creation of famine conditions.

It is not my intention in this paper to examine questions (iv) and (v). They are questions which are unlikely to be answered by an investigation with anything short of Congressional powers. I hope to return to question (i) in a future paper examining accounts of participants in the events and documentation made available under the Freedom of Information Act. My focus here is on questions (ii) and (iii).

As a preliminary resolution of question (i), however, it is worth summarising some of the important conclusions to be drawn from a brief re-examination of the documents on which McHenry and Bird based their account.

In March 1973 the US Embassy received a request from the Bangladesh government for 850,000 metric tons of foodgrain to be supplied in Fiscal Year 1974 (July 1973 to June 1974) under PL480 Title I. The Bangladesh government was hopeful that shipment could begin in July 1973. The US government appears to have made no food aid commitments in response to this request until early 1974 and no substantial despatches until late 1974, more than 18 months after the first request.

A number of memoranda and requests from the Bangladesh government were received by the US government in the ensuing months of 1973 without
definite US government response. In November the Additional Foreign Secretary of Bangladesh visited Washington and told US State Department officials that the Bangladesh government anticipated that there would be a 1.5 million ton deficit between import needs (approximately 2 million tons) and the amount Bangladesh could afford to purchase on commercial wheat markets. The rise in world wheat prices at that time and Bangladesh's constrained foreign exchange position limited the government's purchasing power to 600,000 tons. In a comment cabled to the US Embassy in Dhaka, State Department officials suggested the following:

'The present optimism regarding Aman harvest proves justified, Bangladesh 1973 rice production will be 15-20 percent higher than 1972. With world wheat prices remaining high and PL480 availabilities still extremely tight, it appears absolutely necessary and should be possible for BDG [Bangladesh government] to place heavy emphasis on local procurement and on improvements in domestic distribution of foodgrains in 1974. In any case, USG cannot consider providing concessional foodgrains for stockbuilding. We intend to share this view informally with BD Embassy ...'

(State Department Telegram 236264, December 1973)

Other requests seem to have received a similar 'informal' refusal. Some agreement was reached, nevertheless, early in 1974, to supply 153,000 tons of food under PL480 Title I during Fiscal Year 1974, but only the first tranche of 80,000 tons of wheat was despatched. Requests for the
remainder seem to have been rebuffed. In May 1974, when the Bangladesh Ambassador requested the remaining quantity he was told, according to the State Department’s Memorandum of Conversation,

'the USG has been concerned with our overall foodgrain stock position, and that as we get a clearer understanding of our spring crop we should be able to move PI-480 foodgrains more quickly.'

(Memo, 1 May 1974)

This then is the preliminary evidence on the partial cessation of US food aid shipments between July 1973 and June 1974. At this stage the question of Bangladesh’s trade with Cuba was raised. There is no dispute that there was at this point a suspension of further shipments of PL480 aid to Bangladesh. For some months, as famine deaths were beginning to mount, no further US food aid shipments could be considered until trade with Cuba had ceased. This is the phase I have referred to as the overt embargo; overt in the sense that the Bangladesh government was given a reason for the continued refusal to send food aid.

I turn now to the scale of the embargo. In Table 2 tonnages of US food aid sent to Bangladesh in the years 1972/3 to 1975/6 are set alongside the total tonnages of food aid and commercial foodgrain imported into Bangladesh in those years. The figures indicate that there was a marked reduction in US food aid sent to Bangladesh in the period corresponding to the embargo (in Rehman Sobhan’s account), the year prior to the onset of the increased mortality of the 1974 famine. There is a corresponding reduction (of somewhat greater magnitude) in Bangladesh’s receipts of food aid from all sources, and this is reflected in a reduction in total
imports in the year leading to the famine. The Bangladesh government estimated (in its requests to the US government) that its food deficit for 1973/74 would be similar to the deficit experienced in the preceding year, and that 2.0 to 2.5 million tons of foodgrain would have to be imported. In 1972/73, 2.5 million tons was imported but in 1973/4 only 1.7 million tons was obtained. The shortfall arose from a sharp reduction in deliveries of food aid.

<table>
<thead>
<tr>
<th>YEAR (US FISCAL YEAR)</th>
<th>US FOOD AID TO BANGLADESH AND BANGLADESH FOOD IMPORTS 1972-1976</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US FOOD AID TO BANGLADESH</td>
</tr>
<tr>
<td></td>
<td>TITLE I (thousand metric tons)</td>
</tr>
<tr>
<td>July 72-June 73</td>
<td>0</td>
</tr>
<tr>
<td>July 73-June 74</td>
<td>84.2</td>
</tr>
<tr>
<td>July 74-June 75</td>
<td>839.3</td>
</tr>
<tr>
<td>July 75-June 76</td>
<td>795.4</td>
</tr>
</tbody>
</table>

Sources: (i) Correspondence with USAID Bangladesh Desk Officer, Washington and US Department of Agriculture, General Sales Manager;

(ii) Bangladesh Ministry of Food, Directorate of Movement and Storage statistics, held by World Food Programme, Dhaka.

US food shipments in 1973/4 were down to 17% of the tonnage of the preceding year and only 10% of the subsequent year. Column five casts some light on the US claim (in what the Bangladesh government were told at the time and in more recent correspondence with me) that the tonnages
were down because the US government had less PL480 to distribute (because of poor crops and large sales to the USSR). In terms of worldwide PL480 foodgrain distribution, Bangladesh's share was down to 3% in 1973/4, compared to 8% in the preceding year and 19% in the subsequent year.

What then was the influence of the reduction in food aid? The data marshalled by Sen (1981 Tables 9.6, 9.7) suggest that there was no reduction in the overall availability of food during the year of the famine. The 1974 Aman harvest was high despite flood losses. The reduction in food aid was, however, expressed in changes in stocks held by the government and consequently in changes in the operation of the public food distribution system.

Figure 2 shows how (on average) imports of foodgrain fell in the months preceding the famine, and how levels of government stocks fell to the perilously low level of 200,000 tons in March 1974. (Management practices prevailing in 1984 specified that 500,000 tons of foodgrain stocks represented an important danger level below which stocks should not be allowed to fall.)

