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FISCAL IMPLICATIONS OF FOOD POLICY

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FMRSP Working Paper No. 6

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EXECUTIVE SUMMARY

Major changes have taken place in the food policy regime facing Bangladesh in the last decade or so. The size of the Public Food Distribution System has been scaled down and producer and consumer subsidies have been rationalized. The role of the State in the food sector, however, remains quite substantial, generating significant pressure on the government budget. The extent of the burden remains somewhat conjectural with most estimates available, confounded by a maze of definitional and accounting practices that have evolved over the years. An attempt is made in this paper to estimate the extent of food subsidies provided in recent years in order to assess the potential for further interventions.

1. INTRODUCTION

Agriculture continues to dominate the Bangladesh economy, despite its declining share in GDP over the last two decades. It accounts for some 35 percent of GDP (down from 40 percent in the 1980s). The crop sector is by far the most important sub-sector, and the importance of rice within the crop sector is overwhelming. In fact, rice accounts for 70 percent of the total cropped area and a similar proportion of the value of crop output. Agriculture is also the biggest employer, accommodating around 68 percent of the labor force. Thus, given the size of the food and agricultural sector in the economy, policy makers attach a high priority to these sectors.

Food consumption represents the most important component of Consumption expenditures at the household level for the average household, accounting for over 50 percent of total expenditure in 1996-97. With some 50 percent of the population routinely unable to meet their basic caloric requirements, the role of the food policy regime in a country like Bangladesh assumes critical importance.

Thus, there has always been considerable pressure on the government of the day to do something about food policy. The main policy concerns that have traditionally faced policy makers relate to the provision of incentives to producers and subsidies to consumers. On the one hand, there is widespread concern with the stagnation in rice output that appears to have set in, giving rise to calls for input subsidies and price support. On the other hand, instability in rice output appears to have increased (at least in absolute terms), requiring substantial interventions in food markets in the form of subsidized sales and Open Market Sales (OMS) operations. In addition, the high incidence of poverty means that the government must consolidate and expand its safety nets, essentially through targeted programs like Food For Work (FFW) and Vulnerable Group Development (VGD) operations.

2. THE CONCEPTUAL FRAMEWORK

The importance and size of the food sector means that there will be impacts that will cut across sectors and policy spheres. The direction of cause and effect is not unidimensional, but will work both ways: from macro-meso-micro to micro-meso-macro. This is illustrated through a flow chart (Figure 1).

The framework depicted above has been kept simple and tractable, keeping only the most essential components needed to highlight the inter-linkages between the policy spheres on the one hand and the food and general economy on the other. One can begin at A (the policy level) or at B (the household level) and then trace the impact of changes in policy or household production/consumption on the rest of the economy, via the budget and the balance of payments. An example is indicated below where we take as our starting point, a shortfall in food production, similar to that of the *aman* season of 1997-98.

The Event: Shortfall in production of 5-10 percent. This would set off the following chain of events:

1. The price of food will rise (or the post-harvest, routine decline in prices will be much less)
2. There will be widespread fear that normal seasonalities will be exacerbated. Altered food prices may mean increased cross-border flows.
3. There will be pressure on the government to intervene regarding:
    - Open Market Sales
    - Targeted Distribution
    - Food For Work

