

**WOMEN AND STRUCTURAL ADJUSTMENT –
THE CASE OF BANGLADESH**

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I. INTRODUCTION

1. Structural Adjustment in the Eighties – The Bangladesh Setting

The international recession in the early eighties seriously eroded Bangladesh's growth prospects. There was a collapse in the price of jute – the main export crop – and a simultaneous stagnation of external aid receipts on which the country is almost uniquely dependent. In the face of unsustainable external and fiscal deficits, a wide-ranging programme of stabilisation and structural adjustment was initiated along the guidelines of the World Bank and the IMF. The adjustment efforts have been aimed at remedying the macro-economic imbalances, improving the supply response and allocation efficiency of the economy, and achieving a satisfactory rate of economic growth within the constraints of a less favourable external environment and resource position.¹

The main thrust of the policy reforms under the structural adjustment programme has been towards expanding the role of the private sector and relying increasingly on market forces to allocate resources. In the industry and trade sectors, the major policy reforms include denationalisation, relaxation of direct controls on private investment, rationalisation of tariffs, provision of export incentives and a move towards a relatively free exchange rate regime. In agricultural policy, there have been major shifts towards privatisation of investment in irrigation, withdrawal of input subsidies and provision of producer incentives through farm price support. In the public food distribution system, the reforms are aimed at reducing subsidies on food rations, increasing the allocations for programmes serving the poor and relying increasingly on market-oriented instruments for price stabilisation. In the area of fiscal management, efforts were made to restrain public expenditures and mobilise additional revenue, while a loan recovery programme was launched in the financial sector to restore credit discipline. Finally, consistent with the objective of the structural adjustment programme, the Government is also committed to strengthening efforts at poverty alleviation and human resource development.

The key indicators of Bangladesh's macro-economic performance during the eighties are presented in Table 1. (Annex Table A.1 shows the changes in the important incentive or price indicators.) The external deficit has been reduced from a range of 10–12 per cent of GDP to about 6 per cent (a level which can be financed by normal inflows of concessional aid). This adjustment has been achieved mainly through a decline in the ratio of investment expenditures to GDP. The adjustment process has also involved shifting to lower budgetary deficits and a lower level of imports, both as a proportion of GDP. Compared to the late seventies, there has been a slowdown in the growth of both agricultural and manufacturing production (Table 2). Real GDP growth, averaging about 4 per cent per year, was below the economy's potential poverty-related needs. The slowdown in economic growth in the eighties, however, has been a complex phenomenon and it is not easy to determine the contribution of different causative factors, such as the adverse international environment, the fiscal and credit restraints, the poor supply response of the

¹ The policy reforms have been primarily the results of donors' interventions which were made effective through aid conditionality.

TABLE 1. KEY MACRO-ECONOMIC INDICATORS, 1980/81-86/87

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
As % of GDP at current market prices							
Imports <u>1</u>	18.5	20.2	19.8	17.0	16.3	15.3	15.4
Exports	5.7	5.5	6.5	5.9	6.1	5.9	6.2
Net factor income from abroad <u>2</u>	2.5	2.2	4.0	3.5	2.1	3.0	3.5
Current account deficit <u>3</u>	10.3	12.5	9.3	7.6	8.1	6.4	5.7
Gross fixed investment	15.9	15.0	13.6	12.3	12.5	11.8	12.4
(Private)	(9.5)	(8.9)	(7.3)	(6.7)	(7.2)	(6.3)	(6.0)
(Public)	(6.5)	(6.1)	(6.3)	(5.6)	(5.3)	(5.5)	(6.4)
National savings <u>4</u>	5.6	2.5	4.3	4.7	4.4	5.4	6.7
Government revenue	9.3	9.4	8.8	8.2	8.6	9.2	9.0
Government expenditure <u>5</u>	18.4	18.1	20.0	17.3	16.1	16.4	17.1
Budget deficit	9.1	8.7	11.2	9.2	7.5	7.3	8.1
Growth rates (% annual)							
GDP (real)	6.8	0.8	3.6	4.2	3.6	4.4	4.5
Export (volume) <u>6</u>	11.4	4.0	4.8	4.7	-3.4	11.0	21.4

1 Includes net payments for non-factor services.

2 Mainly includes workers' remittances; also shows net investment income including interest payment on public foreign debt.

3 Net capital inflow, estimated as imports minus exports minus net factor income from abroad.

4 Estimated as gross fixed investment minus current account deficit.

5 Includes both current expenditure and development outlay.

6 At constant 1980/81 prices.

Source: Estimated on the basis of official data in the Statistical Yearbook of Bangladesh, various issues, Bangladesh Bureau of Statistics (BBS); also data compiled by World Bank, Asia Country Department 1.

TABLE 2. REAL GDP GROWTH BY SECTORS, 1975/76-86/87
(% growth per annum, constant 1972/73 prices)

Sectors	Five-Year Average of Annual Growth Rate		Annual Growth Rate		Sectoral Share of GDP (%)
	FY 76-80	FY 81-85	FY 86	FY 87	FY 86
Agriculture	3.7	2.8	3.4	1.6	46.3
(Crop sector)	(4.1)	(2.5)	(4.4)	(1.5)	(36.4)
(Others)	(2.6)	(4.1)	(0.0)	(1.9)	(9.9)
Manufacturing	4.9	2.5	1.8	7.4	10.0
(Large scale)	(5.6)	(2.2)	(1.0)	(11.0)	(5.6)
(Small scale)	(4.0)	(2.9)	(2.9)	(2.9)	(4.4)
Construction and utilities	8.0	11.2	3.0	8.6	5.6
Services	9.5	4.8	6.6	6.7	38.1
GDP at market prices	5.8	3.9	4.4	4.5	100.0

FY 76 stands for the financial year 1975/76 and so on. Sectoral share of GDP for 1985/86 is at constant 1972/73 prices. Estimates for 1986/87 are provisional.

Source: Estimated from official data reported in Statistical Yearbook of Bangladesh, various issues.

economy and an increased frequency of natural disasters (e.g. floods and cyclones).

2. Gender Issues in Structural Adjustment

The wide-ranging economic reforms that have been introduced under the structural adjustment programme are bound to have important implications on the absolute and relative status of the poorer and more vulnerable segments of society. Since women in Bangladesh represent a distinctly disadvantaged population group, the effect of macro-economic restructuring on women is of particular concern. Indicators on health, nutrition, education and economic performance all point to female disadvantages that result in a high gender-specific wastage of human resources. Because of these gender inequalities and discriminations that cut across class distinctions, acute poverty at the margin is likely to be hitting hardest at women. To a large extent, therefore, the effect of structural adjustment on women is closely linked with its effect on poverty levels in general.

There are, however, many aspects of structural adjustment that are likely to affect women other than through changes in general poverty levels. Restraints on public expenditures may adversely affect the fundings for social services programmes that particularly benefit women (such as in the education and health sectors). Women beneficiaries are of course directly affected by changes in budgetary allocations for targeted relief and poverty alleviation programmes. In a wider context, women's role in production and their income-earning opportunities may be affected in many direct and indirect ways by the pattern of economic growth that is promoted under structural adjustment - particularly in respect of technological changes, sectoral supply responses and the export-orientation of the economy. The gender issue here is how to make the macro-economic adjustment process more sensitive to the needs of women so as to enable them to enhance their contribution to, as well as benefit more from, the adjustment process.

In the following section, we present an overview of women's position in Bangladesh and attempt to highlight those aspects of female employment that may help to establish the causal links between macro-economic restructuring and economic opportunities for women. In Section III, the policy reforms in the major areas of macro-economic management are discussed in the light of their likely effects on women. Lastly, Section IV presents a policy perspective in the Bangladesh context, considering how the adjustment process can be made more responsive to the needs of women.