In 1974, the Bangladesh government started the year with lower than normal stocks and, 'throughout 1974, the end of month stock at government storage facilities was barely enough to meet the monthly normal requirement for distribution under various types of rationing' (Alamgir 1980 246). There is no detailed account of how the public food system was operated in 1974. It seems probable, however, that dwindling stocks, very limited foreign exchange reserves with which to buy
FIGURE 2 Bangladesh: food stocks and food imports and chronology of events influencing food shipments

Foodgrains (000 tonnes)

Notes:
1 Monthly food imports (Alamgir, 1980, p 223) Period of excess mortality
2 Six-monthly moving average of end of month stocks (calculated from Alamgir, 1980, p 200)
3 Based on Sobhan (1979)
increasingly expensive foodgrain imports, and reduced food aid were important determinants. The outcome was that the Bangladesh government cut back on its ration food distribution. The Statutory Rationing and Priority Group rations (to major urban centres, industrial workers, police, army, state employees) were not curtailed. Instead, the government cut back those food distributions targeted at poor rural populations, Modified Rationing and relief.

In 1972-3, the monthly offtake through the channels of Modified Rations and relief averaged 150,000 tons per month. In Calendar Year 1974 this came down to 59,000 tons, suggesting that something like an additional 90,000 tons of demand was diverted each month to private markets from the public food system.

A combination of factors - arising from state, nature and market - can thus be seen to have reinforced one another in the creation of a 'squeeze' on the entitlements of poor, rural households, particularly those depending on wage labour.
The events of 1984

In 1984, a sequence of events resembling those of 1974 aroused fears that starvation deaths could occur on a similar scale. They did not. Why not?

Before attempting to answer that question, some of the elements in the resemblance between 1974 and 1984 should be described.

The World Bank's annual assessment of the Bangladesh economy contained the following description:

'The government faced a difficult situation in the latter part of Fiscal Year 1984 following a modest aman harvest, rising foodgrain prices and low levels of public stocks. The situation developed into an emergency at the beginning of Fiscal Year 1985 [i.e. August and September 1984] as the extent of flood damage became known. The response to the crisis was quick and effective and a potential disaster was averted... Although the extent of the floods has been comparable to that in 1974, the most obvious signs of distress and famine conditions prevalent ten years ago were not evident in 1984'

(World Bank 1985 TT-35)

As happened in 1974, a series of localised droughts were followed by three serious, extensive floods. Considerable damage was sustained in all four major seasonal crops (Boro, Aus, Broadcast Aman and Transplanted Aman). In terms of lost output, the damage of 1984 to
foodgrains was estimated as broadly comparable to the damage sustained in 1974 (see Table 1). Losses of jute, which requires more labour per hectare than rice, were higher than in 1974. The effect on employment, therefore, was expected to be greater than in 1974.

Foodgrain prices started rising at the beginning of 1984, and after each of the floods there were fears that a severe price rise would set in. But it did not. Even after the repeated floods in September, which caused significant losses in the normally stable transplanted Aman crop, the elevation of the price of rice was held at about 20% (though up to 23% to 30% in flood affected districts). In 1974, coarse rice prices were 92 Taka per Maund in January and 263 Taka per Maund in October. In 1984 the comparable prices were 255 and 287 Taka per Mound. (These are national, average, undeflated prices from (Alamgir 1977 p.54) and (World Food Programme 1985).)

In August of 1984, there were indications of distress in some rural areas: heavy livestock sales at low prices, excess migration to towns, falling land prices (despite the outlawing of land sales), the consumption of abnormal, 'famine' foods and occasional reports of starvation deaths (Crow 1984).

Why didn't the price of rice keep rising as it had done in 1974? What stopped the early, localised indications of social distress developing into the widespread, severe famine of 1974?

Clay (1985) lists a series of institutional changes which contributed better management of the food crises, all may have had some influence upon the foodgrain prices:
(i) the Food and Relief Ministries function more effectively now than in the aftermath of the war of independence;

(ii) a foodgrain monitoring system now exists, with monthly reports (from both the government and World Food Programme) documenting stocks, imports, food distribution and prices;

(iii) in 1984 the government exhibited a commitment to stabilise grain prices with rapid commercial purchases and sizeable relief distributions;

(iv) new instruments, notably Open Market Sales, were available enabling government to influence prices;

(v) further interventions, notably Food for Work and Vulnerable Group Feeding, were available in 1984 to bring food security to poor households in rural areas;

(vi) considerably increased storage capacity;

(vii) a more diversified agricultural structure leading to a declining variability of output;

(viii) improved donor-government relations;

(ix) an improved internal and external economic environment, with better infrastructure, greater national purchasing power and grain readily available on world markets.

Some of these differences between the conditions prevailing in 1984 and in 1974 relate directly to the external relations of the government and
the economy, notably items (viii) and (ix). Other differences can be attributed to changes introduced by the government with encouragement from the main donors of food aid. Items (ii), (iv), (v), and (vi) fall into this category. In the next section of this paper I shall be describing the ways in which US policy encouraged those innovations.

In a complex, under-researched economy like that of Bangladesh, the assessment of the relative importance of these different factors is problematic. As a preliminary attempt, it seems sensible to examine them in relation to the squeeze on the entitlements of wage labour households, which was particularly important in the 1974 famine.

The most obvious contrast between the events of 1984 and those of 1974 is the relative stability of the price of rice. The timing and regional severity of rice price increases, in 1974, was similar to the timing and regional intensity of the famine. It is reasonable, therefore, to take the rice price as a key determinant of the famine. A range of changes occurred between 1974 and 1984 with consequences for the sensitivity of the rice price. These changes include some which occurred within the sphere, or at the behest, of government and some which are independant of the government. Almost all of the items in Clay's list have some direct or indirect impact upon the price of rice in the private distribution system.

In my account of the 1974 events, I followed other accounts (such as Alamgir 1980 and Ravallion 1985) in placing particular emphasis upon anticipatory stocking (or hoarding) and factors thought to influence those with the capacity to undertake such stocking.
Within the sphere of government, the maintenance of adequate foodgrain stocks is one measure by which government can deter anticipatory (private) stocking. To sustain those stocks the government needs adequate stock, import and offtake monitoring. The capacity to undertake that monitoring in Bangladesh has been greatly improved between 1974 and 1984, partly as a result of assistance provided by the UN World Food Programme, the US government and other donors. It should be noted, however, that the monitoring arrangements operating in 1974 did give the government at least as much warning as in 1984. As Clay notes, in items (ix) and (viii), the external political and economic environment in 1984 enabled the government to obtain adequate additions to its stocks in a way which proved impossible in 1974.

In 1984 the Bangladesh government was able to obtain new and brought-forward food aid commitments from the US government and other donors within a matter of days of its declaration of an emergency. As I noted earlier, those commitments took many months in 1974. In 1984, though commitments were quickly agreed, food aid still took a long time to arrive.

Both Clay (1985) and the World Bank (Tbid) comment upon the relative insignificance and tardiness of food aid in the fighting of the 1984 famine.

