

Final Draft

Consequences of Structural Adjustment Policies on the Poor

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1.1 The Background

The structural adjustment policies adopted by the developing countries including Bangladesh have been prompted by considerations of achieving macroeconomic balances and by the need for acceleration of economic growth through greater reliance on markets. Experience of the countries implementing structural reforms during the early phases had not been particularly favourable for the poor (Cornia, Jolly and Stewart 1987). The countries entering into the reform process during the last two decades, learnt from the earlier experiences. Therefore they were better placed to avoid the anti-poor aspects of the reforms and to include a more effective packaging of the compensating measures for the poor. The poverty accentuating impact of the reforms experienced by the early adjusting countries resulted from the contractionary nature of the stabilization and demand management policies. The curtailment of aggregate demand was ensured through cutback in public investment.

The negative impact was not equally serious in all countries going through the SAP. The proponents of adjustment would highlight the successful cases with less sufferings for the poor. This group would argue that output was supply determined, and therefore the demand restraint did not reduce economic activity and more economic use of resources created scope for provision of safety net for the poorest groups.

The impact of SAP on the poor will also depend on whether the SAP package has given adequate emphasis on poverty and adopted appropriate strategies to counteract the poverty accentuating forces.

1.2 The Framework for Analysis and Scope of the Paper

The framework for analysis of the consequences of economic reforms on the poverty situation has been based on the expected channels of such impact. The pro-poor features of the economic reforms measures discussed in the documents of the World Bank will be examined in the paper (Section 2).¹

¹ Given the short time span for conducting the present study and the limited scope of the study, the review is selective and focuses on policy documents of nineties.

It has by now been recognized that the acceleration of the growth of the economy has a poverty reducing impact. SAP offers opportunities of growth and thereby increases the prospect of poverty alleviation. Growth induced by reforms and its impact on poverty may materialize with a lag. There may be various processes at work which may initially put the poor at a disadvantage. There are a number features of SAP which may increase the vulnerability of the poor and therefore the expected poverty reduction may not materialize even in the longer term. Therefore the study will review the trend of poverty incidence and test the hypothesis of 'lagged improvement' (Section 3).

A study on the impact of SAP on poverty should also directly examine the processes of poverty creation which can be attributed to SAP. A major poverty accentuating force is likely to operate through the labour market. The wage liberalization process is an integral part of SAP and may lead to a stagnation or decline of real wage rate. It is expected that wage liberalization will lead to an increase in employment. The balance of these two counteracting forces will determine the net impact of SAP on the poor. The impact of SAP on the wage labour market and wage earnings will have a significant impact on poverty since an overwhelming majority of the wage labourers are poor. These issues will be examined in the present paper (Section 4).

A large component of the wage labour market in Bangladesh is an informal market and has always been outside government intervention. However, the trends in the formal labour market may influence the informal market. In contrast, a growth of the rural sectors, especially agriculture is expected to have a positive impact on rural wage rate and earnings. These hypotheses will, therefore, be examined.

Labour retrenchment associated with privatization, which is an integral part of implementation of SAP in Bangladesh is likely to accentuate poverty. The gravity of the situation deserve attention. This will also be included in Section 4.

The other route through which SAP may adversely affect the poverty situation is the cutback in public expenditure in the social sectors, especially health and education. Demand contraction policies erode the income flows of the poorer sections of the society. The

situation is worsened by the reduced access of poor households to such services. This mechanism of worsening the situation of poverty will depend on how far the social sector expenditure has been curtailed and how far this reduces the access of services for the poor. Within the limited scope of the present paper, the situation of only the health sector expenditure in the post reform phases will be examined (Section 5).

The net changes in poverty will also depend on other policies of the government and the NGO programmes which have demonstrated remarkable success in this country (Rahman 2000). However, it is difficult to attribute the changes due to each type of policy and this has not been attempted in the present paper.

Most analysis of Sections 4 and 5 on the impact of SAP on poverty will be conducted on the basis of a before-after comparison.² The cut-off points chosen for identifying pre and post SAP period to some extent depends on the availability of data. A general approach for most sections of the paper, is to consider mid-eighties as the beginning of SAP, the late eighties as the early adjustment period and the nineties as the later period of adjustment.

2. SAP design and concerns for poverty alleviation

This Section reviews, the incorporation of the concerns for poverty alleviation in the SAP design. The review will be based on an examination of the relevant aspects in the WB documents and strategy papers. To understand the evolution of poverty and poverty alleviation strategies, a few documents covering the period of 1990 to 1998 have been chosen (WB 1990, 1993, 1995, 1996, 1998a and 1998b). The WB 1990 paper provides a review of the policies and strategies adopted during the late eighties. Therefore, this can provide a starting point for an analysis and obviates the need for going back to the earlier documents. A simple list of poverty alleviation programmes incorporated in these documents will demonstrate the changes in the poverty alleviation strategies during the various phases of reforms.

² This analysis, (like some of the other SAPRI studies) is subject to the problems of isolating the impact of SAP from other accompanying processes of change. This will, to some extent be taken into account by the participatory studies.

The 1990 WB document suggests '... government policies should emphasize two complementary approaches: (a) focus on macroeconomic and sectoral policies directed at improving efficiency and increasing productivity and growth especially in those sectors, where poor predominate and (b) expansion of programmes to lift people out of poverty. Programmes to enhance earning capacities of the poor requires an improvement in the quality and access to educational and health services, promoting new agricultural techniques etc. In addition, supplementary programmes should be undertaken to directly or indirectly transfer income to the poor.

Observations have been made that government has already adopted appropriate programmes along the lines suggested above.