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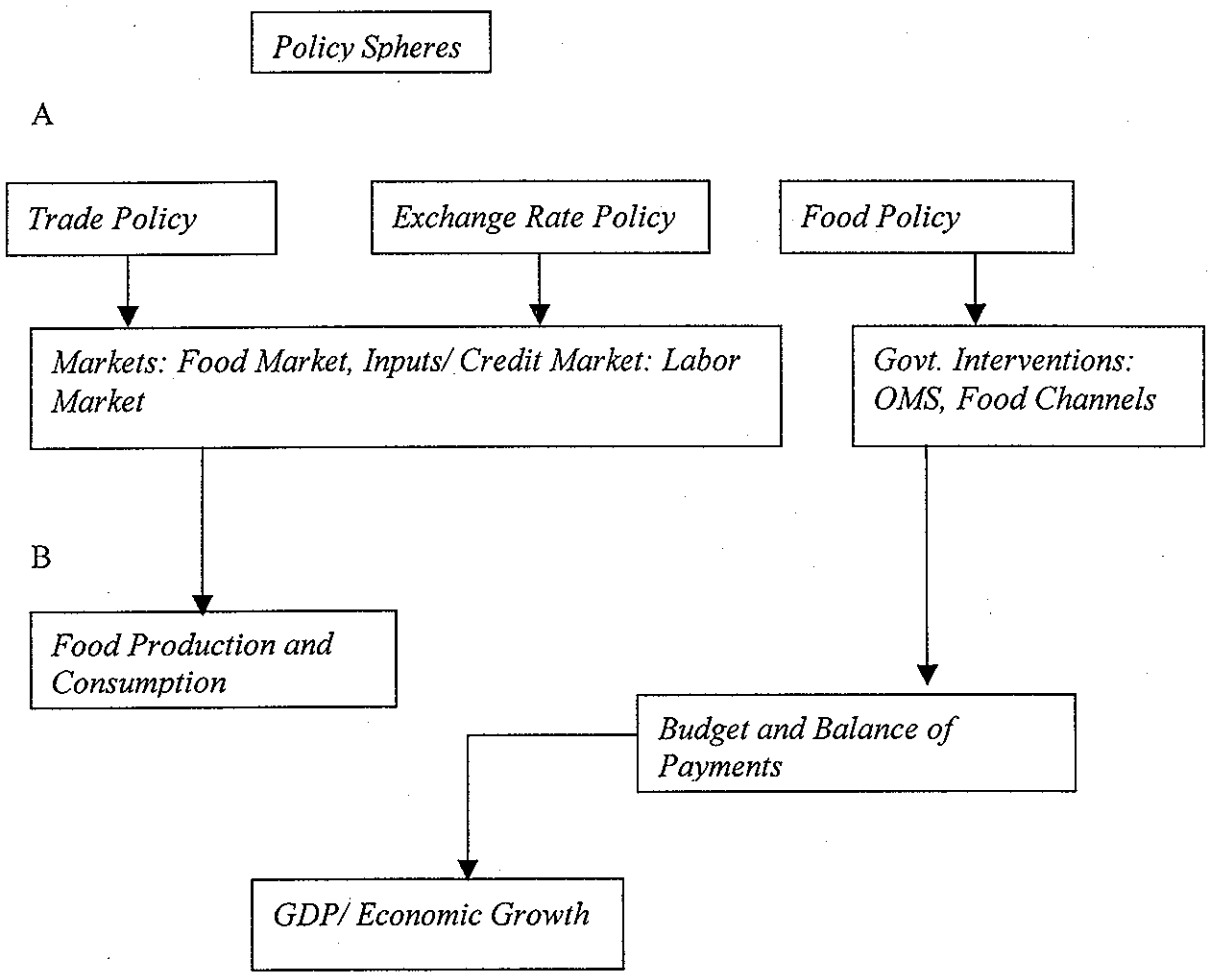
Figure 1 — Framework of Macro-Meso-Micro Linkages Relating to Food Policy



4. PFDS stocks will have to be depleted. New stocks will be required.

5. Stocks will have to be built up through imports or even possibly through domestic procurement (of privately imported foodgrain).
6. Thus, as a result of steps 3 and 5, food procurement operations will have to be increased, imports marshaled and subsidies raised, putting substantial pressure on the budget and balance of payments. Even if imports are made illegally from across the border, this will also entail foreign exchange expenditures and a concomitant decrease in resources available for other imports.