'With new flooding in June and July ... it became clear that a crisis was looming.... The government convened a donors meeting and issued an appeal for increased food aid in August. (However) because of the limited aid response and further serious flooding
in mid-September, the government contracted for additional foodgrain imports ... on commercial terms.... Of total import arrivals of about 1.2 million tons during the critical lean season period July-November 1984, aid shipments were only 300,000 tonnes. During the same period the government distributed about 1.3 million tons of foodgrain, in effect running its food operations by matching the offtake of public grains with import arrivals, and by reducing the monthly level of stocks to a bare minimum of about 600,000 tons.'

(World Bank 1985 TT-38)

In 1984 there was no question about the determination of donors. Their commitments were made very rapidly, it was just their shipping and administrative procedures which resulted in most of the food aid arriving too late to be of significance for the food crisis.

In his list of changes, Clay notes that in 1984 the Bangladesh government's determination to stabilise prices was apparent in its dramatic purchase of rice from Thailand and Burma. Montgomery (who was at the time an economist with USAID, Dhaka, and had special responsibilities for food policy) describes the action in these words:

'... the most important step the government undertook was to make a very dramatic direct purchase from Thailand. As early as June 1984 it was clear to the then Food Minister, Retired Air Vice Marshall A.G. Mahmood and his Secretary Mohammed Ali that donor responses would be too slow given the nature of clearances/ authorizations from home offices and the competition for grain by
African countries facing severe drought. Therefore the Minister and Secretary flew to Burma and Thailand and bought, in the space of less than one week, almost half a million tons of rice (30,000 from Burma, 425,000 from Thailand). The cost to the government can be estimated at approximately one quarter of a billion US dollars (cash and short term credits). While the burden is onerous it demonstrates a point that food policy planners have been making repeatedly. It is not possible to hold domestic food stocks against any level of emergency ... there will always exist some levels of severity of loss (events that occur with low probability) in anticipation of which it is not cost effective to hold stocks and manage them successfully. In such emergencies, the prudent policy is also to hold cash (and good will of donors) and undertake external procurement in a timely fashion.' (Montgomery 1985 172)

Had the Bangladesh government possessed a quarter of a billion US dollars in foreign exchange reserves in 1974, no doubt it could have acted similarly (though it would have found the world rice market much smaller and the world wheat market disrupted by the generalised perturbations of 1973 and 1974). In 1974, the Bangladesh government was facing difficulties in its negotiations with the IMF and World Bank, as well as with the US government. Its foreign exchange reserves were, therefore, in a particularly parlous state. It is only since 1974, and the growth of remittances from Bangladeshis working in West Asia, that the Bangladesh government has had adequate reserves of foreign exchange.

Clay's list also makes reference to the new distribution channels, established within the public distribution system between 1974 and 1984,
which could be used to maintain government influence over prices. The Open Market Sales (OMS) provisions has been established for just such a purpose. OMS arrangements enable the government to release large quantities of low price foodgrain to selected traders at particular times of year in order to stabilise rising prices. In the next section, I shall describe how this policy instrument was introduced at the behest of the US government.

It was, however, not the only new element in the public distribution system. During the famine of 1974, food for work schemes were used, though on a small scale. Langarkhanas, or gruel kitchens/camps, were the major element in the government's response to the emergency. After 1974, food for work programmes were expanded considerably, using food aid predominantly supplied under US PL480 Title II, and organised by the American voluntary agency Care and the World Food Programme. A distribution of free food targetted particularly at poor mothers and children, known as Vulnerable Group Feeding, was also introduced in the aftermath of the 1974 famine. These public distribution arrangements were not designed with their effects on rice prices specifically in view. They have, nevertheless, a significant effect in increasing the direct entitlements of poor households (thus reducing demand in the private distribution system), and, through resale and leakage, they also affect the supply of food on private markets, thus affecting the price in that way too.

The World Bank's investigation of the events of 1984 (World Bank 1985 Volume II Chapters 3 and 4) attributes the successful management of the crises to a list of changes similar to Clay's. The Bank report,
however, highlights the relative insignificance of Open Market Sales compared to other public distribution channels. (It also shares Montgomery's view that the commercial foodgrain purchases were more timely and significant than emergency commitments of food aid.)

According to the World Bank report, Open Market Sales were the poor relation of the public food distribution system. Ten years earlier it had been the distributions to poor populations in rural areas, Modified Rations and relief. In 1984, Open Market Sales were treated as a residual claim upon the system:

'Regional PFDS [Public Food Distribution System] managers had to meet the needs for SR [Statutory Rationing - urban centres], MR [Modified Rationing - selected rural households] and PG [Priority Group - army, police etc.] entitlements and for relief allocations before they could consider even limited OMS from their diminishing foodgrain stocks.'

(World Bank 1985 T1-66)

Compared to the corresponding period in the previous year, these are the offtakes (in thousands of tons) through the main PFDS channels in July to November (same source):

<table>
<thead>
<tr>
<th></th>
<th>1983</th>
<th>1984</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statutory, Priority Group and Modified Rations</td>
<td>550</td>
<td>840</td>
</tr>
<tr>
<td>Relief</td>
<td>130</td>
<td>310</td>
</tr>
<tr>
<td>OMS</td>
<td>60</td>
<td>160</td>
</tr>
</tbody>
</table>
By USATD's estimate, a commitment to OMS sales of 40-50% of an anticipated shortfall is required to control a price rise (Montgomery 1983 29). In this case the shortfall was 1.5 million tons, suggesting that OMS sales of 600 to 750 thousand tons would be required.

These figures also indicate the greater absolute increase in distribution through the ration channels, than the increase through relief. 1984 was a year when market prices exceeded ration prices by a large margin (36% for rice, 19% for wheat) so that demand for this food was high.

Outside of changes in the public food distribution system, there were a number of other factors influencing the contrasting price patterns in 1974 and 1985. In 1974, despite the high prices in Bangladesh, there was smuggling from Bangladesh into surrounding areas of India. The scale of this smuggling, as noted earlier is difficult to estimate. It should be noted that this trade may not have been motivated simply by a price differential and may, in fact, have occurred despite an unfavourable price differential. In 1974, the Bangladesh economy and its currency reflected the widespread turbulence within the country. Traders and large farmers will have been keen to put their assets into a more stable currency.

In 1984, any smuggling took place in the opposite direction bringing foodgrain from India into Bangladesh. In 1985, a large rice trader in Northern Bangladesh gave me an informal estimate that this smuggling would have represented an import of half-a-million tons of foodgrain during 1984. If his estimate is correct, this is an important factor.
As I describe in the next section, one of the objects of donor advice to the Bangladesh government has been to reduce the public food system and change the nature of government influence over the private system. In 1974, the Bangladesh government attempted to control the private food markets through legal controls setting limits on the storage and movement of foodgrains and enabling procurement to be made at low prices. By 1984, this system had been 'liberalized' with controls on movement and storage repealed or relaxed, and procurement put onto a notionally voluntary basis at incentive prices.

