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Poverty Trends and Growth Performance: Some Issues in Bangladesh

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1. INTRODUCTION

With a low level of per capita income, nearly one of every two persons in Bangladesh is poor, and one of three lives below the income poverty line of $ 1 a day.[1] If those who are deprived of adequate clothing or shelter or other basic needs are counted, the number will be considerably higher. Similarly, if the people who live 'above' the poverty line but are vulnerable to risks, crisis and socioecononomic shocks and are in constant danger of income erosion below the poverty threshold are considered, the number will be still larger. The poor in Bangladesh differ in economic, social, physical and other characteristics which reflect various deprivations. Such multidimensionality of the poor's interlocking deprivations suggests that a strategy of increasing income alone may not be adequate for reducing poverty.[2] With multi-dimensional characteristics, poverty requires a multi-strategy solution in Bangladesh.

The implications of attacking poverty within a broad framework highlight the interactions that exist between income and non-income deprivations. The reduction in income-poverty helps in alleviating non-income poverty through enhanced capacity of the poor to gain access to basic needs. Economic growth matters for reducing non-income poverty as well since high economic growth widens opportunities, provides resources for human and non-human investments and increases returns from such

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[1]According to the 1999 Poverty Monitoring Survey, 44.7 percent of the population are poor on the basis of the poverty line defined in terms of minimum calorie intake. The $ 1 a day in 1985 PPP $ takes care of real purchasing power of Taka as against the nominal exchange rate. With this internationally comparable poverty line, 29.1 percent of the population in Bangladesh are poor. See BBS (2000); UNDP (2000).

[2]This brings out the importance of conceiving poverty within a broader framework entailing, in addition to purchasing power, other forms of deprivation e.g. capability and entitlement, participation, empowerment, vulnerability and crisis coping capacity, networking capacity, intra-household and gender disparities, access to credit and resources, and other social concerns.

investments.[3] In the present paper, our focus is on recent trends in poverty in Bangladesh and their relations with the pattern of growth that has taken place in the country. With economic reforms, composition of output and relative prices have significantly changed in Bangladesh. Structural changes, particularly in agriculture and the rural economy, have opened up opportunities through adoption of new crop production technologies, expansion of non-crop agriculture and exploitation of growth potential in the non-farm sector. The paper reviews past changes in order to identify emerging challenges and opportunities. The analysis in the paper is mainly expository and is intended to raise relevant issues.

2. RECENT POVERTY ESTIMATES AND TRENDS

In Bangladesh, there has now been a long tradition of data collection at the household level for poverty measurement and analysis.[4] The inter-temporal estimates of poverty reveal substantial variations due to differences in underlying assumptions and methodologies.[5] Some trends can, however, be discerned with available data (Table 1). It shows that incidence of poverty, as measured by head count index, declined from 59 percent in 1983-84 to 45 percent in 1999. Both urban and rural poverty declined although the incidence of rural poverty remained higher than urban poverty. Two contrasting trends may, however, be noted. Between 1983-84 and 1995-96, urban poverty declined at a faster rate than rural poverty. The incidence of urban poverty was 35 percent in 1995-96 compared to 50 percent in 1983-84.[6] During the period, rural poverty declined from 60 percent in 1983-84 to 57 percent in 1995-96. On the other hand, the 1997-1999 period witnessed a decline of rural poverty from 47 percent in 1997 to 45 percent in 1999 while urban poverty remained stagnant at around 43 percent in both the years. The differential progress

[3]Economic growth, it is argued, contributes to human development at least in terms of reduced income poverty and increased availability of public resources for investment. See Anand and Ravallion 1993.

[4]The typical household surveys, which are nationally representative, refer to the Household Expenditure Survey (HES) and the recently available Poverty Monitoring Survey (PMS) of the Bangladesh Bureau of Statistics (BBS).

[5]For an analysis of the implications of different methodologies on poverty estimates, see Ravallion (1990); Ravallion and Sen (1996). The alternative poverty estimates highlight important issues of measurement of poverty, aggregation of numbers, choice of calorie norm and other dimensions. For a review of the available estimates, see Rahman and Haque (1988); Hossain and Sen (1992); Mujeri (1999).

[6]The direct comparison of poverty trends since the 1970s has been avoided due to several methodological problems. A notable problem, for instance, is the change in data collection method in the HES involving a shift from 'memory recall' prior to 1983-84 to 'diary keeping' after wards. The 1985-86 HES results have also been excluded from the analysis due to controversy regarding the quality of data. For an evidence on declining trends in poverty between mid-1970s and mid-1980s, see Rahman and Hoque (1988); Mujeri *et al.* (1993). On the quality of 1985-86 HES data, see Khan (1990); Ravallion (1990); World Bank (1998). The latest year for which the HES data are available is 1995-96. The information for later years are based on the PMS of BBS. It should, however, be noted that the results of the two surveys are not strictly comparable due to differences in survey techniques and poverty estimates.