II. WOMEN IN BANGLADESH: CURRENT STATUS AND TRENDS

1. Aspects of Female Disadvantage

Women in Bangladesh suffer from marked discriminations and denials in almost all aspects of their lives. Although women's economic contribution is substantial, it remains largely unacknowledged because of their lack of control over productive assets and their limited access to product and factor markets. Consequently, women in general are relegated to the position of home-maker and child-rearer and remain locked into high fertility patterns which diminish their well-being, damage the nutrition and health of children, and frustrate national goals of human resource development.

Table 3 presents some key indicators of female disadvantage in health, nutrition, education and employment. There are fewer women than men, reflecting higher female mortality rates. In fact, the disadvantage for women begins from early childhood and continues throughout life. The natural advantage in survival rates universally enjoyed by female babies at birth is quickly reversed so that, among children aged 1-4 years, mortality rates may be about 70 per cent higher for females than for males (see also Tables A.3 and A.4 in the Annex). Although malnutrition among children is pervasive, a higher percentage of girls than boys become severely malnourished, and it is clear that throughout childhood girls are never really able to catch up nutritionally with boys. A large part of these differentials in mortality and nutritional status is now recognised as being the outcome of sex-biased behaviour within the family in terms of allocation of resources like food and medical care.²

With an early age at marriage, women undergo a long reproductive period resulting in a high fertility rate (Annex Table A.2). Maternal mortality, which is as high as 6 to 7 deaths per 1000 live births, accounts for a large proportion of the deaths of all women of child-bearing age (Chen et al, 1974; Koenig et al, 1986). Most maternal deaths can be linked to poor nutrition, repeated pregnancies and potentially preventable complications. Survey findings also show a high incidence of morbidity, malnutrition and calorie intake deficits among pregnant and nursing mothers (UNICEF, 1984; Chowdhury et al, 1981).

Female-headed households without access to land represent perhaps the most vulnerable poverty group in rural Bangladesh (Alam, 1985). According to the 1981 Census, about 17 per cent of rural households and 15 per cent of urban households are female-headed; but the proportion is likely to be much higher among the landless households - about 25 per cent according to one estimate (see Annex Table A.5).³ Several demographic factors can be linked to this phenomenon such as a high incidence of widowhood at relatively early ages (because of early age of marriage of girls), the gradual decline of the extended family system resulting from increasing land alienation, and higher frequencies of divorce and abandonment among poorer households. Consequently, women's earning capacity is a matter of survival for a large (and, perhaps, increasing) proportion of rural households (Mahmud and Hamid, 1989).

Women in rural Bangladesh are found to work typically more hours per day than men, if work is defined to include both directly productive activities and household maintenance activities. The estimates of average work hours per day, according to time-use studies, fall in the range of 7 to 10 hours for men and 8 to 12 hours for women (Khuda, 1981; Cain, 1979; Farouk 1980; Halim and Hossain, 1983). Although the economic contribution of women is substantial, they have little control over family earnings. Because of

² For a survey of empirical evidence on this, see Mahmud and Mahmud (1985); also Chen and D'Souza (1981).

³ According to the 1983/84 Agriculture Census, nearly half of all rural households are either landless or operate only marginal farms (of up to 0.5 acre size).

TABLE 3. KEY INDICATORS OF FEMALE DISADVANTAGE

Indicators	Male	Female
Percentage share of population, 1981 Census	52	48
Mortality rate of children aged 1-4 years (per 1,000)		
Matlab area, 1979	16.1	27.6
Matlab area, 1983	21.9	37.0
Mortality rate of adults aged 15-44 (per 1,000)		
Matlab area, 1979	2.0	3.3
Matlab area, 1983	2.0	2.8
% of rural children under 5 with weight for age below 60% of standard, 1981-82 <u>1</u>	8.3	17.4
% of rural children with weight for height below 80% of standard, 1981-82 <u>2</u>		
0-4 years	15	25
0-11 years	13	19
Calorie intake as % of requirement, 1981-82 (rural)		
Adults (20-39 years)	101	96
Pregnant	-	90
Lactating	-	90
Pregnant and lactating	-	71
Adult literacy rate (% of population aged 15 years and above), 1981	39.7	18.8
Education enrolment rates (% of standard age groups), 1985		
Primary (6-10 years)	73.0	51.0
Secondary (11-17 years)	18.0	9.0
Higher (18-21 years)	10.0	2.5
Labour force participation rate (population aged 10 years and above), 1983-84	78.5	8.0
Average wage rates of day labourers (Taka/day), 1983-84		
Agriculture	14.7	7.1
Non-agriculture	18.1	7.2

1 Severe or 3rd degree malnutrition by Gomez classification.

2 Acute malnutrition or wasting by Waterlow classification.

Sources: Mortality rates are based on data from the Demographic Surveillance System (Matlab area) of the International Centre for Diarrhoeal Disease Research (ICDDR, B). For child malnutrition and adult calorie intake, 1981-82 Nutrition Survey of Dhaka University; see Mahmud and Mahmud (1985). Literacy rates are from 1981 Population Census. For wage rates and labour force participation rate, 1983-84 Labour Force Survey; see also BBS, 1987 Statistical Yearbook of Bangladesh. For enrollment rate estimates, see Table A.6 in the Annex.

their seclusion women have very few opportunities to earn and command an independent income. For those who seek employment outside the home (usually the very poor or destitute women), the employment opportunities are limited to relatively low-paid and low-status work.

The adult literacy rate for females is about half that of males, at about 19 per cent. Only about half of eligible girls go to primary school, compared with three-fourths of boys, and the proportion of female students in total enrolment declines sharply at higher levels of education (Annex Table A.6). Women have only a tiny representation in skilled and professional jobs in the organised sector. The share of female employment in the civil service is only 6-8 per cent despite the Government's declared intention to increase it (Khan 1988).

2. Female Employment: Magnitude, Pattern and Poverty Linkages

Female labour force participation

Population censuses and labour force surveys, using the conventional definition of labour force participation, grossly underestimate women's involvement in productive work. The proportion of females aged 10 years and above included in the official enumeration of the labour force has ranged from 4 per cent in the 1981 Population Census to about 8 per cent in the 1984-85 Labour Force Survey (Table 4; see also Annex Table A.7 for the composition of the female population by economic category.) The major problem with the conventional measurement of labour force participation lies in defining what constitutes productive work (and in classifying accordingly women's status as unpaid family workers vis-a-vis being housewives). There is a tendency to consider women's productive work as part of their domestic work, even when such work is directly income-earning or contributes to added value. Potential women-workers are also easily excluded from estimations of the labour force because of the seasonal and casual nature of female wage-employment.⁴

The true picture of women's work involvement is only revealed by the few in-depth studies which have specifically looked at this issue. One such study by Schaffer (1986a) places 18-32 per cent of women in the economically active category - about half the rate for men in the areas studied. Based on data from a large-scale village survey on women, Rahman (1986a) has found the proportion of women wage labourers as a percentage of male labourers to vary between 21 and 54 per cent. In another recent country-wide survey of rural women, about half of the women respondents were found to be engaged in some kind of remunerative employment (Safilios-Rothschild and Mahmud, 1989; see Annex Table A.8). These findings suggest widespread labour force participation of rural women, although the figures do not say much about the intensity of work or the degree of underemployment.