One consequence of this relaxation of legal controls on foodgrain merchants is that they are probably not quite so secretive about their stock management practices. Restrictions on the movement of foodgrain from one district to another, which Alamgir cites as a probable factor in the price hike of 1974, would have been less in 1984. Analysis of the contribution of legal controls in 1974 would require an investigation of how they were implemented in different regions.

The changed impact of the government's control on merchants is one of a number of factors which could only be assessed with further research, particularly focussed on what happened in specific districts. Other factors which would repay investigation include the role of the military and changes in the structure of production between 1974 and 1984. In 1984 the military was given an unprecedented watching brief which involved the posting of military officers to state offices throughout the country. By this means, the efficiency of policy implementation may have been increased considerably. As Clay notes the diversification of agricultural production may have provided a greater stability to agricultural output.
Its effect on employment may also have been important. The other side (from prices) of the 1974 entitlement squeeze, was the fall in rural employment opportunities and in rural wages. Quite how the real prospect of a widespread loss of jobs was avoided in 1984 remains an important area for investigation. In August 1984, government estimates of lost employment opportunities ranged from 65 to 250 million person days (Crow 1984 p.1757). The 156,000 tons of food for work distributed in the latter six months of 1984 (a considerable increase on previous years) would have generated employment of some 50 million person days (the payment rate is 3 seers of food per day, approximately 3 kg). The government's rapid provision of additional production loans and of seedlings (to replace those washed away in floods) will also have generated some employment (though no doubt a large proportion of the loans were wisely but illegally used as consumption credit).

No final verdict can be handed down to authoritatively claim success in the handling of the food crisis of 1984 for one factor or another. At the national level, at which this assessment has been pitched, the interaction of several important factors can clearly be established. Their relative weight needs further investigation, particularly at a level closer to those who are the prime movers and victims in any food crisis, the merchants, food policy officials, large farmers, peasants and wage labourers.

It can be seen, nevertheless, that government actions at both ends of the entitlement squeeze (prices and employment) played a part. In addition factors outside the control of the Bangladesh government, and circumstances outside Bangladesh altogether also had an important influence.
The coerced evolution of food policy between 1974 and 1984

Between the two years of food crisis discussed in previous sections, the principal means of food policy implementation were transformed. In 1974, the government enforced legal controls over the private (market) distribution of food and maintained a high level of subsidy in the food distributed through the public (ration) food system. Both the storage of foodgrain (beyond a few days), and its shipment from one zone to another, were subject to legal controls intended to secure urban food supplies (through coerced procurement) and to prevent speculative hoarding. By 1984, the controls on the private storage and movement of foodgrain had been relaxed and the level of subsidy in the public food system had been reduced. The emphasis of policy implementation had been transferred from legal controls on the private sector and the maintenance of a ration system, to new policy methods using periodic sales to traders and voluntary procurement from farmers and traders to stabilise and sustain the price of foodgrain prevailing in the private distribution system. In simple terms there has been a move towards the greater privatisation of foodgrain distribution. It has been accompanied, however, by the introduction of new ways for the government to influence food prices.

This shift of emphasis has taken place along lines encouraged by the major aid donors to Bangladesh, amongst whom the most influential with respect to food policy has been the US government. No doubt some changes would have taken place whether donor governments had given policy advice or not. The level of sustained and co-ordinated pressure
on the Bangladesh government to change its food policy, however, makes it appropriate to term the outcome a coerced evolution of policy.

In their original article, McHenry and Bird noted the second US food aid embargo, between November 1975 and March 1976. They did not devote much attention to this embargo. As noted earlier, the Dhaka US Aid Mission had decided to withhold some agreed food aid shipments in an attempt to force the Bangladesh government to raise its food ration price (the price at which Statutory Rations and Modified Rations would be sold to the consumer). McHenry and Bird interpreted this as a developmental use of the power accruing to the allocation of food aid, and considered it intrinsically less interesting than the political use of the power. This 1975-6 embargo was, nevertheless, the first flexing of the US muscle which was to be used to encourage the shift in Bangladesh food policy.

One of the architects of the shift of policy emphasis was Joseph Stepanek, an economist at the ATO Mission in mid-1970s. He published a book in 1979, no doubt reflecting reports he had written for ATO, which contained the following paragraphs under the heading 'Food as a development resource - a proposal':

'In the short space of three years, Bangladesh has endured precarious variations in its food supplies and prices. During these crises, and between them, the government has not used its ration system to serve development. Instead, domestic crop forecasts, ration system "needs", and stock estimates are interpreted liberally to give ample scope for imported food.
What was to have been a program for feeding the destitute in the 1940s has now become a permanent urban welfare system that impedes development objectives. Agriculture is stagnating. The poor are left out of one food system and struggle to eke out a living in the other.

'Food priorities must be reordered ...

'This objective can be distilled down to the age-old choice between expensive food and cheap food. Bangladesh has few options. A dual pricing policy is prohibitively expensive. The government does not have the resources to procure grain on a significant scale and to sell it at a subsidized price.... The choice is, therefore, between cheap and expensive food for the economy as a whole. Accordingly, my proposal rests upon the acceptance of a fundamental proposition: the government can rely on its own agrarian resources to feed its population. A relatively higher food price and a high-level commitment to agricultural programs are keys.

'Food imports should complement and stabilize a reliance upon the countryside; they cannot be allowed to displace it. The basic mechanism for ensuring the incorporation of imported food with this shift to an agriculturally-led growth strategy is a public price-stabilization scheme. In large cities, public food stocks should be sold when grain prices rise above a predetermined level, and these public sales should be curtailed when market prices moderate. They should not continue to flow regardless of
prevailing market prices. In time, several of the system's ration categories should be terminated and, with compensatory salary adjustments, the recipients should rely on the private market and public open-market sales for their grain ... ration coverage can be curtailed with or without accompanying reductions in food subsidies. Market grain prices should be higher than the 1976 and 1977 levels ... but a return to 1973-4 levels must be prevented because extreme food prices act to brake employment-creating processes. In this formulation, the urban population would continue to benefit from the imported food, but they would pay a higher price.

'The price stabilization scheme should also extend a price floor to cultivators.... The primary objective of [government] procurement drives should be the effective maintenance of a price floor in small rural markets. The achievement of tonnage targets to maintain the ration system should become a secondary objective ... the administrative difficulties involved in local procurement rule out implementing an effective price floor at the farm-gate, or even village-market level ... production levels and the private grain trade [should] determine the overall price trend....'