The 1993 document identifies the need for further action in these lines which include:

- developing a comprehensive health and FP policies,
- increasing utilization of facilities,
- better coordination between health and FP,
- decentralizing management and implementing plans to improve personnel management,
- better management of PFDS and eliminating channels benefiting the better off reforms in rice tendering and in OMS systems,
- introduction of Food-for-Education programme increasing the coverage of VGD and RMP.

In the education sector, priorities include:

Improvement in quality and efficiency by eliminating the problems which take the form of 'insufficient teacher-pupil contact time, poor quality of teacher training, unsatisfactory physical facilities etc'.

The 1995 the 'priority reform agenda for rapid growth' did not forget the poor and

- included most of the above as strategies for 'attacking poverty'.
- In addition, two more items received attention. These are water supply, and sanitation facilities initiated by the government and NGOs respectively; and
- appropriate programmes for dealing with urban poverty.

The CAS 1995:

- ◆ Continues to emphasize the human development agenda.
- ◆ Emphasis on microcredit and rural infrastructure came to the forefront.
- ◆ Intensification of agriculture and fisheries was mentioned
- ◆ Flood control projects have been mentioned as strategies of 'How IDA targets the poor' (WB 1995b p 17).
- ◆ Support to PKSf for channelling funds to poor has been suggested.³

In the CAS 1998, poverty received a special focus. A special report was prepared for detailing out the strategies for 'making the poor count' (WB 1998a). It contained an analysis of the trends and determinants of poverty. Our comments on the analysis will be included in the following sections of the paper. In the 1998 CAS a number of new policies have been suggested:

- # The emphasis on social sector expenditure and improvement of quality of the services continues.
- # A renewed emphasis on agriculture and rural development has been observed.
- # In the social sector development strategy, the issue of equitable access of the poor and gender equality has been raised.
- # Regional differences in poverty incidence (within the urban and rural) has been addressed and suggestions for policies designed to improve the characteristics of poor regions' has been made.
- # A clear emphasis on MC is observed: 'support MC schemes' because 'NGO led MC is poverty reducing and is well targeted'.
- # Emphasis on 'food safety nets' continues with an additional change in the form in which safety net would operate: 'consider monetization options to increase welfare impact'.

The above synopsis of policy agenda for poverty alleviation during various phases of SAP highlights the range of the policies. It should be noted that the range is rather narrow

³ A positive comment on the role of MC activities of Grameen Bank has been incorporated as a background to the support to PKSf.

and traditional in content. They do not take into account the possibility of adopting policies for redistribution of assets, and for reducing the inequality in the access to commercial credit etc. Table 1 presents some observations on the findings from the policies of poverty in WB 1998b. The descriptions provided in the Table are self-explanatory and therefore further attempts to elaborate these are not necessary. (In Table 1, only those points have been mentioned where we have specific suggestions). In terms of acceptability of the policies suggested by WB, it is rather impressive to note that most of the policies have been adopted in Government's Five Year Plans, before these were put forward by the WB and donors (whether these have been implemented, is, of course, a different matter). There is no controversy about the desirability of most of the policies. The emphasis on microcredit in the WB documents came with rather a lag, after an initial success of Grameen Bank and NGO-led schemes of MC. In fact, during the early periods of SAP, the emphasis on financial sector reforms were in contradiction with directed credit system. Therefore MC was against the SAP agenda. Initial success of MC and the enthusiasm most of the donors to accept it as a poverty alleviation strategy had motivated WB to adopt this course during the mid nineties.

The only exception and an absence of general agreement among the Bank, and the findings of general policy research within the country is the question of monetization of food aid. The pros and cons of the impact of monetization has been discussed during the last two years without a general consensus being reached and the empirical evidences on the impact of monetization is somewhat mixed.

It should however, be mentioned that, the documents reviewed above are from the nineties and do not include the initial set of policies and suggestions on economic reforms which did not include the concern for poverty alleviation.⁴ This concern, as an add on agenda received attention from the late eighties and especially during the nineties.

3.1 Estimates of Poverty

An assessment of the trend in poverty, especially for various phases of reforms can provide useful insights into the net result of the counteracting impacts of economic reforms.

⁴ Within the limited scope of the paper, it has not been possible to review all relevant policy documents and operations documents.

Household Expenditure Surveys of BBS provide the data base for estimates of poverty. HES reports provide estimates of HCR based on direct calorie intake (DCI) method. In addition, other researchers used HES data to provide HCR based on 'cost of basic needs (CBN) method. Such estimates by WB (1998b) and Ravallion and Sen (1996) are quoted in the following analysis.

However, the poverty estimates provided by the WB (1998b) and a number of other sources produce not only different magnitudes but also contrasting trends of poverty incidence. The existing research on poverty trends demonstrate a lack of concern about the contrasting trends of poverty estimates provided by various sources. The present paper will highlight these differences. This is necessary for a proper evaluation of the changes in poverty estimates at different phases of economic reforms and to identify the policy implications of the contrasting estimates given by various methods.

The estimates of head count ratio for the upper poverty levels have been presented in Table 2. The Table shows the BBS estimates based on 'direct calorie intake' method and the estimates based on 'cost of basic needs' method used by WB 1998b. Other estimates and the estimates based on lower poverty level has been presented in Table A.1 and A.2.