Pattern of women's employment

Traditionally, women's productive roles in Bangladesh have been largely home-based. In rural households, their activities typically include post-harvest processing of crops, food processing, poultry and livestock husbandry, homestead gardening, and craft work of various kinds. These

⁴ On this, see Rahman (1986a) and Mahmud and Hamid (1989).

TABLE 4. COMPOSITION OF LABOUR FORCE AND LABOUR FORCE PARTICIPATION RATE BY SEX AND RESIDENCE, 1974, 1981, 1984/85

Year/Source	National		Rural		Urban	
	M	F	M	F	M	F
	(% of total civilian labour force)					
1974 Census	96	4	87	4	9	0
1981 Census	94	6	82	5	12	1
1984-85 LFS <u>1</u>	91	9	78	7	13	2
	(Labour force participation rate; %) ²					
1974 Census	80.3	4.0	81.1	3.8	73.7	5.8
1981 Census	78.2	5.1	79.0	5.0	73.2	6.8
1984-85 LFS <u>1</u>	78.2	8.2	78.8	7.4	74.2	12.1

1 Labour Force Survey.

2 Labour force participation rate is the proportion of population aged 10 years and above in the labour force.

Source: Estimated from data reported in Statistical Yearbook of Bangladesh, 1987.

home-based activities (in which most of the labour inputs are provided by women) generate a significant share of household income, as is shown by both household survey data and national income accounts (BRAC, 1983; Hamid, 1989). Post-harvest processing of crops at the household level has been the single major source of employment for rural women. It has been estimated that homestead-based processing of paddy could generate an average of 50 days employment per year for every active-age rural woman (Hariss, 1979; McCarthy, 1980). However, because of the rapid spread of mechanised milling, female employment in paddy processing has been declining since the late seventies - perhaps at a rate of 2-3 per cent annually in terms of the number of work days lost (Ahmed, 1982; Scott and Carr, 1985; Mahmud and Hamid, 1989). Rural industries, mostly located in the homestead, are also an important source of employment for women; nearly one-third of the workforce employed in rural industries are women (BIDS, 1980).

The type of work of rural women and its contribution to household income varies by season and by household income status.⁵ Access to land determines the scope of work in family farming so that women in some land-owning households may get overworked during the busiest rice-processing season (Khuda, 1981). On the other hand, women from landless households work fewer hours at home because they have less resources to manage and less food to cook. Women who seek 'outdoor' wage employment apparently do so only under extreme subsistence pressure. A large proportion of female wage workers are destitute women belonging to households with no active male members; but the majority are now coming from households in which the male earnings are insufficient to meet the subsistence needs. Recent survey findings show that between half and two-thirds of functionally landless rural households have women wage workers. Thus, women's wage earnings have become essential for the viability of a large number of rural households (Rahman, 1986a; Westergaard, 1983; Halim and McCarthy, 1983; Chen, 1986a, 1986b).

Most women wage workers in rural areas find casual employment, often on a daily basis, in various homestead-based activities such as paddy-husking and processing of other crops and domestic help.⁶ Also, about a fifth of female workers employed in rural industries work as hired labour (BIDS, 1981). Recent survey data, however, indicate a change in the type of jobs for which women are hired. In many areas, women are increasingly moving into different kinds of field agricultural activities which are traditionally performed by men (see Annex Table A.8). Some seasonal wage employment for rural women is also now generated by public works programmes, although the volume of employment generated falls far short of demand.⁷

Very little is known about the pattern of women's work involvement in urban areas. Small-scale surveys on slum dwellers in Dhaka suggest that,

⁵ For survey findings on this, see Begum and Greeley (1979), Westergaard (1983), and Safilios-Rothschild and Mahmud (1989); also see Annex Table A.8.

⁶ Nearly one-third of female labour unit in home-based processing of paddy is provided by hired female labour, Ahmed (1982).

⁷ About 10 per cent of total seasonal work-days of employment for female wage workers was found to arise from such projects in two survey areas, see Rahman (1986a).

while single male migration continues, increasing numbers of destitute women and families are migrating as a unit to urban areas. Most urban female workers are in the informal sector, in activities such as brick-baking and construction work, backyard craft-work, piece-work of different kinds and domestic help. Small factories in peri-urban areas also provide some additional unskilled work for women. The organised manufacturing sector has traditionally provided employment for only a small number of urban female workers, particularly in food processing, pharmaceuticals and factory-based handloom weaving.⁸ Nevertheless, the recent growth of the modern export-oriented garment sector has changed the situation quite dramatically, as we shall discuss later. Female participation in the urban professions has been limited, but there are growing opportunities for women in the health and education sectors and as field development workers.

Supply versus demand factors

Survey findings from rural areas suggest that the female wage labour market is characterised (even more so than the male labour market) by a high degree of underemployment and a highly elastic supply of labour (measured in terms of, say, effective-person years). There are very large seasonal fluctuations in employment, and women wage labourers in many areas may find employment for no more than one-third of the days in a year.⁹ However, the volume of employment may increase sharply, even two- to threefold, in response to higher demand, as can be observed by the difference between developed and backward villages (Rahman, 1986a; Solaiman, 1988; Halim and Ali, 1986). Clearly, the real constraints to expansion of female wage employment stem both from inadequate demand for women's labour and from the institutional barriers against women's entry into the mainstream wage labour market (Adnan, 1988).

Regarding the supply of female wage labour, it is useful to distinguish between the female participation rate in wage employment and the intensity of employment per worker (the former being a proxy indicator for labour supply only in the stock sense). Survey findings suggest that the female participation rate in wage employment (as also in self-employment) responds positively to increased opportunities for such employment. On the other hand, it is also evident that the participation rate is negatively related to family income - especially to the level of male wage earnings.¹⁰ Depending on the relative strength of these two opposing forces, simultaneous shifts in demand in both male and female labour markets may change the female participation rate in either direction. It is not surprising, therefore, that in making comparisons between agriculturally

⁸According to the latest published results of the Census of Manufacturing Industries of the BBS, only about 11,000 female workers are reported to have been employed in medium- and large-scale manufacturing industries during 1982-83, constituting less than 3 per cent of total employment in these industries.

⁹ See Rahman (1986a); Khuda (1981).

¹⁰ Female wage earnings compensate for, although inadequately, low male earnings so that, among the labour-selling households those having female wage workers are found to have the least income; see Rahman (1986a).

developed and backward villages, the findings of different studies are not similar regarding the variation in the proportion of women who work as wage labourers; however, the daily wage rates and the intensity of work per female wage worker are invariably found to be higher in the developed villages (Hossain, 1988; Solaiman, 1988; Rahman 1986a).

It may be noted that an increase in women's participation rate in the wage market, *per se*, cannot tell us whether it has resulted from the 'demand-pull' or the 'supply-push' factors discussed above; but the implications for female wage earnings and the general poverty level can be quite different in the two cases. It also follows that even if labour markets for male and female workers remain segregated, a contraction in male employment opportunities is also likely to have an adverse effect on the female labour market through the 'supply-push' factor. As has been noted earlier, there are signs that the social barriers to women's participation in the mainstream labour markets (such as in field agricultural activities) are beginning to give way. If this trend continues, female wage workers will be increasingly drawn into the common pool of underemployed labour and will be therefore more directly affected by changes in the overall employment situation.¹¹

Given the present pattern of sex-segregated labour markets, the growth of demand for female labour will greatly depend on the sectoral composition of growth in the economy and the nature of technological developments. Survey findings clearly show that the spread of the modern seed-fertiliser-water technology in crop production can have a very favourable effect on the demand for female labour. Employment opportunities are created not only directly in agricultural activities, but also in the rural non-farm sector through agriculture-income-induced demand for non-farm products (Hossain, 1988). The average work days per woman increases both for female family members and for hired labour, but the increase is much larger for the latter (Solaiman, 1988).¹²

While the spread of the technology for developing high yielding varieties (HYV) has the potential for increasing the volume of employment for wage-earning women, the technological changes in other areas can have large displacement effects on labour. We have already noted this effect from the rice-milling technology; but the displacement is, in fact, far larger for hired labour than for family labour so that the estimates at the aggregate level would not reveal the potential severity of the effect on poor wage-earning women (Mahmud and Hamid, 1989). Technological changes in manufacturing activities can also adversely affect female employment opportunities. Among rural industries, female employment is clearly concentrated in the low-capital-intensive low-productivity activities (Table 5). In spite of the very low labour productivity, these activities can remain viable because of the low wage rates of female workers (and the implicit low 'reservation' wage of female family workers). The lower representation of

¹¹ For a review of the estimates of underemployment in the Bangladesh economy, see Mahmud (1987).