Instead of the initial event being a food production shortfall, it can just as easily be a sudden surplus in output that threatens to depress prices and farm profitability. Such an event would also lead to cries for intervention, this time to support farm prices and "save" the farmer, and if taken up, could mean substantial rice procurement at a huge cost to the national exchequer. It has been observed in the past that good years often cause more disruption to the government budget than bad years, precisely because of the above tendency. The opportunity costs for the budget and the balance of payments are likely to be substantial, but are difficult to quantify.

3. FISCAL IMPLICATIONS

Major changes have taken place in the food policy regime over the last 10-15 years. The PFDS has been drastically reduced in size with the elimination of statutory and *palli* rationing. The rate of subsidies to consumers and producers has also been adjusted downwards by reducing procurement prices and raising consumer prices. Nevertheless, the role of the state in the food sector remains substantial, arising out of a number of policy objectives. Producer price support remains a central policy instrument through which the government tries to guarantee a minimum floor price at harvest. Price stabilization is another central policy objective, necessitating food distribution and sales in both urban and rural areas. Provision of safety nets has also become increasingly important, especially to vulnerable groups who would otherwise not be able to acquire food in any other manner. Supply of food to "priority" groups continues to be maintained, perhaps largely because this appears to be a sensitive issue. Further, the frequency of natural calamities means that the government needs to be ready to undertake emergency distribution at short notice.

According to a recent report (World Bank 1997), total subsidy on food and fertilizers in 1997 was Tk. 5 million, an increase of 70 percent (in nominal terms) over 1996. A further rise of 41 percent was anticipated for 1998. Total cash outlay on the food budget is estimated at Tk. 12.5 billion (roughly 6.0 percent of total national budget expenditures). An attempt is made in this section to critically re-examine the whole question of food subsidy estimates (in a purely fiscal sense), as there appears to be considerable ambiguities in the manner in which these figures are arrived at. An indication of the nature of these ambiguities can be better understood with reference to the accounting practices followed by the Director General, Food.

Our discussions with the DG Food reveal the following:

1. Commercial accounting is practiced.
2. Separate accounting for the food budget is performed, which for accounting purposes is treated as being separate from the government.
3. Food, Railway and T&T receipts are put into Acct 11 of the Bangladesh Bank.
4. Detailed guidelines are available with the Food Directorate
5. Pricing of aid imports: essentially world prices are used, plus handling costs minus demurrage.

USAID Title II food-sales receipts (which is a major component of food aid) are initially booked as an expenditure and held at Bangladesh Bank. From there it is transferred to the American Express Bank and then when expenditures are agreed upon and finalized, the money goes back to Bangladesh Bank.

The treatment of FFW in Statement I of the budget is tricky for 1997-98 (and differs from its treatment in 1996-97). For 1997-98, the FFW figure shown is only the non-ADP part of FFW. The major part of FFW, however, is under ADP (See GOB 1998; GOB 1997).

An attempt has been made in Table 1 to arrive at a clear picture of food subsidies. An item-by-item discussion would be useful. The table is divided into two parts: (a) food distribution and value of receipts, and (b) Cost of food procurement or imports (including aid imports).

Under distribution receipts, the first item is "cash sales" of rice and wheat. This refers to sale of foodgrain through different monetized channels of the PFDS like "essential priorities," OMS, etc., which usually involve an element of subsidy, that is, sales prices are lower than purchase price or procurement price.

Apart from the monetized channels, there are the non-monetized channels, principally FFW and Food For Education (FFE). As far as the budget is concerned, these channels do not generate any revenue and may therefore be considered as free channels.

Table 1 — Estimated Subsidy on Food, 1996-97 and 1997-98

Values (Tk. Billion)