'A market-oriented system by itself does little to serve the needs of the poor. The primary vehicle for their welfare, over the longer term is a strategy for agricultural development. However, when food shortages occur, the government should
initiate food-for-work projects and, in extreme situations, open gruel kitchens ...

'There is a natural tendency to view a proposal for change with hesitation. The presumption by many both in and out of government is that the present ration system is adequate. It clearly is not. Whether the system's purpose has been political pacification, revenue generation, or even food for the poor ... the present system ill-serves developmental and humanitarian objectives.'

(Stepanek 1979 pp.67-9)

This, in its main essentials, is the manifesto for reform which has guided donor objectives since 1974. The embargo of 1975-6 was the first element of coercion required to start the implementation of the manifesto.

Stepanek proposed:

- a greater reliance on private foodgrain markets
- reduction of the public food system (rations)
- termination of subsidized food to urban populations
- the introduction of an open market sales, price-stabilization scheme
- high food prices generally.

By 1984, some progress had been made toward each of these objectives. OMS was in place (though its use to create a floor price for producers had been superceded by the introduction of incentive procurement),
ration subsidies had been reduced and, whilst the public food system was not absolutely much reduced, it had not grown even though the population had. In addition, as I have noted, the various legislative limitations on the private market had been relaxed.

I should make it clear that I am not concerned here to mount a critique of this proposal for the privatisation of food distribution and a market-led growth strategy. A prior task, my task in this article, is to establish an outline of how food policy was transformed. In a review of a subsequent generation of ATD proposals for market-led growth in agriculture, Clay has noted a number of grounds for scepticism. In conclusion, he notes that, 'freeing the hidden hand where the basic needs of the majority of the people are not assured is potentially a recipe for disaster' (Clay 1986).

The 'developmental' embargo of 1974-5 was almost certainly not unique. The need to exert leverage so coercively has, however, been reduced by the development of a new US food aid channel, PL480 Title III.

A 1977 congressional amendment instituted the procedures of Title III which allowed multi-year purchase of food on concessional terms (low interest rates, 10 year grace period, 40 year payback) and provision for writing off all or part of the loan if the client state complied with US policies. Title III is intended to provide 'Food for Development'. (In my discussions with ATD personnel, I have come across the suggestion that PL480 Title III was introduced with the case of Bangladesh and the manifesto of food policy reforms specifically in view. Senator Bellmon, who was associated with the introduction of the legislation, had visited
Bangladesh just prior to the drafting of the amendment and talked at length with some of the US architects of food policy reform.)

Few Title III agreements have been negotiated. Out of some 30 countries eligible, as 'relatively least developed countries' (defined as having a GNP per capita of $730 or less), a recent survey found that only 6 countries had negotiated agreements (Garzon 1984). PL480 Title III was intended to 'encourage food-deficient countries to undertake development projects and policy reforms which will increase their self-sufficiency in food production' (Tbid).

Title I of PL480 provides concessional terms for the sale of agricultural produce to foreign governments. Title II provides relief food for governments and other agencies. Title III provides free food if the recipient government complies with policy reforms and implements projects, intended to assist peasant farmers and landless labourers, previously agreed with the US government. The recipient obtains food initially on Title I credit terms, then if policy reforms are implemented and/or projects undertaken, loan 'forgiveness' is granted. Garzon has described Title III as 'a hybrid of Title I food aid, New Directions development assistance and macropolicy reforms associated with the IMF and World Bank' (1984 235). The Title III agreements with the Bangladesh government have been aimed at policy reforms to a greater extent than Title III agreements elsewhere.

In the following section, I describe the content of the Title III Agreements which Bangladesh has signed and show how they have been used to establish not just the broad principles of food policy but also the details of its implementation.
PL.480 Title III Agreements with the Bangladesh Government

The series of agreements and amendments negotiated by the US government for the supply of Title III food aid to Bangladesh have as their principal objectives:

(i) the maintenance of price-incentives for foodgrain production;

(ii) the reduction of subsidised food distribution; and

(iii) the introduction of an Open Market Sales system to mitigate seasonal foodgrain price rises and those attributed to crop shortfalls and stock shortages.

The agreements, the agreed minutes of the negotiations which led to them and the reports of evaluations periodically undertaken by USAID personnel describe a prolonged endeavour to shape the institutions, policies and occasionally day to day actions of the Bangladesh government concerned with the exchange and distribution of foodgrains. It is an iterative process in which an assessment of the efficiency of one agreement is fed back, through amendments and new agreements, as new policies and new ways of implementing policy.

The second Agreement (USG/BNG, 1982) contains this history of PL480 programs in Bangladesh:

'The second Food for Development Program can be viewed as the beginning of the third phase in the history of PL480 Programs in Bangladesh. The first phase (1970/71 to 1974/75) involved the provision of wheat, mainly for emergency relief purposes to avert
famine. The second (1974/75 - 1980/81) also involved the provision of foodgrain to augment domestic supply, but the emphasis shifted to development purposes to promote domestic foodgrain production and to contribute to the creation of a foodgrain security system. Major achievements during the second phase included the establishment of a foodgrain security system including a procurement program to support prices and acquire commodity for reserves, an open market sales mechanism to release commodity to dampen seasonal price upswings, and expanded foodgrain storage facilities. Foodgrain production has increased and is expected to continue to do so.... Therefore, as Bangladesh moves toward foodgrain self-sufficiency the need for foodgrain shipments will gradually diminish.... With the inclusion of cotton in the program, the theme of expanded private sector involvement which has been characteristic of the Title III Program in foodgrains and vegetable oil is carried into the cotton spinning industry.... In this Title III Program the BNG agrees to create a policy environment in which a private spinning industry can take root and develop.'

(UFG/BDG 1982 Annex B Page V-2)

According to this history, the first phase of US food aid involvement, in the period 1970/71 to 1974/75, had the objective of averting famine. The second, 1974/5 to 1980/81 helped to introduce institutions for the management of famine and incentives for foodgrain production. Phase III, which started in 1980/81 will attempt to increase private sector control in industry. In this section of the article we are concerned only with the intentions and achievements of Phase II of the US plan.
The first Title III agreement (USG/DBG 1978) included in its 'Agreed Minutes' the draft order which the Bangladesh government agreed to send to its food controllers. This described the proposed new policy of Open Market Sales (OMS). At this stage the policy incorporated a maximum ceiling price (of Taka 150 per maund of coarse rice). In amongst detailed commitments by both parties, the Agreed Minutes document a lengthy discussion about how the price for OMS sale of wheat should be set. USG officials wanted a price of Taka 95 per maund, BNG wanted it set at Taka 85. A compromise of Taka 90 was suggested, but the Bangladesh government insisted.