¹² It is, of course, true that in the case of unpaid family helpers, the technology resulting in high yielding varieties has merely increased the workloads for women without giving them any apparent gender-specific benefit.

TABLE 5. CAPITAL INTENSITY, LABOUR PRODUCTIVITY AND WAGE RATES IN
RURAL INDUSTRIES
(arranged in descending order of female labour participation)

Industry	Percentage of Female Workers	Capital per Worker (Taka)	Value-Added per Labour Day (Taka)	Wage Rate per Day (Taka)
Coir rope	64.3	145	4.07	2.41
Fishing nets	63.3	265	4.78	4.04
Mat making	62.8	465	5.21	3.98
Pottery	47.0	799	11.76	11.07
Oil pressing	42.5	1,006	12.58	7.40
Handloom weaving	37.6	1,594	15.07	11.66
Tailoring	20.4	4,982	27.51	12.13
Dairy products	9.8	3,076	23.42	15.24
Carpentry	4.4	3,009	19.88	16.07
Blacksmith	2.4	760	15.77	11.83
Jewelry making	2.1	1,283	18.67	8.60
Gur making	nil	711	20.02	16.42

Sources: Rural Industries Survey, 1979-80, BIDS (1981); Hossain (1987).

female workers in the relatively more productive activities is probably explained by their lack of skills, lack of command over capital resources, and the fact that the more capital-intensive activities are usually based outside the homestead. Technological changes towards more capital-intensive processes and products can therefore potentially displace female employment.

III. EFFECTS OF MACRO-ECONOMIC RESTRUCTURING ON WOMEN

1. Policy Reforms in Agriculture

The major agricultural policy reforms under the structural adjustment programme have included: (i) gradual withdrawal of input subsidies, especially on fertilisers; (ii) initiation of a compensating farm price support programme; and (iii) privatisation of ownership of irrigation equipment (all kinds of tube-wells and power pumps). Previously, most irrigation equipment was publicly owned and used to be rented out to farmer groups at subsidised charges. While the subsidy on rental charges has been substantially reduced, it has been largely compensated for by a subsidised equipment sale programme. Thus the structure of incentives in the case of irrigation has tilted heavily towards the subsidised privatisation of irrigation equipment (Rahman and Mahmud, 1988; Osmani, 1985; ASR, 1989).

One of the most visible effects of these reforms has been a marked decline in the share of agriculture in the government's development outlay - from over 30 per cent in 1980-81 to less than 20 per cent in 1986-87. This is mostly explained by the withdrawal of fertiliser subsidy and by the fact that public water control investment declined in real terms (Mahmud, 1988). Because of the withdrawal of subsidy, the prices of agricultural inputs have risen faster than those of paddy, thus dampening farmer incentives to adopt HYVs and use modern inputs more intensively.¹³ The Government's paddy procurement programme, because of its many weaknesses, has also failed to play effectively its role of supporting farm-gate prices in good harvest years. In addition there was a credit squeeze in the agricultural sector because of the credit recovery drive launched as part of the monetary sector reforms. While the disbursement of agricultural credit had grown rapidly up to the early eighties, there has been a sharp fall since then - to the extent that net disbursement was negative in 1985-86 and 1986-87. This partly explains why the sales of irrigation equipment have sharply declined after an initial spurt in the early eighties.

The above factors appear to have played a part in the slowdown in agricultural production in the eighties (Table 1), quite apart from the effects of frequent natural disasters (such as floods and cyclones). The reforms are also likely to have been biased against smaller farmers who have been relatively more responsive to incentives for HYV adoption in the past compared to larger farmers (Mahmud and Muqtada, 1988). Because small farmers are in food deficit and face a severe credit constraint, they are adversely

¹³ As a result of the price reforms, the domestic prices of both rice and fertiliser are now near the level of international parity prices, ignoring annual fluctuations (Annex Table 1). However, in the case of rice, the parity has been achieved mainly because of the sharp fall in world prices in the eighties, while the domestic paddy price has in fact risen less rapidly than the general rate of inflation, Rahman and Mahmud (1988).

affected both by higher input costs and by higher support prices for paddy. There is also some evidence that the policy of privatising irrigation equipment is adversely affecting the utilisation rate of installed facilities as well as small farmers' access to irrigation (Parthasarathy, 1989).

The poor post-reform performance of the agricultural sector, which mainly reflects sluggish growth in paddy production, is a matter of great concern for policy-makers. Macro-economic projections of the Bangladesh economy show that sustained growth in foodgrain production over the medium term will be crucial for supporting the balance of payments, improving food security and generating employment opportunities (Mahmud, 1987). We have already discussed survey evidence showing the favourable impact of the spread of HYV technology on female wage employment. Income-earning opportunities are created for women directly in post-harvest operations (and increasingly in agricultural field operations) as well as indirectly through derived demand for the products of non-crop agriculture and cottage industries.

The bias in agricultural policy against small farmers can also have adverse effects on women. As noted earlier, the incidence of female-headed households is much higher among smaller farm-size classes, so that the reforms have an indirect gender bias as well. As regards demand for female wage labour, it may be argued that a lower productivity growth for smaller farms may not have much direct effect on such demand (which mainly originates from large farms). However, there are likely to be supply-side factors working to the disadvantage of both male and female wage workers. Small farms, beside their contribution to agricultural production, absorb a large proportion of the underemployed labour force. The lower the growth of farm income for small and marginal farmers, the greater will be the number of workers joining the rank of wage labourers as the population pressure on land increases. Even if the initial impact is only on the male wage labour market (since female wage workers come mainly from landless households), the supply-side factors will eventually affect the female wage labour market as well (through linkages with the level of male wage earnings as discussed earlier). There may, however, be innovative approaches to redressing some of these adverse effects, such as through providing credit to small farmers or organising women's groups to own and operate irrigation equipment on a commercial basis. Such programmes have already been initiated, although on a very limited scale.

2. Public Food Distribution and Food Security

The Government's management of the domestic food situation has significant effects on farmers' incentives, food security and poverty alleviation. To achieve its food policy objectives, the government intervenes in the markets for foodgrains (rice and wheat) by using a variety of instruments such as domestic procurement, import, rationing, and relief and market stabilisation operations. As part of structural adjustment, the public food distribution system (PFDS) has been undergoing a process of transformation. An important objective behind restructuring the PFDS is to reduce the food subsidy and eventually to limit it to the vulnerable population groups. Another important objective is to rely increasingly on market-oriented instruments (e.g. sales-cum-procurement) to stabilise food prices.