	1998-99	1997-98	1996-97	Comments
A. Distribution/ Receipts				
1. Cash Sale (rice+wheat)	3.10	2.65	1.01	Not free
2. Food for Work	6.20	4.16	6.21	Payment in kind wages
3. Food for Education	4.39	3.90	2.81	Free, but valued at ec. cost
4. Other	.20	.23	.23	
5. VGD & Relief	4.98	4.85	4.71	Free, but valued at ec. cost
6. Transfer Items	4.11	3.90	3.45	
7. Total Grain Distributed	18.87	17.77	14.97	
B. Purchased/ Procured				
1. Aid Imports	5.41	5.53	5.52	World price
2. Own Imports	3.54	4.30	1.36	World price
3. Domestic Procurement	9.20	7.15	7.15	Domestic price
4. Operating Costs	3.06	3.08	3.27	
5. Total Supply/ Costs	21.21	20.06	17.30	
Unit Cost/'000 MT	0.0124	0.0122	0.01217	
Cost of Distributed Grain	21.30	19.886	17.27	
SUBSIDY (GOB)	2.433	2.29	2.30	
As percent of ADP	1.8	2.2	2.0	
SUBSIDY II (+VGD, etc.)	7.413	7.716	7.01	
As percent of ADP	5.5	6.0	6.0	
SUBSIDY III (also FFE)	1180.3	1146.6	982	
As percent of ADP	8.7	9.0	8.4	

Source: Estimated from Budget Summary Statements, 1997-98 and 1996-97 (See GOB 1998; GOB 1997)

On the other hand, since FFW distribution is contingent upon work paid at around the market wage, this cannot be considered as a true subsidy. A similar case can be made for FFE, which can be considered as an investment in human resource development. Items like VGD, Test Relief, etc., can be basically considered free distribution.

The National Food Account, however, treats FFW, FFE and VGD at their economic price in arriving at the total cost of distribution of food (that is, purchase or procurement cost adjusted for transport and handling expenses, etc.). In the case of receipts from the monetized channels, actual issue prices are used. Thus, from the perspective of the food account, the subsidy element relates only to the monetized items, while the bulk of food operations on FFW, VGD, TR and FFE are not considered as

incurring a subsidy. Thus, depending on our objectives, the question of subsidy can be seen in the following number of ways:

1. The National Food Account definition is the most conservative where (free) distribution through the non-monetized channels is not considered as being subsidized, presumably because these are considered to have a high development content. While this argument could be forcefully made for FFW (where workers are paid roughly at the market wage rate), and perhaps even for FFE (where this could be treated as an investment in human resources, that is, education), the inclusion of VGD, TR, etc., seems inexplicable. Notwithstanding these definitional niceties, the fact remains that in a purely financial sense, resources will have to be found for the non-monetized channels.
2. We can thus take the least conservative view and say that the entire distribution made through the non-monetized channels, including FFW, FFE and VGD, TR, etc., should be included in the definition of subsidy. This in fact appears to be equivalent to what the World Bank calls the Net Cash Taka Impact (World Bank 1997).
3. A third alternative would be to allow that FFW is not a subsidy. It would then be interesting to see to what extent pressure on the budget is being minimized by aid imports.

Let us take an illustrative example. In 1997-98, the total value of receipts from food distribution (excluding edible oils) was Tk.17 billion (valuing FFW, FFE, etc., at economic cost). Total expenditures were Tk. 19.88 billion (cost of grain plus transport, handling, etc.). The difference between the two yields the GOB definition of subsidy -- in this case, above Tk. 2 billion.

Since in practice, VGD and relief are distributed free, these should be treated as subsidies. Incorporating this into our estimate results in a subsidy estimate of Tk. 7.71 billion (a jump of over 2.5 times!). Let us call this Subsidy II. Similarly, FFE can be treated as a subsidy as this is free for the beneficiaries (this could be treated as a subsidy

to education). In this case, the subsidy figure would increase by another Tk. 3.75 billion to Tk. 11.46 billion. Let us call this Subsidy III.

Strictly speaking, FFW is not a subsidized program; it has a safety net, welfare - oriented objective, and thus could be so viewed. If this component were treated as a subsidy, then the total figure would rise by another Tk. 6.14 billion to Tk. 17.6 billion. In effect, this would imply that the bulk of food-grain operations in the country are in fact subsidized.

The least controversial definition of subsidy would be Subsidy II, which includes VGD, but not FFE or FFW. The most controversial would be one that includes FFE and FFW in addition.