Table 1

Incidence of Poverty in Bangladesh

Year	Head Count Ratio (Percent)			No. of Poor (Million)		
	Rural	Urban	Total	Rural	Urban	Total
1983-84	59.6	50.2	58.5	50.3	5.6	55.9
1988-89	59.2	43.9	57.1	54.1	6.2	60.3
1991-92	61.2	44.9	58.8	58.4	7.2	65.6
1995-96	56.7	35.0	53.1	57.8	7.1	64.9
1997	46.8	43.4	46.0	45.3	12.9	58.2
1999	44.9	43.3	44.7	42.4	15.4	57.8

Source: World Bank (1998); BBS (1998, 2000).

Note: The figures for 1983-84 to 1995-96 are based on HES while those for 1997 and 1999 are taken from PMS of BBS. The poor in the HES are estimated using the cost of basic needs (CBN) method and are taken as those living below the poverty line which corresponds to an intake of 2122 kcal/person/day and a nonfood allowance which corresponds to nonfood expenditure among households whose food expenditure equals the food poverty line. The poverty lines in the PMS use the food energy intake (FEI) method and refer to calorie intake of 2122 Kcal/person/day in rural areas and 2112 Kcal/person/day in urban areas. The number of the poor has been derived using estimated population and its rural-urban distribution implicit in respective surveys.

in rural and urban poverty reduction, however, conceals important dimensions of spatial movements of the poor. Over the 1984–1999 period, the absolute number of the poor in the country increased to 58 million from 56 million—an increase of 2 million over 15 years when total population increased by about 34 million. During the period, the number of rural poor declined from 50 million to 42 million while the number of urban poor recorded an increase—from 6 million to 15 million.[7]

The period under review also witnessed substantial variations in the rate of poverty reduction across different sub-periods (Table 2). Over the 1984–1999 period, poverty incidence declined at a rate of 1.8 percent per year: 1.9 percent in rural areas and around 1 percent in urban areas. Within the period, three sub-periods may be identified. During 1984–1992, the incidence of poverty increased marginally due to increasing rural poverty although urban poverty declined at a rate of 1.4 percent per year. In contrast, the 1992–1996 period witnessed a rapid decline in poverty incidence at an annual rate of 2.5 percent: 1.9 percent in rural areas and 6 percent in urban areas. The 1997–1999 period, on the other hand, recorded a higher rate of poverty reduction in rural areas—at a rate of more than 2 percent per year—compared to only 0.12 percent in urban areas. The overall decline in poverty incidence was 1.4 percent per year.

[7]The increase in the number of the urban poor vis-à-vis the declining number of the rural poor does not necessarily indicate migration of the poor from rural to urban areas. While rural-urban migration of the poor is a reality, the change in the definition of urban areas between the HES and the PMS appears to be a major contributory factor in the increase in the number of the urban poor in the PMS. This is revealed in the share of urban population in total population implicit in the two surveys. For instance, the share of urban population in 1995-96 HES is 16.5 percent while the corresponding shares in 1997 PMS and 1999 PMS are 23.5 percent and 27.3 percent respectively.

Table 2

Annual Changes in Incidence of Poverty

(Percent)

Head Count Ratio	1984–1999	1984–1992	1992–1996	1997–1999
Rural	–1.87	0.33	–1.91	–2.05
Urban	–0.97	–1.38	–6.01	–0.12
Total	–1.81	0.07	–2.54	–1.42

Source: World Bank (1998); BBS (1998, 2000).

Some trends that emerge from the assessment of the poverty situation highlight the following:

- The overall incidence of poverty in the country has been declining although the rate of decline is slow at less than 2 percent per year;
- Although rural poverty experienced some increase in the late 1980s, a faster decline of rural poverty in the 1990s has taken place;
- Urban poverty has been declining consistently since the 1980s. The rate of decline, however, slowed down in the late-1990s;
- The absolute number of the poor started to decline since the mid-1990s.

Along with incidence, it is important to analyse changes in other dimensions of poverty e.g. the depth and severity of poverty.[8] The trends in depth and severity are somewhat similar to incidence of poverty revealing generally higher depth and severity of poverty in rural areas till the mid-1990s (Table 3). The depth and

Table 3

Trends in Depth and Severity of Poverty

(Percent)

	Poverty Gap			Squared Poverty Gap		
Year	Rural	Urban	Total	Rural	Urban	Total
1983-84	16.8	14.3	16.5	6.7	5.8	6.6
1988-89	16.0	11.1	15.4	6.1	3.8	5.8
1991-92	18.1	12.0	17.2	7.2	4.4	6.8
1995-96	15.4	9.2	14.4	5.7	3.4	5.4
1997	11.2	13.5	11.7	3.9	5.8	4.4
1999	11.1	11.2	11.1	4.0	4.2	4.1

Source: World Bank (1998) and BBS (2000).