The following aspects of the trends of poverty (from Table 2 and A.1) are worth highlighting:

- 1) There has been a decline in head count ratio of poverty (HCR) between 1983-84 and 1995-96. Both World Bank and BBS estimates show such decline.
- 2) According to WB estimates, the decline in HCR of poverty took place between 1991-92 and 1995-96. Before this period, poverty in fact increased. BBS estimates based on DCI show a different timing of the improvement of poverty situation: between 1983-84 and 1988-89 the decline had taken place and after that the poverty situation remained virtually unchanged.
- 3) Use of the CBN method does not ensure that similar magnitude or even similar trends of poverty will be obtained in the studies conducted by different researchers. Depending on the 'basket' and the price index, not only the magnitude, but also the trend of HCR may vary. This is illustrated by the findings of WB and Ravallion and

Sen. Between 1988-89 and 1991-92, the percentage of urban poverty showed an increase in the former but a decline in the latter.

It is difficult to reconcile the contrasting picture of poverty obtained by the CBN and DCI methods. Observation 2 mentioned above implies that the improvement in the income poverty during the nineties has not been transformed into an actual improvement in the calorie consumption. The improvement in the 'command' over the bundle of basic needs may not be translated into improvement in the standard of calorie intake due to lack of knowledge about nutrition requirement and due to a variety of social problems like addiction to smoking, drugs etc. The contradiction becomes even more glaring when one compares the urban figures in the two estimates. In the WB estimates urban poverty decreased between '91-'92 and '95-'96 by about 10 percentage points, whereas the DCI estimates show an increase during this period. The following explanations may underlie this discrepancy:

- a) The most obvious explanation will be that the urban poor spend a significant part of income on non-basic needs. When income increases, urban poor may increase the proportion of income spent on these items. Though one has to stretch ones imagination to visualize a scenario where this would take place at the cost of a decline in food consumption.
- b) It is conceivable that lack of education in general and absence of knowledge of nutritional requirement may result in inadequate calorie intake. But it is unlikely that with an upward shift in income, calorie intake will decline.
- c) An alternative explanation of this contradiction (rising poverty in terms of calorie and falling poverty in terms of expenditure required for command over basic needs) lies in the changes of prices of food and non-essential non-food. A price index of non-food basic need expenditure is incorporated into the calculation of the poverty line. But the actual consumption pattern may include a much larger percentage of non-food and non-essential non-food (e.g. smoking), especially in the urban areas. If the prices of these items increase more than in proportion to the price index of the package of non-food basic needs basket, and the quantity consumed remains fixed, then the allowance for food and thereby the actual calorie intake may decline. Thus a comparison on the

basis of CBN is not free from the biases built in the baseline 'consumption basket' and/or price vector.

- d) Another factor contributing to the observed trend is that the household expenditure in HES survey include imputed expenditures for many items. Total expenditure may show an increase due to the increase in the value of these items. More specifically, many of the urban poor living in slums construct their own shacks on the public land. No rent is paid for these dwelling units of the 'owner-occupant' whereas, those who rent a room in a slum pay the 'market rent'. Such market price would be imputed for the owner occupants. When the market rent of these slum houses rise, so does the imputed expenditure and the total expenditure of the owner-occupants. However, there is no means for transforming this increment of expenditure into calories.

Table 2
Trends in Rural and Urban Poverty, 1983/84 to 1995/96
(head count ratio)

Year	World Bank (1998)			BBS (Various Years)		
	Rural	Urban	National	Rural	Urban	National
1983/84	59.6	50.2	58.5	61.9	67.7	62.6
1985/86	53.1	42.9	51.7	54.7	62.6	55.7
1988/89	59.2	43.9	59.1	47.8	47.6	47.8
1991/92	61.2	44.9	58.8	47.6	46.7	47.5
1995/96	56.7	35.0	53.1	47.1	49.7	47.5

The above discussion suggest that the controversy on methodology of poverty measurement and data quality cannot be resolved simply through the use of CBN method. Since none of the methods are satisfactory, a combination of CBN and DCI methods should be used in poverty analysis, the former providing a hypothetical picture and the latter providing the actual, in terms of calorie intake. The WB report (1999) claims superiority of CBN method and takes the view that Household Expenditure Survey Report (BBS 1999) provides estimates on the basis of DCI method, just to ensure comparability with the previous report. It is strongly recommended that BBS continues to produce estimates based on DCI method, because only this method provides a strictly consistent estimate of poverty which ensures comparability over time (even if the welfare implication is narrow).

Despite the problems with methodology, there is no disagreement that there has been a decline in poverty between 1983-84 and 1995-96. According to BBS estimate, poverty declined by 15 percentage points between these years ('83-84 to '95-96) and according to WB estimates, the decline has been 5.4 percentage points. According to BBS, most of the improvement took place between 1983-84 and 1988-89. According to WB estimates, the substantial improvement took place between 1991-92 and 1995-96 and this scenario is consistent with the usual hypothesis about the relationship between SAP and poverty, -- during the initial years, hardship increases and ultimately the fruits of economic reform policies are shared by the poor who have been able to prepare themselves to respond to the new economic opportunities. On balance, no systematic relationship between overall poverty trends and the timing of economic reform policies can be definitively identified.

So far we have focused on the period of 1983-84 to 1995-96. There are some methodological problems in making direct long-term comparison of poverty incidence for the period 1973-74 to 1995-96. However, the data for 1973-74 and 1981-82 are comparable and 1983-84 and 1995-96 are comparable. Extent of poverty reduction during these two sub-periods are shown in Table A.3. The difference in the rate of poverty reduction is so large between the two periods that most researchers agree that 'the incidence of poverty declined at a faster rate in the first period than in the second period' (BIDS 2000).⁵

The scope of the paper does not include an analysis of the various indicators of depth of poverty, and relative poverty. The trends in the depth of poverty measured by FGT index will introduce further complexity to the contrasting pattern of poverty decline measured by various indices.