The major channel of public food distribution so far has been the subsidised sale of foodgrains through the rationing system (Table 6). It is widely recognised that this system has been not only urban-biased but has

TABLE 6. TRENDS IN FOODGRAIN AVAILABILITY AND PUBLIC FOOD DISTRIBUTION

	Five-Year Average <u>1</u>		Annual Data		
	FY 76-80	FY 81-85	FY 85	FY 86	FY 87
Per capita foodgrain availability (ounces/day) <u>2</u>	15.20	15.76	16.2	15.2	15.5
Government distribution:					
Million tons	1.84	2.02	2.58	1.54	2.12
% of total availability	13.91	13.21	15.59	9.76	12.73
Percentage shares of distribution categories:					
Ration sales	81.4	66.0	56.6	47.4	53.5
Market sales	2.7	6.3	8.1	9.0	12.1
Food for work	13.0	20.3	17.8	25.0	22.6
Vulnerable group programmes <u>3</u>	3.0	7.4	17.5	18.7	11.7

1 In the case of percentages, estimated as the ratio of five-year averages of the respective variables.

2 Foodgrains include rice and wheat. Availability is estimated as net supply from domestic production (i.e. 10 per cent deducted from gross production for seed, feed and wastage and adjusted for crop cycle overlap with fiscal year) minus government procurement plus government distribution.

3 Mainly consists of feeding programmes for women and children; also includes other relief operations.

Source: Food Policy and Monitoring Unit, Ministry of Food; Rahman and Mahmud (1988).

largely failed in targeting its benefits to the poor. Under the present reforms, the share of the rationing channel in the PFDS and the subsidy on food rations have been progressively reduced (by raising the ration prices and reducing ration quotas). At the same time, there has been a significant increase in the allocations for the non-monetised channels which serve rural landless workers and destitute mothers and children. The scope of open market operations has also been expanded to some extent.

Judged from the point of view of maintaining stable food supplies and food prices, the Government's record of food management appears to have improved considerably in the eighties. Despite poor crops and frequent natural disasters, acute food shortages have been avoided by arranging timely imports and pursuing an active food stocks policy. Compared to the seventies, not only has per capita foodgrain availability improved but the annual and seasonal fluctuations in foodgrain prices appear to have become more moderate (Rahman and Mahmud, 1988). This would have a favourable impact on food security, thus benefiting the nutritionally vulnerable age-sex-income groups such as mothers and children belonging to poor households.

The more direct benefit for the poor has, of course, come from the expansion of the targeted food distribution programmes. The Food for Work (FFW) programme is now an important source of seasonal employment for rural landless workers, generating more than 100 million man-days of work during the dry season (with an estimated beneficiary population of between 2.5 and 3 million). Female participation in the FFW projects has been rather limited, but two recent modified FFW programmes - the Post-Monsoon Rehabilitation Programme and the Road Maintenance Programme - are now specifically targeted to rural female workers. However, the major channel for distributing food to the women and children nutritionally at risk is the Vulnerable Group Development (VGD) programme which has, again, expanded considerably in recent years. The VGD, together with the above two FFW programmes, is now reaching directly over 600,000 of the most distressed and vulnerable women each year, and thus supporting a much increased beneficiary population (Annex Table A.9).

Under the VGD, a mother of children under five years of age, without a supporting husband, receives daily take-home rations for two years. The scope of the programme has been expanded beyond food to include training in such areas as basic health and literacy and support for income-generating activities. Evaluation suggests that the VGD, as well as the special FFW programmes for women, are reaching the target population and that social rehabilitation goals and basic welfare needs are being met (WFP, 1986; CARE International, 1986). The beneficiaries, though, still constitute only a small proportion of the total target population and the amount of assistance provided is usually inadequate to lift the family to a self-sustaining earning status or to have a large nutritional impact. A more fundamental problem in the case of take-home rations is that the actual number of beneficiaries is larger than intended, since the food will be shared by the entire family (which also raises the question of biases in intra-family distribution). However, some degree of age-sex-specific targeting is automatically achieved by concentrating on families which are female-headed and have many young children.

3. Trade and Industrial Policy Reforms

The reforms in the industry and trade sectors have been major elements in the macro-economic restructuring in the eighties. The Government

has sought to expand private sector participation in manufacturing through denationalisation of publicly owned enterprises and relaxation of direct controls such as investment sanctioning and import-licensing. Previously, most private investments in the organised sector required prior approval; this now applies only to a few large projects seeking long-term loan-financing. In the trade sector, the reforms are aimed at liberalisation of imports, rationalisation of tariffs, provision of export incentives and moving towards a flexible exchange rate regime. While an increasing proportion of imports has been diverted to the secondary free exchange market (known as the WES market), the official exchange rate has been successively adjusted towards the free market rate (Annex Table A.1). These reforms are intended to improve the competitiveness and export-orientation of the domestic manufacturing sector.

The performance of the manufacturing sector in the eighties has been discouraging on the whole, with the large-scale sector growing at little more than 2 per cent annually on average, compared with about 6 per cent during the late-seventies (Table 2). On the other hand, the official index of manufacturing production understates the growth rate to some extent (because of using out-dated commodity weights) and does not reflect the rapid expansion in the new export-oriented industries such as ready-made garments and fish and shrimp processing. During 1980/81 to 1986/87, non-traditional exports grew in real terms at an average annual rate of 22 per cent, and their share in total export earnings rose from 18 to 47 per cent (Table 7). In the traditional manufacturing sector, growth has been affected by several adverse factors, such as weak external demand (in the case of jute textiles), depressed money incomes due to a slowdown in agricultural growth, as well as a tight monetary environment and the constraint on private investment imposed by the credit recovery drive.

The most visible gender aspect of structural adjustment in the manufacturing sector has been the phenomenal expansion of urban female employment in the export-oriented garment industry. The industry has an overwhelmingly female work force (80 to 90 per cent), and recent figures suggest that these female workers may number around 200,000. About 60,000 to 80,000 of them may be permanently employed while the others find temporary work from time to time.¹⁴ This would mean that the garment workers accounted for about 4 to 5 per cent of the urban female population of economically active age. Yet because of the excessive expansion of capacity in the early eighties and the subsequent imposition of quota restrictions by Bangladesh's trading partners, there have also been frequent temporary closures of the garment manufacturing units, resulting in cycles of lay-offs and re-employment of workers. The women made redundant find it difficult to revert to their earlier status (Adnan, 1988). Many women tend to remain locked into apprentice grades. Nevertheless, the average wages earned are

¹⁴ There is considerable uncertainty regarding these estimates because of lack of data and the high 'birth' and 'death' rates of garment manufacturing units. The figures vary widely among different sources, such as the Bangladesh Garment Manufacturers and Exporters Association (BGMA) and the Inspector of Factories and Establishments; see Khan (1988).