After sixteen months of the agreement, a USAID evaluation reported disorganisation and failure. OMS wheat had been channelled to flour mills. The Bangladesh government had introduced controls on OMS distribution (to prevent 'windfall' profits). OMS had become another subsidized ration channel. The proceeds of food sales had been utilized to maintain fertilizer subsidies (rather than to finance fertilizer storage as had been agreed) ... and so on. The report recommended that policies be adjusted, notably the OMS price be made movable, and some objectives be reconsidered, such as the constraint of rice prices (USAID Bangladesh 1979).

It is not obvious what was at issue in this case. In part there was a conflict between the 'old' philosophy of legislative controls on the private market, and the 'new' philosophy of efficient allocation through the hidden hand of the market. The Bangladesh government feared that the traders who were recipients of the cheaper OMS foodgrain would make
'windfall' profits simply by selling it at the prevailing market price. They instituted controls. The evaluators brought in by ATD wanted the market to be given freedom.

After (one surmises) a period of reflection, the lessons of this relative failure were incorporated into a new agreement (USG/RDG 1982). The new agreement did not abandon constraint of the rice price as an objective but detailed a mechanism by which the prices of OMS sales could be adjusted as free market prices changed (this arrangement is described later). The agreement determines when procurement prices should be announced, how they should provide for an adequate profit margin etc.

Garzon (on the basis of discussions with ATD officials in Washington?) comments upon the Bangladesh agreement as follows:

'Bangladesh accepted a policy-oriented agreement. In this case ... the amount of aid was very large, Bangladesh's dependence on food aid great and the agreement did not threaten existing policies. Nevertheless, the government strongly resisted through sluggish compliance, the policy reforms stipulated in the agreement.'

(Garzon 1982 2411)

Be that as it may, USATD's evaluations of the operations of OMS subsequent to the 1982 agreement become more satisfied (Molldrem et al 1983, Montgomery 1983). As far as the US government was concerned, its ten year old endeavour to transform food policy in Bangladesh was beginning to achieve success.
It can be seen that the objects of the Title III conditions imposed on the Bangladesh government were (and remain) far-reaching. Great claims are made in the latest edition of the World Development Report for 'agricultural policy improvements' in Bangladesh, of which these food policy reforms are an important element:

'The private sector now handles about 85 percent of the internal marketing of grains. Aided by the construction of adequate storage facilities, the private sector has been particularly effective in limiting temporary increases in foodgrain prices between harvests. The reduction of subsidies to urban consumers enabled the government to expand rural investment and relief programs rapidly, providing food-for-work and nutrition schemes for the poor. The investments have provided rural jobs equivalent to the full-time employment of close to 1 million landless labourers ...'

(World Bank 1986 p.107)

The assertion of the efficacy of the private sector in limiting price increases presumably refers to the 1984 experience. It is an assertion which is not substantiated by the Bank's own evaluation of what happened, which recognises the importance of state purchases. Possibly the Report's authors were carried away by their favourable opinion of Adam Smith's comment that 'a dearth never has arisen from any combination among the inland dealers in corn' (World Bank, 1986, p.9). In a very interesting discussion of the classical economists' writings on famine, Amartya Sen takes up this point and concludes, 'It is arguable that Smith did underestimate the extent to which traders can
and do, in fact, manipulate markets ...' (Sen 1985, p.22). This is, however, a digression.

The World Development Report continues with a very favourable view of agricultural development in Bangladesh: agriculture has grown at 3.5 percent per year; it has contributed to most of the growth in employment; high yielding varieties and water control have been expanded; agriculture as become more resilient in the face of natural disaster; foodgrain imports have fallen as a proportion of total consumption; farmers have diversified from rice to wheat; exports have increased and become more diverse (jute, shrimp, tea and leather).

In this paper, I have been concerned to investigate the objectives of Title III conditions with respect to food policy reform and specifically relating to their possible effects upon food security. As can be seen in Stepanek's account of the food policy manifesto and in some of the quotations I have made from the Title III agreements, the objectives of reform were considerably wider than food security.

The World Development Report mentions one element of reform, specifically encouraged by Title III, to which I have not given any emphasis. This is the shift, first in consumption, then in production, from rice to wheat. During the evolution of the Title III agreements, the promotion of wheat consumption came to be seen as desirable by US policy makers. In part that is no more than an expression of the need to promote the agricultural commodity most in surplus. Beyond that interest, the promotion of wheat consumption in Bangladesh was considered worthwhile because (a) it was 'self-targetting' to poor
households and (b) wheat could be grown in Bangladesh at lower cost than rice.

Until the late 1970s, wheat was not a widely consumed food. Rice was preferred to parathas and chapatis. It was believed, therefore, that wheat distributed at subsidised prices was less likely to be resold to consumers with greater purchasing power. In the 1979 evaluation of Title III, it was agreed that the rice price was no longer the key determinant of the entitlement of the poor, the price of wheat had supplanted it (USAID 1979 p.32). In the 1982 Title III Agreement, the Bangladesh government agreed that one element of its 'reduction of the ration system' would be:

'reduction in the rice portion of the ration and the eventual withdrawal of rice from the ration system'

(USG/BDC 1982 Annex B p.V7)

Rice was to replaced by wheat.

This objective of food policy reform has been achieved. Wheat products are now much more widely consumed in Bangladesh and wheat production has been growing at rates approaching 20 percent per annum. As elsewhere, a note of caution has to be set beside that conclusion. Wheat consumption and wheat production were growing before this round of encouragement from the US government. It is difficult to isolate the effect of this US policy on its own.

The growth of wheat consumption has, nevertheless, been so successful that it is no longer regarded as 'self-targetting' to the poor.
At the end of 1985 negotiations were opened for a new Title III agreement. Consultants were brought in by the US government to provide:

'assistance in identifying a set of agricultural policies and programs to accompany the third PL480 Title III agreement with Bangladesh ...'

(Block and Makinen 1982 p.2)

In amongst a set of recommendations to help realize much of the same food policy manifesto:

(i) partial market stabilization;
(ii) reform of the ration system;
(iii) promotion of increased agricultural productivity; and
(iv) non-farm rural employment generation

is a discussion of the potential for the introduction of maize into Bangladesh:

'The present situation with maize invites comparison with the situation with wheat in the early 1970s. Wheat at that time was neither produced nor consumed on a large scale, though today it is the second most important crop in Bangladesh. This points to similar possibilities for maize. Nevertheless, the similarity to maize is imperfect, particularly since widespread acceptance of wheat by Bangladeshi consumers occurred amidst a severe famine.'