3.2 Human Poverty

BIDS (2000) shows that Human Poverty index has undergone a sharp decline between 1983 and 1997 (Table 3). A larger improvement in 'human poverty' accompanied by a much smaller decline in income poverty estimates' has the following implications:

⁵ The same view has been expressed by Azizur Rahman Khan in his recent public lecture on Globalization, delivered on September 12, 2000 at BIDS.

- a) An improvement in human development is not being translated into higher income. This may be due to the lack of opportunity for productive utilization of human capital.
- b) An increase in HPI may have taken place through improvement in the situation of the non-poor. In that case, this may have a positive impact on income of this group which will not have a poverty alleviation impact.

Therefore, the substantial increase the value of HPI is a positive feature of the development of the country, but it cannot be used as a sufficient indicator of an improvement in the situation of the poor.

Table 3
Changes in Human Poverty Index

Year	Value of HPI	Percentage point change in HPI per year
1981-83	61.3	- 1.41
1993-94	47.2	
1995-97	40.1	- 2.37

Source: BIDS (2000) and author's calculations.

4. Labour Market, Economic Reforms and Poverty

An analysis of the impact of economic reforms on the labour market assumes special importance in view of the extensive poverty among the wage labourers (Hossain's study shows that, 85 per cent of wage labourer households live below the poverty threshold). The conflicts between SAP and the interest of the poorest and unskilled workers had been a matter of concern from the initial years of adjustment policies.

One of the important objectives of the economic reform policies pursued by Bangladesh during the last one and half decades is to ensure labour competitiveness for industrial growth. This will imply that strategies will be adopted to reduce wage cost. This will not only lead to immediate accentuation of poverty, it may as well prove to be inimical to long run socio-economic development through slowdown of the process of human capital development. The nature of the labour market policies pursued as a component of SAP is, therefore, a matter of concern.

Labour market policies as a poverty-accentuating feature of SAP in Bangladesh did not receive much attention because it did not take a proactive form. It took the form of lack of upward revisions of minimum wages and government's inertia to enact further legislations of minimum wage for the uncovered sectors. In this section the trends of urban and rural wages will be presented which will throw light on whether poverty is being perpetuated through lack of intervention in the labour market. How far the liberalization policies in agriculture have a prospect of pushing up rural wages and thus may have a poverty alleviating impact, will be examined in Section 3.2.

4.1 Urban Wage

Wage liberalization is advocated on the ground that the minimum wage policies and public sector wage policies have a negative impact on competitiveness through their positive impact on formal private sector wages. Wage liberalization has been pursued by the government not only to ensure the competitiveness of the industrial sector but also in view of the realization that due to inadequate administrative capacity, implementation of minimum wages is most often difficult. Realizing its inability to enforce minimum wages as well as due to the emphasis on reducing government intervention in the labour market by the proponents of liberalization, minimum wages for many industries have not been revised during the recent years. Most awards of minimum wages were revised last time in 1986. The inflationary pressure during these years led to increases in market wage rates which had overtaken the minimum wages. An upward revision of minimum wages will not have an impact on market wage rate unless the revision is sufficiently drastic to cover the existing gap. Under these circumstances, the movement of wages during the period of economic reforms of late 1980s and early 90s depends on how the wages in the formal sector are indexed with increases in productivity and with inflation. Data on indices of wage rate (Table 4) in urban sectors show that they have risen above 100 (compared to 1969-70) after 1986 when a revision in minimum wages had taken place. The wage index in manufacturing sector had stagnated during the early nineties.

If one considers the five year periods of 1981-82 to 1985-86 (pre-reform); 1985-86 to 1989-90 (early years of economic reforms) and 1989-90 to 1993-94 (later period of reforms) one can identify a clear slow down of the growth in wage indices. In these three periods

wage indices in manufacturing increased by 23, 13 and 6 percentage points. In the construction sector the changes have been 6, 13 and -7 percentage points. Thus the deceleration in wage rate in both formal and informal sectors has been substantial during the period of 1989-90 to 1993-94.

The choice of the sub periods will influence the rate of growth of wage indices. The choice of 1995-96 as the cut off point (as chosen above) helps to compare the changes in wage indices with the changes in employment (as revealed by Labour Force Survey). Recently, the wage indices for another year (1996-97) has been published, which show a large upward trend of wage. Therefore, it will be useful to compare the pre-reform years with the entire post reform years as well. The average annual change in wage rates between 1979-80 to 1985-86 and between 1985-86 to 1996-97 have been 4.7 and 3.0 percentage points respectively.

Table 4
Wage Rate Indices in Urban Sectors (1969-70 = 100)

Year	Construction	Manufacturing
1979-80	94	74
1980-81	96	80
1981-82	94	79
1982-83	99	82
1983-84	99	95
1984-85	91	91
1985-86	100	102
1986-87	106	109
1987-88	117	108
1988-89	120	110
1989-90	113	115
1990-91	107	114
1991-92	104	113
1992-93	109	119
1993-94	106	121
1994-95	100	121
1995-96	105	123

Source: BBS, Statistical Yearbook of Bangladesh (various years).

Conventional wisdom on the impact of reforms, would predict that an increase in employment would be associated with the slower growth of wage rate. This did not, however, materialize and the manufacturing sector failed to absorb the 'surplus labour' from rural areas. Employment expansion did not even keep pace with the growth of urban population. Rather, there has been an absolute decline in the size of labour force employed in the manufacturing sector (Table 5). The decline has been partly due to the retrenchment of the workers of the industrial units privatized during this period.