On the financing side, it would be interesting to see to what extent aid-imports of foodgrain are able to finance these food operations. Thus for 1997-98, the value of food-aid received was Tk. 5.53 billion, or less than 40 percent of grains distributed free through the non-monetized channels, while own imports accounted for another 24 percent. As a rough rule of thumb, GOB tries to finance FFW operations primarily through aid-imports, while the other channels are financed by the exchequer.

The National Food Account (Annex 1) provides a detailed breakdown of expenditure and earnings from GOB food operations. Here, the GOB subsidy is estimated by first calculating the unit costs of imports/procurement multiplied by the total foodgrain distributed, thus yielding total expenditure (including establishment costs). Receipts and earnings arise from sales of rice and wheat through different channels in a given year, including an imputed value to flows through non-monetized channels like FFE and VGD. The difference between expenditures and receipts constitutes the GOB food subsidy.

The food account provides a figure called "net effect on resources," which basically reflects the change in stocks. For any given year, all of the foodgrain procured or purchased may not be distributed, resulting in stock build up, or alternatively,

distribution may be higher than total quantities procured, resulting in stock depletion. The 'net effect on resources' essentially measures such stock changes.

A similar estimate for the proposed 1998-99 budget yields a GOB subsidy of Tk. 2.78 billion, while subsidy II and subsidy III are estimated at Tk. 7.76 billion and Tk. 12.15 billion. As a percent of the ADP, the respective figures are 2, 5.7 and 8.9 percent respectively.

A COMPARISON WITH PAST TRENDS

While recent trends suggest that subsidies have been greatly reduced from historical levels, the size of subsidies still remains considerable, ranging from 6 to 10 percent of ADP (depending on the definition adopted). In the 1970s and 1980s, foodgrain subsidies accounted for close to 20 percent of the ADP -- representing a substantial drain on scarce resources. There remains further potential that could be exploited, in particular by phasing out the "essential priority" channels and rethinking our policy regarding price supports and possibly Food for Education[1].

It would be instructive to look at past levels of subsidy to put current levels in perspective. Table 2 indicates the high cost of food subsidies on the budget and the impact that this must have had on allocation of development funds.

The volume of food operations of the government has declined significantly from its peak levels in the late-1980s and early-1990s, from two to three million tons to just over one million tons. The quantity of domestic procurement, however, has tended to rise from 1995-96, after an initial decline in the early 1990s. The reduction in subsidies however was much greater than the reduction in public food operations, indicting that free channels have been reduced and others have been rationalized.

Foodgrain operations on the aggregate have declined both in nominal and relative

[1] There are problems with respect to the fertilizer pricing policy which would require separate discussion. This is not attempted in this paper.

Table 2 — Subsidy Levels, 1976-77 to 1980-81

Period	Subsidy (Million Tk.)	As Percent of ADP
1976-77	444.2	14.1
1977-78	1,392.4	40.0
1978-79	1,028.9	21.9
1979-80	2,060.1	30.9
1980-81	1,569.0	18.6

Source: Murshid (1985)

terms. However, there has also been a marked change in the structure of foodgrain operations. On the one hand, the monetized channels have been sharply reduced while on the other non-monetized (targeted) channels have grown in importance. As a result, the net cash taka impact declined initially, but as the targeted channels began to expand, it quickly became large. It has increased from Tk 9 billion in FY 19993 to Tk. 11.5 billion in FY 1996 and to over Tk. 17 billion in FY 1998, roughly doubling in five years. The increase would be much less in real terms but would still remain substantial.

A COMPARISON WITH INDIA

The Indian Central Government has a long history of interventions in the foodgrain market and undertakes a variety of food-targeted (anti-poverty) programs along with food distribution through a number of more generalized channels of the PFDS. Introduced in response to very critical food shortages in the mid-1960s, the Indian PFDS is now saddled with a complex program of providing price supports to farmers and subsidies to consumers. PFDS subsidies account for substantial expenditures at the Central level. In addition, some States also have their own subsidy programs.