(Block and Makinen 1986 p.19-20)

This is not the place to embark upon a full description of the objectives and achievements of Title III-related reforms. I set out to
outline the history of those reforms and to examine some of the ways they might have influenced food security between 1974 and 1984. This I have now done.

In a final short subsection, I describe the operation of the main food security instrument introduced by these reforms, the Open Market Sales channel. Those not centrally interested in the description of that policy should skip the next pages and go straight to the conclusion.
The place of open market sales in the food distribution system of Bangladesh

To finish at least one part of the story of the reforms introduced with the encouragement of Title III food aid, the operation and scale of the principal instrument of policy they introduced should be described.

In recent years foodgrain production in Bangladesh has been about 15 million tonnes, supplemented by imports of 1.5 to 2.5 million tonnes of wheat and rice.

The marketed surplus of rice was estimated at about 10% of production in the mid-1960's (Bureau of statistics 1964; quoted in Ahmed 1981 38) and marketable surplus is now estimated at between 19 and 23 percent of production (Ahmed 1981 40), that is, some 3 - 3.5 million tonnes.

Internal procurement has varied since the mid-seventies at between 200,000 and 600,000 tonnes with one exceptional year (FY 1981) of just over 1 million tonnes (WFP July 1983, World Bank 1985 II 37).

Since 1972/3 between 1.5 and 2.7 million tonnes of foodgrain have been distributed through the (now) ten channels of the public food distribution system (PFDS). Most of this food has been provided by commercial and food aid imports.

Within this 10-18% of available foodgrains distributed through state channels, only a small proportion is distributed through the Open Market Sales channel. By 1983 OMS had risen to some 100,000 tonnes or about 6% of foodgrain distributed through state channels. (This is expected to rise to 8% by FY86).
The significance of Open Market Sales lies not in the volume of food grain distributed but in the influence those sales exert upon prevailing market prices.

In its evolved form, the Open Market Sales channel works as follows. Foodgrains are supplied by the Food Ministry to licensed grain dealers at a price halfway between prevailing market prices and a pre-set trigger price, which is 15% above domestic procurement. Sales do not start until the market price rises 25% above the procurement price. Once OMS sales have started, if market prices continue to rise, the OMS price follows but maintaining its position approximately halfway between the market price and the trigger price. There is thus no ceiling price. This 'floating ceiling' is thought to be less costly to defend if prices rise sharply. In fact, the initial (USG) proposal for an open-ended commitment to keep selling until prices fell was also limited by the Bangladesh government imposing restrictions on the amount any one consumer could purchase from the licensed grain dealer (Montgomery 1983 5-6).

The intention of OMS sales is to provide a mechanism which enables government to maintain rice prices with a variation (suggested by the World Bank) of no more than 20% between harvest troughs and 'lean season' peaks. OMS sales, therefore, are only expected to occur in response to lean season price rises.

After two false starts, when OMS sales were small, the USADF economist concerned with the program argues that prices were successfully constrained in July-October 1982. He described the success in these terms:
'... the OMS rice and wheat sold in the months of July, August and September was sufficient to break the back of a potentially disastrous price rise. Prices peaked on approximately October 7 and declined quickly by October 21st, 1982. The level of offtake per capita of OMS grain in each subdivision (region) was directly related to the degree of price decline; the greater the OMS offtake per capita, the greater the price decline.'

(Montgomery 1983 29)

OMS was introduced to provide a policy instrument with which the state could influence price rises caused by apprehensions of imminent scarcity:

'... mere pronouncements of government's good will and intention to overcome crises will not suffice. The apprehension is usually based on some quite important information and has a real basis. The reaction is often a very dramatic one; prices can rise 50% or 100% in a period of a very few weeks, when the shortfall in production is in fact only a few percent of what it might have been, or the delay in the harvest is only one month.'

(Montgomery 1983 3)

Montgomery's analysis shows that the fastest rate of monthly price rise occurred in the year prior to the 1974 famine. Between the winter (harvest) trough and spring peak the price rise averaged 15% per month, and between the summer (harvest) trough and autumn (lean season) peak the rise averaged 19.6%. Nevertheless in three other trough-peak periods (out of a total of 19 studied) the rate of rise exceeded 10%.
Montgomery argues that demand elasticity is low in Bangladesh, that is, a large change in price will only cause a small change in demand. This he attributes to the 'thinness' of the market or the small size of the marketable surplus. Using an elasticity estimate from Ahmed (1981), Montgomery estimates that for every one percent of supplies withheld from the market by traders, prices will rise by four percent.

As we have seen, even though the OMS arrangements had been tried and tested in an earlier food crisis, their operation in 1984 was too little too late.
Issues: famine, food aid and donor leverage

This story, of two food crises in Bangladesh and the influence upon them of United States government policies, impinges upon a number of debates: debates about famine, debates about aid donor leverage, debates about food aid, and others besides. My research into the story continues but it seems appropriate to draw attention to some important issues.

The paper continues the investigation of what happened to create the famine in 1974. The policies of the Bangladesh government have not been investigated to any depth, but it is clear that the decision to sustain ration distribution in the cities and to drastically reduce public food distribution to the rural areas could have been an important factor. Behind that decision seems to lie the Bangladesh government's justified concern about its ability to sustain food imports at an adequate level.

There can be no doubt that delays, prevarication and finally the declared cessation of US food aid were important influences on the level of food imports in the months which led up to the famine. Some of the reasons for the embargo, given by the US government, at the time and subsequently, have been set down. At a simple level, there is some correspondence between the deficit in US food aid shipments and the deficit in the Bangladesh government's food distribution. US food aid shipments were cut back by about 400,000 tons in the year July 1973 to June 1974. Some 500,000 tons would have been required to maintain the Bangladesh government's food distribution at the level of the previous year during the lean months at the end of 1974. That correspondence is too simple. Effective procurement by the Bangladesh government could
have provided much of the shortfall. (The administrative capacity of the government in early 1974 may not, however, have been up to the task. In the event, little was procured). It is, nevertheless, tempting to conclude that if the US government had acted in 1974 as it did in 1984 there would have been no famine. This is a plausible view.

With regard to the causation of the 1974 famine, issues which would repay further investigation include: foodgrain merchants' storage behaviour, smuggling to India, the effect of legislative controls on the storage and movement of food, and exactly what the US government thought it was doing.