Even though industrial growth accelerated during some years of early nineties, real wage. Indepth research should be undertaken to explain these apparently divergent trends. A plausible hypothesis is that the growth of industrial sector was associated with high capital intensity and the reform policies and low wages could not encourage industries to increase their labour intensity.

The burden of the growing labour force in the urban areas has been borne by the informal sectors like community and personal services, trade & hotels and construction. Wage rate index in some of these sectors fell during the latter period under consideration.

Table 5

Average annual growth rate of employment by industry and gender

Major industry	1990-91 (000)			1995-96 (000)			Annual growth rate %		
	Both sex	Male	Female	Both sex	Male	Female	Both sex	Male	Female
Total	50159	30443	19716	54593	33762	20831	1.8	2.2	1.1
Agri. Forestry, fisheries	33303	16560	16734	34530	18382	16148	0.7	2.2	-0.9
Mining & quarrying	15	15	-	23	22	1	10.7	9.3	100.0
Manufacturing	5925	4240	1685	4085	2586	1499	-6.2	-7.8	-2.6
Electricity, gas, water	40	39	1	103	90	13	31.5	26.1	240.0
Construction	525	485	41	1015	936	80	18.7	18.6	19.0
Trade, hotel & restaurant	4285	4162	123	6060	5573	488	8.3	6.0	59.3
Transport, storage, comm.	1611	1600	11	2380	2263	45	9.5	8.1	61.8
Finance, business Services	296	284	12	213	197	16	5.6	6.7	6.7
Community and personal services	1909	1647	262	5092	3343	1748	33.3	20.6	113.4
Household sector & not adequately defined	2249	1411	838	1163	369	794	-9.7	-14.8	-1.1

Note: Details may not add to totals due to rounding.

Source: LFS (Various years).

The trends described above will obviously have serious negative implications for poverty. A deceleration of wage rate in manufacturing had occurred but the optimism that '... by expanding opportunities for formal employment, reforms would benefit the vast majority of the poor' (p iv. WB 1995) has not been transformed to reality.

4.2 Adjustment in Crop Sector and Rural Labour Market

Liberalization policies expected to have positive impact on agricultural growth have been described in other papers commissioned by SAPRI. Agricultural growth induced by the liberalization policies is expected to reduce rural poverty through its positive impact on small and marginal farmers' productivity and through the increase in employment opportunity and/or wage rate of the agricultural labourers. The trends in rural wage rate is important from the point of view of poor rural households for whom wage earnings continue to be a major share of total earnings. This section will focus on the impact of SAP channeled through the wage labour market.

Economic reforms affecting the crop sector have contributed to increased labour demand in agriculture (manifested in the increase in the number of workers between 1983-84 and 1989 and a more intensive labour input between 1989 and 1990-91). At the same time non-farm rural employment has increased due to linkage effects. Even during the nineties, the average annual growth rate of labour force engaged in the agriculture sector was positive (Table 5).

The increased demand for labour in agriculture is not uniformly spread over different cropping seasons and over the various ecological zones with varying cropping pattern. The increase in demand for labour resulted specially from the cultivation of modern rice varieties which has been encouraged through the impact of liberalization of imports of STWs. Modern varieties are grown mostly on irrigated land in the dry season. The additional crop leads to an increase in the cropping intensity in the irrigated areas. However, in many areas, the irrigated high yielding variety actually replaces a low yielding traditional crop in the rainfed season. Thus, labour demand gets concentrated in a single crop season and in certain months within the crop season, when the field operations take place.

Studies on labour use for crop production had shown that irrigated crops use much larger amount of labour per cropped acre (Muqtada and Alam, 1986; Rahman, 1980; Hossain et al., 1994; Rahman and Saha, 1995). Larger labour demand in irrigated areas reflect a higher labour productivity in these areas. Rate of return to labour engaged in irrigated agriculture is found to be higher than non-irrigated systems (Hossain et al., 1994; Rahman and Saha, 1995).

A comparison of wage on irrigated and non-irrigated areas has been used to test whether the shift in labour demand has been translated into an increase in wage rate. While a comparison of cross sectional data can capture the impact of the increase in the use of irrigation, and other modern inputs, representing a major part of the changes associated with reform policies, a time series of wages rates can reveal the balance of the forces operating under the cover of economic reforms. Such forces not only include the labour demand arising from increased productivity in agriculture, but also the possible impact of transfer of labour to rural non-farm activities or to the urban areas.

Some of the cross sectional data on the impact of irrigation shows that a higher labour demand is reflected in a rise in wage rate (Muqtada and Alam 1986, Rahman 1980). Multivariate analyses have been carried out by some studies to isolate the impact of irrigation/modern variety on wage rate. Hossain in his early study (Hossain, 1988) obtained a positive coefficient of irrigation on wage rate. His later study (Hossain et al 1994) obtained an insignificant impact of irrigation on average wage rate for two seasons. Another recent study (Rahman, 1996) obtained a positive impact of irrigation on wage rate in the month when the irrigated crop is harvested, but not in the non-irrigated seasons. As a result, the impact of irrigation on the total earning of wage labourers is not significant.

The differences in the empirical results on the impact of agricultural modernization on wage rate is mainly due to the difference in how the 'wage' variable is defined: only for the peak agricultural season or as an average for different seasons. Even if the peak season wage rate rises significantly, it may not have a large impact on the earnings of labourers because the duration of the peak season is short.