Consolidated data of Central and State government subsidies do not seem to be available. Central subsidies on food have been reported to be over Rs. 50 billion (Rs. 51 billion in 1994-95). This is a figure that is more than 16 times higher than the GOB definition of subsidy. This figure would be even higher if State-subsidies are added. As a proportion of total Indian Government expenditure, subsidies have been between three to

four percent in recent years (or 0.6-.0.8 percent of GDP) -- a figure that would appear to be about double the Bangladeshi levels.

The impact of the Indian subsidies on poverty and equity appear to have been negligible, with Rs. four to six spent to yield a Rs. one benefit (Radhakrishna and Subbarao 1997). Whether Indian farmers have benefited (and Indian agricultural profitability has been improved) is another story that would be of relevance to Bangladeshi policy planners.

4. CONCLUSIONS

The ramifications of food policy in a country like Bangladesh can spread far and wide. Policy makers are particularly sensitive to the food supply-demand issues due to a history of food shocks and memories of famine. It is in this backdrop that the GOB shift in policy away from ever-greater reliance on the monetized channels of the PFDS must be seen. Under the circumstances, major achievements have been made. PFDS has been greatly rationalized and food channels that were not well targeted have been closed down. It is a matter of time that other channels, that is, those under essential priorities, will also be brought in line (if the political climate is favorable). In the medium term, however, certain types of operations will have to be continued. These would basically fall under the category of price stabilization and safety nets. Provision of floor prices for farmers is a big challenge and will require a clear understanding of the issues involved, including Bangladesh's comparative advantage in rice, the need (and actual) potential for diversification and the impact of procurement policy on farm prices and profitability. Alternatives to procurement policy will also need to be investigated.

The massive expansion in targeted channels (and the cash impact on the budget) is a potential source of worry and needs to be carefully analyzed. The expanding public involvement in food operations can only be justified on developmental and equity grounds. What needs to be squarely faced is to what extent these concerns are being successfully addressed.

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Annex Table I — Estimated Subsidy on Food, 1996-97, 1997-98 and 1998-99

	Quantities (Thousand MT)			Values (Billion Tk.)			
	1998-99	1997-98	1996-97	1998-99	1997-98	1996-97	
A. Distribution/ Receipts							
1. Cash Sale (rice+wheat)	450	480	275	3.10	2.65	1.01	Not free
2. Food for Works (FFW)	525	522	525	6.20	6.14	6.21	Payment in kind wages
3. Food for Education	350	325	250	4.39	3.90	2.81	Free, but valued at economic cost.
4. Other	-	-		0.20	0.23	0.23	
5. VGD & Relief	393	393	369	4.98	4.85	4.71	Free, but valued at economic cost.
6. Transfer Items	-	-		4.11	3.90	3.45	
7. Total Grain Distributed	1718	1630	1419	18.87	17.77	14.97	
B. Purchased/ Procured							
1. Aid Imports	600	650	652	5.41	5.53	5.52	World price
2. Own Imports	350	450	109	3.54	4.30	1.36	World price
3. Domestic Procurement	750	630	660	9.20	7.15	7.15	Domestic price
4. Operating Costs	-	-	-	3.06	3.08	3.27	
5. Total Supply/ Costs	1705	1580	1421	21.21	20.06	17.30	
Unit Cost/Thousand MT				0.0124	0.0122	0.01217	
Cost of Distributed Grain				21.30	19.886	1.727	
SUBSIDY (GOB)				2.433	2.29	2.30	
As percent of ADP				1.8	2.2	2.0	
SUBSIDY II (+VDG, etc.)				7.413	7.716	7.01	
As percent of ADP				5.5	6.0	6.0	
SUBSIDY III (also FFE)				11.803	11.466	9.82	
As percent of ADP				8.7	9.0	8.4	

Source: Estimated from Budget Summary Statements, 1997-98 and 1996-97

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