The paper also documents a success story to contribute to the discussion of famine causation. In Bangladesh in 1984, foodgrain output losses and lean season-employment losses probably exceeded those which preceded famine in 1974. Widespread starvation was, nevertheless, averted. That success deserves scrutiny. The analysis contained herein suggests it be attributed partly to luck (high foreign exchange reserves, and reverse foodgrain smuggling from India into Bangladesh) and partly to a more effective state response (the maintenance of government stocks enabling the distribution of large volumes of subsidised foodgrains, through several channels, at an early stage of a widely-anticipated rice price rise).

Parts of the more effective state response were made possible in 1984 by improved relations with the US government and part may be attributed to the innovations in food policy implementation encouraged by the use of US leverage. Much remains to be investigated, however, about the
operation and consequences of the food policy instruments introduced as a result of US leverage. On the surface at least, the power of the food aid donor, and the revenue the food generates, have been used to increase producer prices and, at the same time, to create a 'ceiling' to limit the seasonal peaks of prices (for the benefit of consumers).

It has not been my concern to argue whether the objectives of the reforms are good or bad. The intentions of the architects of the food policy reform were clearly to encourage development. Consideration of the market-led strategy toward which they chose to point the Bangladesh economy would require a more wide-ranging assessment than I have made here.

I am concerned, however, to highlight the concerted and detailed influence which has been exerted, over an important area of Bangladesh policy, by the US government. Why the Bangladesh government acquiesced in this level of foreign control remains an area for investigation. Other states have chosen not to participate in the Title III arrangements and still receive PL480 food aid.

Debate about the leverage exerted by aid donors is in its infancy, and to date it has been concentrated principally on the conditionality of IMF finance and to a lesser extent, the conditions attached to the provision of various World Bank credits (e.g. Mosley 1985). This paper suggests that Title III of US Public Law 480 provides an analogous instrument through which sophisticated, detailed and evolving policy guidelines can be enforced upon the recipient government. In the case of Bangladesh, the three instruments of donor leverage (IMF credits,
World Bank credits and US PL 480 negotiations) are used in a coordinated manner. Donor agencies have an informal but widely acknowledged division of policy influence. Under this division, the IMF has undertaken to introduce responsible and realistic macroeconomic policy guidelines, the ATI has been concerned principally with the privatisation of agricultural input provision and the reform of food policy, the Import Program Credit negotiations of the World Bank have ranged widely but focused mainly upon the mobilisation and management of domestic resources. Formal and informal coordination procedures prevent the benchmarks and guidelines of the three major donors undercutting or contradicting one another.

The use of Title III food aid for policy reform is the subject of my final point. I am uneasy about the use of the threat of famine to attempt to control famine. This is in part what this story is about. The story tells of the evolution of US food aid policy - influence from the use of the stick (the embargo of 1974) to the use of the carrot (loan forgiveness under Title III). But the stick remains as a threat. On rare occasions (most notably in 1975–6) that threat is made explicit. Even when it is not, it hangs over the negotiations. As the level of disagreement over policy increases, the use of the stick becomes more likely. If policy disagreements between the two governments coincide with political differences (as happened in 1974) then food shipments may be imperilled.

The food policy changes, which Title III leverage has thus far been used to encourage, were relatively uncontentious (though for various reasons they were resisted and continue to be resisted in a variety of ways).
Currently ATD are considering where the influence of the next multi-year Title III agreement should be brought to bear. At the same time, several donors are encountering increased Bangladesh government resistance to some elements of the agricultural policies they are encouraging. If such negotiations become antagonistic, elements of the 1974 crisis could be re-enacted.
References


Ahmed R 1981  Agricultural price policies under complex socioeconomic and natural constraints: The case of Bangladesh.


Clay F 1986  'Releasing the hidden hand: an agenda for growth or chaos in Bangladesh?'  Food policy May 1986 pp 178-80.


Crow B 1984  'Warnings of famine in Bangladesh'  Economic and Political Weekly, October 6.


Garzon J M 1984 'Food aid as a tool of development: The experience of PL480 Title III' *Food Policy* August 232-244.


Montgomery R 1983 *Open Market grain sales as a public policy instrument for moderating food price fluctuations in Bangladesh* USATD, Dhaka.

McHenry D and Bird K 1977 'Food bungle in Bangladesh' *Foreign Policy* 27 Summer 72-88.


Ravallion M 1982 'Agricultural wages before and after the 1974 famine' Bangladesh Development Studies 10 75-89.


Sobhan R 1979 'Politics of food and famine in Bangladesh' Economic and Political Weekly December 1.


Signed August 2nd 1978

USG/BDG 1982 Agreement between the Government of the United States of America and the People's Republic of Bangladesh for sales of agricultural commodities Public Law 480, Title III.

Signed March 8th 1982
USAIN 1979 The PL480 Title III Program in Bangladesh. An


World Bank 1985 Bangladesh: economic and social development prospects
Report No. 5409 (in four volumes) April, Washington.

World Food Programme 1985 Bangladesh foodgrain forecast, UN WFP
Dhaka November.

World Food Programme 1983 Bangladesh foodgrain forecast UN WFP Dhaka
July.
The Development Policy and Practice research group was set up at the Open University towards the end of 1986 to promote research on development issues. Its members have a wide range of disciplinary backgrounds (engineering, sociology, economics, education and geography). At present, research is focussed in three areas: food markets - particularly in sub-Saharan Africa and South Asia; the development of finance and banking; and links between small and large scale production.

DPP is a relatively small research group with limited funding. In order to increase our efficacy we are keen to enter into collaborative arrangements with other research groups and development agencies where appropriate. DPP will also be acting as a centre to focus the development concerns of the Open University by arranging seminars and workshops.

DPP can be contacted at the following address:

Development Policy and Practice,
Technology Faculty,
The Open University,
Walton Hall,
Milton Keynes,
MK7 6AA
United Kingdom

Telephone: 0908 652103/2
Development Policy and Practice:

Working Papers

DPP Working Papers are available either to exchange with journals or with other working paper series, or on payment of £2 per paper. Please make cheques or International Money Orders payable to 'The Open University (Development Policy and Practice)'.

Papers marked by an * have been published in journal or book form, and are no longer distributed as working papers.

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Author</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M. Mackintosh</td>
<td>Agricultural Marketing and Socialist Accumulation: a case study of Maize Marketing in Mozambique.</td>
</tr>
<tr>
<td>2</td>
<td>L. Harris</td>
<td>Finance and money with underdeveloped banking</td>
</tr>
<tr>
<td>3</td>
<td>H. Bernstein</td>
<td>Capitalism and Petty Commodity Production.</td>
</tr>
<tr>
<td>5</td>
<td>M. Mamdani</td>
<td>Extreme but not exceptional: towards an analysis of the agrarian question in Uganda.</td>
</tr>
</tbody>
</table>