A hypothetical calculation will make it clear that poverty will continue if the average value of real wages cannot be improved. Consider that an increase in employment takes place due to output growth associated with liberalization, and a person gets wage employment for the whole year. At the prevailing average wage rate, she/he will be able to maintain a family of only two and half persons above poverty. In contrast, the current data shows that the average family size is larger than five persons.

As mentioned in the earlier discussion, employment opportunities in the manufacturing sector had declined. In a situation of shrinking formal sector employment and stagnant real wage rate, rural wages rate will be subject to a downward pressure.⁶

There is a supporting data set on rural wage from a recent large scale survey which collected panel data ranging over a period of 5 years. This data (Table 6) set shows a slight decline in the rural real wage rate between 1989-90 and 1994-95. In 1994 a day's wage could support 2.54 persons above poverty level as compared to 2.68 persons in 1990. Wage rates provided by other sources (BBS 1998) show a larger decline in terms of poverty level income. Thus, whatever impact SAP had on agricultural growth, this had been insufficient to make an impact on real wage of labourers in the rural areas.

Table 6
Rural Wage Rate and the Poverty Line

Year	Wage rate (taka/day) BBS data	Wage rate (taka/day) from BIDS survey	Poverty level income (taka/person/day)	Persons supported by a day's wage	
				BIDS	BBS
1990	31.4	34.0	12.67	2.68	2.45
1994	34.9	43.7	17.22	2.54	2.03

Source: Rahman (1996) for col. 3, 5, BBS 1998 for col. (2)

4.3 Retrenchment and Poverty

Privatization of state owned enterprises (SOE) is an essential element of the economic reforms process. Privatization of SOEs in Bangladesh has meant retrenchment of a significant number of workers and another sizeable part of labourers are waiting for

⁶ WB (1996) simulation of the impact of a rise in minimum wage produced the pessimistic scenario that rural real wage will decline by 2.5 per cent if urban wage rate increases (by 50 per cent) through a minimum wage legislation. As shown below, without any such move, rural real wage has declined during some of the recent years.

retrenchment in SOEs which are going to be privatized in the coming years. Retrenchment is popularly viewed as associated with poverty and sufferings and protests are therefore not uncommon. It is therefore pertinent to examine the extent of poverty creation through this process.

During 1995 to 1997 about 89 thousand workers have been retrenched (ILO 1999). Given the government salary scale and the definitions of income poverty level, most of them would be above poverty threshold when they were employed. The number is not a significant percentage of the total population of the country. But it would be a significant percentage of employed workers. Moreover, such workers are in most cases likely to be the head and/or the major earning member of households.

The next question is, whether all the retrenched workers' households are plunged into poverty as a result of retrenchment. The answer to this question will depend on two factors: whether (and how soon) they find new employment and what amount of compensation they received and how did they use it. 55 per cent of the retrenched workers are above age 50. Only because of age, they will have little prospect of getting new jobs. Few of these workers are below age 35 (ILO 1999).

Only 4.4 per cent of retrenched workers are non-production workers in the category of officers managers etc. The profile of skill and educational level of the workers are not available. ILO (1999) uses indirect evidence to conclude that about 60 per cent of the retrenched employees are illiterate and their overall educational levels are low. Low education and possession of experience related to only the current job reduces the chances of getting new employment. Low education also implies that they come from poor households, since there is a negative relationship between poverty and education.

Compensation received

Retrenched workers' compensation, popularly known as 'golden handshake' is expected to help them to generate a future stream of income. Whether this will be sufficient to enable them to live above the poverty threshold (not to speak of maintaining the current level) will depend on the amount of compensation and how this is utilized. Data on

compensation received by workers retrenched from some of the jute mills is presented in Table 7.

Table 7
Compensation received by retrenched workers of jute mills

Age of workers (years)	Amount (taka) received per worker
35-50	44,000
50 +	80,000

Source: ILO (1999).

There are complaints about not receiving the compensation on time. It is difficult to verify whether such allegations are correct and the number of workers affected by such default. Some of the workers who receive lumpsum benefit would spend the money in settling outstanding social obligations or financial liabilities. Even if the workers invest the entire amount received as compensation⁷, (in fixed interest bearing national saving schemes with say, 12% rate of interest), they would earn about taka 800 per month from an investment of taka eighty thousand. Which is not even 25 per cent of the final wage of the worker earning about taka 3500 per month. If they invest in some self-employment activity and generate 25% profit annually, the income will be much lower than the poverty threshold.

A training course of short duration has been organized for the retrenched workers of the jute sector. Between November 1995 and November 1997, about 88 hundred workers were trained in 28 trades. This constitutes a small percentage of the workers retrenched and most of the trainees considered that the course was inadequate to help them in generating income through self employment. Thus on the basis of indirect evidence, the future of the retrenched workers does not appear as poverty-free.

Retrenched workers participating in the focus group discussions conducted by SAPRI study teams vividly described the sufferings of the workers (included in A. Rahman's SAPRI Report) who are out of work after the long years of service and are being unable to obtain productive employment. Health related problems and lack of means for seeking health care

⁷ World Bank comments on the draft paper mentioned that 'the information we have is that the separation, pay received by jute sector employees was about taka 106 thousand'. The difference of 26 thousand does not change the arguments presented here.

services is among the most important forms of sufferings described by the retrenched workers. One of the reasons for highlighting this problem is that while they were employed, they used to avail the free/subsidized health services provided by the employers. Thus, these workers may not be counted as poor on the basis of minimum calorie requirement because they may use the compensation money to maintain their basic consumption level. Nonetheless, the sufferings and insecurity faced by these workers should not be ignored simply because they are not below the poverty threshold by the commonly used criterion. Even if they are not enumerated as poor households, immediately after retrenchment, they are likely to join the rank and file of poor households after a few years. Discontinuation of education of the children and the declining health standard of earning members may also imply an increase in the number of 'tomorrow's poor.'