TABLE 7. PATTERN OF EXPORTS AND GROWTH OF NON-TRADITIONAL EXPORTS, 1980/81-86/87

Items	Value in Current FOB Dollar Prices (US\$ million)				Share in Total Exports (%)	
	80/81	82/83	84/85	86/87	80/81	86/87
Traditional exports <u>1</u>	583	533	672	571	82.0	53.2
Non-traditional exports	128	153	262	503	18.0	46.8
Ready-made garments	3	11	116	299	0.4	27.8
Fish and shrimp	40	72	87	136	5.6	12.7
Other	85	70	59	68	12.0	6.3
Total exports	711	686	934	1,074	100.0	100.0

1 Traditional exports include raw jute, jute goods, tea and leather.

Source: Official trade statistics of the Bangladesh Bank and Planning Commission.

still quite high compared to alternative opportunities available for women.¹⁵

The rapid expansion in frozen fish and shrimp exports has also contributed to an expansion of female manufacturing employment, since the proportion of female labour is substantial at the processing stage.¹⁶ Surprisingly, however, the export boom in non-traditional items has been mostly limited to garments and processed fish. Exports of such items as handicrafts and handloom products, which can expand female employment opportunities, have remained negligible. Among traditional export items, only that of leather has increased rapidly, but female employment is not known to be significant in leather tanning and processing. On the other hand, there is little prospect for an export-led growth of the tea industry which is a major employer of female labour.¹⁷

The reforms in import tariffs have been intended to reduce the existing rates of protection considerably and to achieve uniform lower levels across import-substituting industries. Reforms in this area are still under way and have been too recent to have a discernible effect on the growth of the industries involved. The case of the textile industry, though, deserves to be specially mentioned. The handloom sector, which accounts for most of the domestic weaving capacity, provides employment to roughly a million workers, of whom more than one-third are estimated to be women (Mahmud, 1987; BIDS, 1981, 1988). Imports have been liberalised so far only for fabric types which compete mainly with domestic mill-made or powerloom cloth. The main handloom products (women's saree and men's lungi) are still subject to complete import bans, although withdrawal of all such bans and quantitative restrictions on textile imports have been proposed under the structural adjustment reforms (TIP, 1985). Handloom products are already subject to considerable competition from smuggled Indian fabrics (especially saree fabrics), so that a liberalisation of such imports can seriously jeopardise the growth prospects in the industry. On the other hand, it has been argued that the domestic handloom industry has a potential comparative advantage and that it deserves both price support and non-price interventions aimed at strengthening the industry, such as in respect of improved production capabilities and better product design and quality. Interestingly, this provides an example where maintaining the existing level of protection may be desirable both for realising longer term comparative advantage and for expanding employment opportunities, especially for women.

Apart from import liberalisation, a more serious threat to female employment opportunities may have arisen from the liberalisation or 'decontrol' of private investment and its likely effect on technology choice. The policy environment surrounding the private sector in fact started to

¹⁵ An average female garment worker earns Taka 800-1100 per month. In the 1983-84 Labour Force Survey, average weekly earnings of urban wage-earning and salaried persons were found to be Taka 120 for males and Taka 59 for females.

¹⁶ It is estimated that roughly 70 per cent of cleaning and washing and 20-30 per cent of processing is done by female workers.

¹⁷ About 70,000 female workers are estimated to be employed in tea plantations and processing; see Khan (1988).

change from the late seventies with liberal loan sanctions, tax concessions and various supply services being provided to private investors. Since then, rapid expansion has taken place in some of the so-called 'free sectors' such as rice milling and powerloom textiles (Sahota, 1989). We have already noted the adverse impact of the mechanised rice milling technology on the employment opportunities for rural women. Similarly, the rapid growth of powerloom production of cloth poses a problem for the expansion of the handloom sector. During the period 1977/78-86/87, cloth production from handlooms is estimated to have grown at an annual trend rate of 3 per cent, compared with 4 per cent for that from large-scale mills and 34 per cent for that from medium-scale powerlooms (Chowdhury, 1989).¹⁸ Within the handloom sector itself, there has been a shift away from home-based production towards large-scale factory-based production, which has again been to the detriment of the employment opportunities for female weavers (BIDS, 1988).

4. Human Resource Development and Poverty Alleviation Programmes

Consistent with the objective of the structural adjustment programme, the Government has emphasised its commitment to strengthening efforts at poverty alleviation and human resource development. Since women have been recognised as a disadvantaged group, particular efforts are to be made to expand education and health care for them and to improve their access to productive resources and employment opportunities. To this end, a number of programmes targeted at women are now being implemented by government agencies and NGOs, with active support from donors. In addition, women will benefit from the overall education, health and family planning programmes as well as from special components in many other development programmes.

In spite of the Government's commitment, public expenditure outlays for human resource development programmes have remained extremely low. Public expenditures on education and health in recent years have been the equivalent of 3 to 4 US dollars per year per person, representing around 2 per cent of GDP.¹⁹ These levels, which have remained virtually stagnant during the eighties, are among the lowest in the world and certainly well below what would be required to provide for minimum standards. The available evidence also suggests that those in the disadvantaged population groups have benefited less than the average person from the existing mainstream programmes. Within the health sector, for example, there has been a tendency to neglect maternity and child health (MCH) services, although some steps have been taken recently to redress this imbalance.

Among the targeted poverty alleviation programmes for women, we have already discussed the Vulnerable Group Development programme and the women's Food For Work Programme. Besides them, considerable progress has been made in recent years in expanding the programmes for organising rural women - especially those belonging to landless and female-headed households - into various income-generating activities. These programmes, implemented by government agencies as well as NGOs, are aimed at strengthening women's

¹⁸ However, because of the narrow initial base of powerloom production, about 70 per cent of total cloth production was still accounted for by the handloom sector in 1986/87.

¹⁹ The expenditures include both recurrent and capital expenditures.

TABLE 8. PUBLIC EXPENDITURES ON EDUCATION, HEALTH AND FAMILY PLANNING, 1980/81-85/86

	80/81	81/82	82/83	83/84	84/85	85/86
Per capita public expenditure (Taka/constant 1973/74 prices)						
Education and training	16.73	15.34	15.84	16.76	14.47	18.73
Health and family planning	7.76	7.25	7.87	8.79	8.97	7.60
Total	24.49	22.59	23.71	25.55	23.44	26.33
Public expenditure as % of GDP (current prices)						
Education and training	1.40	1.34	1.34	1.57	1.50	1.52
Health and family planning	0.65	0.63	0.64	0.72	0.74	0.61
Total	2.05	1.97	1.98	2.29	2.24	2.13

Public expenditure figures are based on revised budget estimates as reported in BBS, Statistical Yearbook (various issues); the general wholesale price index (1973-74=100) is used as the deflator.

economic capacity through skill training, credit provision and savings mobilisation; very often literacy, health and family planning components are also included. The Grameen Bank (which is partly owned by the Government) has developed a well-known model of rural banking to create self-employment opportunities for the assetless poor, especially women (Hossain, 1988b; Rahman 1986b). Evaluation suggests that, in the case of well-designed programmes, the income-earning capacity of their participants has increased, and family planning practices as well as the school attendance rate of children have been encouraged. However, the coverage of these programmes is still rather limited. For example, the female membership of the Grameen Bank, which had reached 346,000 by 1988, would still constitute only about 1.5 per cent of rural females aged 15 years and above and, thus, roughly 3-4 per cent of the target group of women belonging to landless households.

Because of lack of reliable time-series data, it is not easy to assess the country-wide impact of policies and programmes on the status of women, particularly in respect of poverty alleviation and human resource development. Estimates based on the recent rounds of the official Household Expenditure Survey, as well as of real wage movements, suggest that poverty increased in the early eighties but has diminished somewhat since (Rahman, 1988; see also Annex Table A.1 for real wage indices). Data on demographic variables again indicate some improvement since the early eighties. For example, the child mortality rate (for both sexes) seems to have been declining in recent years after reaching a peak in 1983; however, no similar trend is discernible from the data on infant mortality (see Annex Tables A.2 and A.3). The fertility rate is, again, showing some downward trend. The attendance rate at the primary school stage has slightly improved during the eighties for both boys and girls (Annex Table A.6).

IV. POLICY PERSPECTIVE

The foregoing discussion points to the major areas of policy intervention in making the structural adjustment process more sensitive to the needs of women. Generally speaking, gender concerns will carry more conviction if they can be related to, and integrated with, the overall development strategy pursued under structural adjustment. There is wide agreement among development planners and policy-makers about the need for an employment-oriented poverty-alleviating growth strategy for Bangladesh, on grounds both of social equity and of economic efficiency. Measures aimed at enhancing women's economic capabilities clearly fit into this growth strategy, again on both equity and efficiency grounds. Unfortunately, explicit gender concerns in economic planning and policy-making have so far been largely limited to the delivery of social services like family planning, thus ignoring women's potential productive roles.