5. Government Expenditure on Health and its Impact on Poverty

It has already been mentioned that SAP may affect the incidence of poverty and the situation of the poor through the curtailment of expenditure in the social sectors, especially health. Lack of adequate health services will also adversely affect productivity and human capital (Behrman and Deolalikar 1988) and thus perpetuate poverty in the long run. The economic reform policies in Bangladesh were designed in such a format that the social sector expenditure did not decline. In contrast to the original design of SAP, Bangladesh opted for raising the expenditure in the social sectors as a strategy for alleviation of poverty.

Although there is a strong view that the SA policies affect the health standards of the poor through the adverse impact on public expenditure, an opposing view also prevails. According to this view, increases in public expenditure is not the only way to improve the access to health care facilities and health standards. Moreover, it may be argued that an increase in public expenditure may not be sufficient for improving the health services for the poor. The proponents of this view argue that in developing countries like Bangladesh, the government action in the health sector is neither efficient nor equitable. The inefficient allocation of resources in the health sector may result from the bureaucratic interventions and from the biases among the powerful groups of medical practitioners. These groups may be driven not by the motivation for maximizing the health care services for the poor but by the considerations of prestigiousness of the projects. This may result in an expansion of

specialized hospital services with a pro-rich bias at the expense of basic preventive services. This does not help to improve the health standards of the poor.

An investigation of the impact of economic reform policies on the public health care services availed by the poor involves two steps of analysis: first, what happens to public expenditure in the health sector and second, to what extent the poor households avail the benefits of such expenditure.

5.1 Public Expenditure in health sector: Before and After

There are variations in the cut off points used in 'before after' comparisons to highlight the impact of SAP. The choice of cut-off points are usually constrained by data availability. Since the data on sectoral breakdown of public expenditure is available continuously, comparisons will be provided for three periods of equal length: 1980-81 to 1984-85 (before adjustment); 1985-86 to 1989-90 (first phase) and 1990-91 to 1994-1995 (second phase).

As shown in Table 8, public sector expenditure on health in both current and constant prices increased at a significant rate during the period. The rate of increase is, however, not uniform during the entire period. In current prices, the growth has been 20%, 13% and 18% respectively, during the periods of 1981 to 1985, 1986 to 1990 and 1991 to 1995 respectively. In constant prices there has been a clear deceleration in the growth of health sector expenditure, the average annual growth has been 6%, 5% and 3% respectively during the three periods.

Table 8

Public Expenses in Health Sector in Current and Constant Price (1984/85=100)
(Tk. In Crore)

Period	Total Expenses		Average Annual Increase	
	Current Price	Constant Price	Current Price	Constant Price
1980-81	129.22	197.0	19.7%	6.0%
1981-82	149.25	205.8		
1982-83	167.07	212.8		
1983-84	209.65	233.2		
1984-85	256.43	256.4		
1985-86	260.96	237.6	13.3%	4.7%
1986-87	304.11	249.5		
1987-88	364.22	277.6		
1988-89	382.04	270.3		
1989-90	434.86	293.3		
1990-91	521.95	321.8	18.5%	3.1%
1991-92	549.29	325.0		
1992-93	730.39	431.6		
1993-94	887.38	500.9		
1994-95	1005.21	537.9		

Source: Begum and Sen (2000) and author's calculations.

However, the per capita expenditure on health increased during this period (Table 9). The percentage of budget expenditure going to health sector has also increased. This implies that a reallocation of expenditure has enabled the government to sustain its health sector spending.

Using data from Mahmud, S. and Mahmud, W. (2000) an idea may be formed about the foreign aid component of various types of services during the mid nineties. It is observed that (Table 10) the largest share of foreign aid goes to FP and MCH in the form of project aid.

Table 9**Trends in Public Expenditure on Health and Family Planning**

Year	Expenditure of health and family planning as % of budget expenditure	Per capita expenditure in 1987 Taka
1983-84	4.8	72.0
1985-86	3.4	50.9
1987-88	5.5	80.7
1989-90	5.5	85.3
1991-92	5.8	86.9
1993-94	7.0	125.7
1995-96	6.4	120.8
1997-98	7.3	142.4

Source: Mahmud, S and Mahmud, W. (2000).

Table 10

Source of Fund for selected Health and Population Sector Activities, 1994/95
(amount: million Us \$)

Source of Fund	Activity		FP/MCH	Total Public Sector
	Hospital	PHC		
Government	61	78	61	246
Household	2	3	2	7
Foreign aid:	18	28	107	174
Food & Commodity aid	10	14	11	40
Project aid	7	14	96	135

Source: Mahmud, S and Mahmud, W. (2000).

During the recent years, donors have moved to program aid from the previous project aid mode. Under this arrangement, for each program government fund must be matched and this not only creates complexity but may increase the financial pressure on government in future.⁸ Donor allocation on health in the ADP has recently increased in percentage terms, (as pointed out in a comment form World Bank on the present paper). This may, however, imply that government resources have been reallocated to the revenue expenditure which

⁸This concern was expressed by the participants in a seminar where the earlier draft of the paper was presented.

must be continued. In fact, in the health sector, salary component (within the revenue budget) is high and this has direct link with the service provided. However, the fact remains that Bangladesh has one of the lowest per capita spending on health and population and this is lower than a few other South Asian Countries.