All medium-term projections of the Bangladesh economy show the importance of accelerating the growth of agricultural production for generating employment and improving food security. Unlike in many other developing countries, agricultural policy reforms in Bangladesh have in fact worked to the disadvantage of the farm sector in terms both of producer incentives and of the Government's budgetary allocations for agriculture (Demery and Addison, 1987; ASR, 1989). The effects of the policy reforms should therefore be carefully reviewed, particularly in respect of their bias against small farmer groups (which include disproportionately large numbers of female-headed households). Provision of credit to small farmers and the leasing of government-installed irrigation facilities to small farmers'

co-operatives have been suggested as remedial measures, but they will require overcoming many institutional problems (ASR, 1989).

A relatively high rate of growth in the basic rice economy as envisaged would create diversified demand for agricultural products having high-income elasticities of demand (i.e. fish, poultry, milk, fruits, etc.). Intensified homestead production of these items can substantially expand women's income-earning opportunities as well as contribute to family nutrition and food security (Safilios-Rothschild and Mahmud, 1989). Results from experimental projects suggest that women's access to credit, inputs, know-how and other support services are crucial factors in the intensification of homestead agricultural production. The traditional research, training and extension services are, however, neither designed to reach women farmers nor suitable for adopting an integrated farming system approach. This may partly explain why the potential of agricultural growth outside the main field crops has so far remained mostly unrealised. Innovative approaches to agricultural extension through female field staff and community volunteers therefore need encouragement and support.

The nature of technological changes under structural adjustment can have a strong impact on female employment opportunities. Female labour-intensive production is found generally to vary negatively with both the capital intensity of production and the size of enterprise, although there are important exceptions such as the modern garment-making industry which is large-scale but employs mostly females. Given the factor endowments of the Bangladesh economy, the technologies which are relatively capital-saving and labour-using are generally found to represent the more socially profitable options (at the appropriate 'shadow' factor prices).²⁰ However, mechanised techniques often have a cost advantage over the traditional ones, not only because of the substantial saving in wages but also because farms using mechanised techniques have usually better access to credit, markets, imported inputs and other government support services. A policy of liberalisation and active support towards private investment therefore carries the risk of promoting inappropriate technologies that would specially hurt female employment opportunities.

The tariff and exchange rate reforms under the structural adjustment programme are aimed mainly at correcting the distortions in the industrial incentive structure by making the effective rates of protection more uniform (as between, say, export-orientated and import-substituting industries). But ensuring mere 'neutrality' in government interventions on prices (which is what the reforms aim at) may not be sufficient for redressing the disadvantage of the unorganised small-scale sector in relation to the organised large-scale sector. The case of the handloom industry, which illustrates the need for providing selective protection as well as for non-price supports to labour-intensive technologies having potential comparative advantage, has already been cited. The upgrading of traditional technology in some cases,

²⁰ The higher social profitability of traditional technologies in comparison with the more capital-intensive ones is not necessarily based on the assumption that the shadow wage for female labour is less than that for male labour. In fact, given the very large degree of underemployment in Bangladesh, the opportunity cost of both male and female labour should be close to zero; Mahmud (1987).

such as in food processing and handicrafts, can lead to an improvement in quality so that the products can successfully enter urban and even export markets. Since skill development is an essential component of such technology upgrading, the extent to which women can benefit from the expanded employment opportunities will depend on their access to higher skills. Skill training for women is necessary in a more general context in order to enable women to move into more productive and remunerative lines of activity.

A number of group and co-operative approaches, such as those of the Grameen Bank and some NGOs, have proved successful in enabling assetless women to undertake productive activities, thereby enhancing their capacity to respond to economic opportunities (Rahman, 1986b; Hossain 1988b; Lily, 1986; Schaffer, 1986). Such 'bottom-up' group approaches are specially important in helping women to overcome their disadvantaged status by circumventing some of the social structures placed on women's activities. As noted earlier, the programmes have reached only a small fraction of the target population; the replication and expansion of the successful programmes therefore merit continued and larger support, from the Government and donors. However, as the programmes expand in coverage, they are likely to come up against demand-side constraints and will need to be increasingly linked to macro-economic and sectoral policies as well as to local planning (Mahmud, 1987). It will also be important to outgrow the current focus on sex-stereotyped low-productivity activities in order to exploit wider employment opportunities for women. The policy areas that will need greater attention are: providing skill training, co-ordinating credit activities with marketing, making larger loans, and organising collective enterprises to reap economies of scale.

While making efforts at restraining public expenditures, it is essential that the Government not be distracted from its commitment to poverty alleviation and human resource development. The feeding and Food for Work programmes targeted at the most vulnerable women are proving effective in rescuing them from destitution; they therefore merit continued support, sufficient for expansion. It is also essential to expand social services in priority areas such as primary education, adult literacy and basic health care. The problem is not, however, merely one of making more funds available. It also involves strengthening the delivery system and creating effective demand for the services. Here again, the NGOs have provided many useful models and approaches which can enrich ongoing or future Government programmes. Expansion of social and development services specially targeted at women can also create employment opportunities for relatively educated women as field workers and teachers and in junior management (Khan, 1988; Jiggins, 1987).

Finally, there is need for a systematic monitoring and assessment of the effects of structural adjustment on women. At present, there is little capacity in the government agencies to incorporate gender concerns in development planning and policy-making or to assess the impact of investment programmes on women. To a large extent, this is also true of employment and poverty monitoring in general (Mahmud, 1987). Efforts should therefore be made for strengthening and reorienting the national statistical system to cater to the needs of an employment-oriented gender-sensitive development strategy. To devise meaningful employment policies, it will be particularly important that the emerging trends in female involvement in productive activities be truly captured in the official nationwide labour-force surveys. There is also scope for generating more gender-related information from the regular national censuses and surveys such as the agricultural censuses and

TABLE A.1. SOME KEY INCENTIVE INDICATORS OF THE BANGLADESH ECONOMY, 1980/81-85/86

	80/81	81/82	82/83	83/84	84/85	85/86
Domestic inflation rate (%) <u>1</u>	8.0	16.1	2.4	15.9	17.1	4.5
Exchange rate (Taka per US\$):						
Official rate	16.34	20.04	23.76	24.95	26.06	30.85
Secondary market rate <u>2</u>	20.11	22.79	24.12	27.16	29.29	32.74
Premium of secondary rate over official rate (%)	23.7	13.6	1.4	8.9	12.8	9.4
Commodity terms of trade (1979/80=100) <u>3</u>	77.7	66.1	74.9	87.0	109.0	83.3
Ratio of domestic prices to world prices <u>4</u>						
Rice	0.60	0.62	0.93	0.98	1.08	0.99
Fertiliser (urea)	0.56	0.63	0.73	0.67	0.68	0.86
Index of real wages (1974=100) <u>5</u>						
Agriculture	93	89	94	103	120	116
Small-scale rural industries	118	118	154	163	169	185

1 Based on the official general wholesale price index (1973-74=100).

2 Refers to the secondary exchange market in which the exchange rate is allowed to move freely.

3 Estimates by Asia Country Department I, World Bank.

4 Estimates by Rahman and Mahmud (1988). World prices are import parity prices (domestic wholesale level) at the ruling official exchange rate.