5.2 Poor Household's Access to Public Health Services

A number of studies conducted at different points of time show that poor households have greater access to public health care services. WB (1990) provide the following data (Table 9). The expenditure was estimated on the basis of a per cent of households availing the services and the cost of providing services to an individual. In the rural areas, the ultra poor receives about double of the expenditure of non-poor households. The pro-poor bias is observed to be much higher in the urban areas.

Table 9

Gross Health Service Expenditure Incidence by Income group

Income Group	Expenditure/household (taka)	
	Urban	Rural
Ultra Poor	821	90
Poor	476	85
Not poor	93	44
Average	293	67

Source: WB 1990.

Recent data (Begum and Sen 2000) on the per capita health expenditure from public sources among the decile groups (of per capita income) show that the amount is higher in the lowest decile group, compared to most of the higher decliles. However, the decline is not continuous. The fifth and tenth decile show even higher incidence of public health expenditure.

The above estimates, however, are subject to the bias that a larger per cent of the poor households are subject to sickness episodes at a particular point in time (Table A.4). Therefore, data on what percentage of sick persons from the poor and non poor receive

treatment from public hospitals should be considered along with the analysis of incidence of expenditure. Though such data is not available for the poverty based groups, data from rural households, classified by land ownership can be used as a substitute. Land ownership is strongly correlated with poverty, and more than 80 per cent of the landless and marginal landowning households live below the poverty threshold. Table A.5 shows that in the lowest land ownership group, a substantially higher percentage of the sick persons obtained treatment from government health care centres.

7. Summary of findings

The present study could not arrive at a conclusive result on the impact of SAP on the incidence of poverty. The improvement in poverty situation has been rather small. It has been pointed out in the paper that the World Bank document (WB 1998b) on the changes in poverty trend has ignored the contradictory and contrasting evidence on estimates of poverty incidence obtained by various studies. According to WB estimates using CBN method and based on BBS data, poverty declined by 5.7 percentage points between 1991-92 to 1995-96 while according to BBS estimate using DCI (and the same set of data), poverty declined between 1983-84 and 1988-89 and remained stagnant during 1988-89 to 1995-96. Other studies have been cited which arrive at different results. Moreover, poverty declined at a faster rate (1.29 percentage point per year) during the pre-reform period (1973-74 to 1981-82) compared to the (0.92 percentage point per year) during the post reform years (1983-84 to 1995-96).

The wage labour market has been one of the important channels through which the SAP related factors contributed to the worsening of poverty. Government's reluctance to intervene through the minimum wage legislation process led to a stagnation in real wage in most sectors (and a decline in some of the informal sectors) without accompanying increase in employment in manufacturing.⁹ Since poverty is concentrated among the wage labourers, these processes have adversely affected the poverty situation.

⁹ The macroeconomic developments and GDP growth performance which may explain the slow employment growth have been provided in other SAPRI papers.

Information on labour retrenchment and data on the average compensation of jute mill workers shows that such retrenchment works as a poverty accentuating factor. Even if the retrenched workers do not immediately plunge into poverty in terms of 'poverty level expenditure' (because they are likely to use the compensation money to maintain the minimum consumption requirement), they become vulnerable and may be considered as tomorrow's poor. It is however, difficult to quantify such impact. Information on whether the workers received the compensation on time is not available and more research is required in this area.

The usual contention that a reduction in health sector expenditure during the SAP period may lead to deterioration in the poverty situation proved to be incorrect. Health sector expenditure did not decline, although the growth of such expenditure, especially in real terms decelerated during the adjustment period. Poorer sections obtained a larger share of the public sector health services, although this may be due to the poorer quality of such services which results in a preference for private and paid services among the richer households. Moreover, during the early nineties, the increase in government's health sector expenditure was possible through a reallocation of budget, which may not be feasible in future. This is a matter of concern when the per capita health expenditure in this country is one of the lowest in the region.

Table A.1: Alternative Estimates of Poverty by Ravallion and Sen (1996), Using CBN Method

Year	Head count ratio	
	Rural	Urban
1983/84	53.8	40.9
1985/86	45.9	30.8
1988/89	49.7	35.9
1991/92	52.9	33.6
1995/96	51.1	26.3

Table A.2: Estimates of Extreme Poverty by DCI Method

Year	Head count ratio		
	Rural	Urban	National
1983/84	36.7	30.4	36.7
1985/86	26.3	30.7	26.9
1988/89	28.6	26.4	28.4
1991/92	28.3	26.3	28.0
1995/96	24.6	27.3	25.1

Source: BBS (Various years).

A.3: Comparison of Poverty Trends between 1973-74 to 81-82 and 1983-84 to 1995-96

	Percentage point change per year	
	1973-74 to 1981-82	1983-84 to 1995-96
Urban	2.97	2.93
Rural	1.10	0.40
National	1.29	.92

Source: BIDS 2000.

Table A.4: Morbidity Rate among Households in Various Income Groups

Annual Household Income (Taka)	Morbidity rate
00001 - 06000	14.8
06001 - 12000	13.2
12001 - 24000	11.3
24001 - 36000	11.2
36001 - 60000	9.3
60001 - 84000	6.6
84001 +	8.1
All	11.1

Source: Khan (1994).

Table A.5: Per cent of Sick Persons from Various Landowners groups who Received Treatment from Government Medical Centres

Land Ownership	Per cent of sick persons who received treatment from government medical centres
00	17.5
0.1 - .50	13.2
.51 - 1.00	11.6
1.01 - 1.50	14.7
1.51 - 2.50	11.0
2.51 - 5.0	8.4
5.01 +	8.0

Source: Khan (1994).

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