5 Refers to daily wages (without food) of unskilled workers. Real wages are estimated by applying rural consumer price indices. Estimated from data reported in BBS, Statistical Yearbook of Bangladesh.

TABLE A.2. TRENDS IN INFANT MORTALITY RATE (IMR), CRUDE BIRTH RATE (CBR) AND TOTAL FERTILITY RATE (TFR), 1979-86

Year	IMR (per 1,000 live births)		CBR (per 1,000)		TFR (per woman)	
	Matlab Area	Bangladesh	Matlab Area	Bangladesh	Matlab Area	Bangladesh
1979	118.0		40.9		5.88	
1980	114.0		41.2		5.87	
1981	114.5	111.5	39.5	34.6	5.53	5.04
1982	118.3	121.9	40.7	34.8	5.63	5.21
1983	112.5	117.5	38.3	35.0	5.28	5.07
1984		121.8		34.8		4.83
1985		111.9		34.6		4.71
1986		116.6		34.4		4.70

Estimates for Bangladesh are from Bangladesh Demographic Survey and Vital Registration System of BBS; see BBS, Statistical Yearbook, 1987. Estimates for the Matlab area are from the Matlab Demographic Surveillance System of the ICDDR, B. The estimates for CBR and TFR refer to the whole survey area in Matlab including the MCA-FP project intervention area, while the IMR estimates refer only to the non-intervention area.

TABLE A.3. MORTALITY RATE PER 1,000 CHILDREN AGED 1-4 YEARS BY SEX, 1979-86

Year	Matlab Area		Bangladesh	
	Male	Female	Male	Female
1979	16.1	27.6		
1980	16.5	28.0		
1981	16.2	28.3		
1982	15.8	31.7	20.5	23.9
1983	21.9	37.0	25.5	22.0
1984			14.4	19.8
1985			13.0	16.2
1986			9.7	14.1

Explanatory notes same as for Table A.2. The estimates for the Matlab area refer to the whole survey area including the MCH-FP project intervention area.

TABLE A.4. MORTALITY RATE PER 1,000 POPULATION BY AGE AND SEX IN THE MATLAB AREA, 1979 AND 1983

Age (in years)	1979			1983		
	F	M	F/M Ratio	F	M	F/M Ratio
Under 1 *	114.0	118.7	0.96	111.5	100.9	1.11
1-4	27.6	16.1	1.71	37.0	21.9	1.69
5-14	3.3	2.7	1.22	3.2	2.3	1.39
15-44	3.3	2.0	1.65	2.8	2.0	1.40
45-64	13.5	18.9	0.71	13.8	18.1	0.76
65+	84.1	68.3	1.23	80.2	80.6	1.00

* Per 1,000 live births.

Source: Estimated from Matlab demographic surveillance data of the ICDDR, B.

TABLE A.5. PROPORTION OF FEMALE-HEADED HOUSEHOLDS IN RURAL BANGLADESH BY FARM SIZE, 1988

	Farm Size (in acres)					
	Landless	Up to 0.5	0.5-0.99	1.00-2.49	2.50+	All Sizes
Female-headed households as % of all households	25.0	16.7	10.7	8.8	3.9	15.0
Share of farm size class in all rural households (%)	15.6	47.9	14.4	15.5	6.5	100.0

Source: Data reported in Safilios-Rothschild and Mahmud (1989) taken from "Women in Agriculture Survey", Agriculture Sector Review, 1988.

TABLE A.6. EDUCATION ENROLMENT RATE BY LEVEL AND SEX,
1973, 1980 AND 1985
(percentages of standard age groups)

	1974	1980	1985
Primary level (6-10 years)			
Male	79.0	70.0	73.0
Female	41.0	46.0	51.0
All	60.0	58.0	60.0
Secondary level (11-17 years)			
Male	27.6	19.0	18.0
Female	7.9	8.0	9.0
All	18.1	13.0	14.0
Higher level (18-21 years) *			
Male		9.0	10.0
Female		3.0	2.5
All		6.0	6.0

* Enrolled students in higher education could be older than standard age group. Enrolment rates for primary level are likely to be overestimates because of the tendency of official records to inflate the number of enrolled students.

Sources: Population Census, 1974 and 1981; BBS, Bangladesh Education in Statistics, 1985; BBS, Statistical Yearbook (various issues).

TABLE A.7. RURAL AND URBAN DISTRIBUTION OF FEMALE POPULATION BY ECONOMIC CATEGORY, 1974, 1981 AND 1984/85
(Thousands)

	Rural			Urban		
	1974 Census	1981 Census	1984/85 LFS <u>1</u>	1974 Census	1981 Census	1984/85 LFS <u>1</u>
Total female population	33.7	37.4	42.2	3.1	6.2	5.7
Population aged 10 years and above	21.4	24.5	29.0	2.1	4.3	3.9
Civilian labour force	0.8	1.0	2.2	0.1	0.3	0.5
(a) Employed	0.7	0.9	2.0	0.1	0.3	0.4
(b) Unemployed	0.1	0.1	0.2	- <u>2</u>	- <u>2</u>	0.1
Not in the civilian labour force	32.8	36.4	26.8	2.9	5.9	3.4
(a) Housewives	16.4	18.8	22.2	1.3	2.6	2.5
(b) Inactive <u>3</u>	4.1	4.7	4.6	0.6	1.4	0.9

1 Labour Force Survey, 1984-85.

2 Negligible.

3 Does not include children under 10.

Source: BBS, Statistical Yearbook of Bangladesh, 1987.

TABLE A.8. PROPORTION OF WOMEN INVOLVED IN PRODUCTIVE WORK BY PRIMARY OCCUPATION AND FARM SIZE, 1988 ¹

Primary Occupation	Farm Size (in acres)				
	Landless (up to 0.04)	Marginal (0.05-0.49)	Small (0.50-2.49)	Medium and large (above 2.5)	All Sizes ²
Agricultural field work on own farm	7.2	21.1	23.8	7.4	17.2
Agricultural field work as wage labourer	22.8	15.0	1.5	0.8	12.2
Other agricultural work ³	9.3	11.6	13.3	7.8	11.2
Total agricultural employment	39.3	47.6	38.5	16.0	40.6
Non-farm employment	17.8	12.7	4.7	1.6	11.0
Total work involvement	57.0	60.3	43.3	17.5	51.5

¹ Calculated as per cent of total number of women in the respective farm size class; based on information on 3,948 women consisting of wives of male heads of female heads or households.

² Estimates for all size classes may not be representative of Bangladesh because of likely over-representation of the landless and small farm size groups in the sample.

³ Includes homestead agriculture, livestock and poultry, rice husking and other agricultural processing.

Source: Estimated from data reported in Safilios-Rothschild and Mahmud (1989).

TABLE A.9. WOMEN BENEFICIARIES IN TARGETED FOOD DISTRIBUTION AND RURAL WORKS PROGRAMMES

Programme ¹	Coverage/Year	Women Beneficiaries (thousands)	Direct Benefits
Road Maintenance	Nationwide 1985-86	60	Tk.12 per day all year
Post Monsoon Rehabilitation	Nationwide 1985	35	4.65kg of wheat 4 days per week Sept.-Nov.
Vulnerable Group Feeding ²	Nationwide 1986-87	450 ³	31.25kg of wheat monthly over 2 years per mother ⁴ .

¹ These are all ongoing programmes, but the information in the table refers only to a specific year.

² Now called Vulnerable Group Development (VGD) Programme.

³ Does not include the children. The VGD reaches approximately another 25,000 women in training centres and 60,000 women and children through institutional feeding programmes.

⁴ Others with two or more children whose husbands cannot work.

Source: Jiggins (1986).

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