[8]According to the Foster-Greer-Thorbecke (FGT) class of poverty measures, the depth and severity of poverty are given by poverty gap and squared poverty gap respectively. The poverty gap estimates how far below the poverty line the poor are on the average as a proportion of the poverty line which is a measure of depth of poverty. The squarred poverty gap measures the severity of poverty and considers the distance separating the poor from the poverty line and the inequality that exists among the poor. See Foster *et al.* (1984).

severity of urban poverty, however, seem to have worsened afterwards. A contrasting recent trend may also be noticed: while the depth and severity of urban poverty have been declining, recent developments have largely bypassed these poverty dimensions in rural areas.

Trends in Human Poverty

At the macro-level, the relatively high incidence of poverty in Bangladesh is reflected in two indicators—real GDP per capita and the human development index (HDI).[9] The per capita GDP (at 1995 US $) increased at a rate of 2.4 percent per year over the 1975–1998 period (Table 4). During the same period, the annual rate of growth of HDI value was 1.5 percent. It may, however, be noted that while the annual growth rate of per capita GDP has accelerated to more than 3 percent in the 1990s compared to 2 percent in earlier period, the growth rate of HDI value has declined—from more than 1.5 percent for earlier period to 1.4 percent in the 1990s.

The human poverty index (HPI) of UNDP measures the distribution of progress in human development and shows the extent of human poverty.[10] The HPI value is estimated at 43.6 percent in 1998. This indicates that 55 million people in Bangladesh lived in human poverty in 1998 compared to 59 million who lived below the income poverty line.

Table 4

Trends in Per Capita GDP and HDI Value

	GDP per Capita (1995 US $)	HDI Value
1975	203	0.329
1980	220	0.348
1985	253	0.381
1990	274	0.412
1998	348	0.461

Source: UNDP (2000).

Trends in Inequality

The nature of impact of economic growth and other macroeconomic changes on poverty is influenced by changes in the distribution of income and consumption. In Bangladesh, the inequality in the distribution of consumption is lower than that of

[9]The HDI value gives the overall progress in achieving human development in three basic dimensions measured by life expectancy, educational attainment and income. See UNDP (2000).

[10]The HPI is a composite index of deprivation in three basic dimensions of human life: a long and healthy life, knowledge and economic provisioning. For details on the indicators and computation methodology, see UNDP (2000).

income which in turn is much lower than inequality in wealth.[11] Available evidence indicates that relative inequality increased over time in both rural and urban areas in the country as measured by the Gini coefficient of income distribution (Table 5). The inequality is higher in urban than in rural areas. In general, relative inequality widened in both rural and urban areas until the mid-1990s after which some decline in inequality was observed. Urban inequality increased more than rural inequality over the years and the disparity between rural and urban areas widened sharply during the 1990s [World Bank (1998)]. It may, however, be noted that the period of 1992–1996 which was associated with sharp increase in inequality (the Gini Coefficient increased by nearly 6 percent in rural areas and 12 percent in urban areas) also witnessed decline in incidence of poverty at a rate of 2.5 percent per year—nearly 2 percent in rural areas and 6 percent in urban areas.[12] The evidence, nevertheless, points out that a significant potential of the growth process in reducing poverty is lost in Bangladesh due to the inequalising nature of growth. A higher inequality generates a lower subsequent rate of growth in average income with reduced impact on poverty and a lower share of total and incremental income for the poor.

Table 5

Relative Inequality in Income Distribution

(Percent)

	Gini Coefficient	
	Rural	Urban
1983-84	35.0	37.0
1988-89	36.8	38.1
1991-92	36.4	39.8
1995-96	38.4	44.4
1997	39.0	43.0
1999	36.0	42.0

Source: BBS (1998, 2000).

[11]Although information on inequality in wealth is scanty, the ownership pattern of productive assets reveals marked variations across rural and urban areas as well as among the poor and nonpoor households. The value of assets per urban household is estimated at almost three times that of rural household on average. For the non-poor households, the average asset value is nearly 200 percent higher in the rural areas compared to that of the poor. In urban areas, the disparity is much higher: the average asset value of the nonpoor is five times that of the poor. One of the major factors that contribute to less inequality in expenditure distribution compared to income distribution is the higher dependence of the poor households on subsistence production and greater access to common property resources. See Mujeri (2000).

[12]There is a strong evidence that inequality matters for poverty reduction and high inequality dampens the impact of growth on poverty. When economic growth is accompanied by rising income inequality, opportunities are missed for poverty reduction. See Bruno *et al.* (1998); Ravallion (1997); Ravallion and Sen (1996); Mujeri (1999).

Characteristics of the Poor

The poverty characteristics in Bangladesh are manifested in differences among the poor people. Several indicators e.g. physical and human resource endowments, demographic features and occupational groups are important in identifying the poor.

In rural areas, income of households depends on several factors e.g. land ownership and productivity of land, number of earning members, quality and composition of labour, nature of employment, and availability of infrastructure and other services to enhance the scope and return from income earning opportunities. The incidence of poverty is associated with poor human development indicators. Household heads with no education face a higher probability of being poor and poverty falls as the level of education increases.[13] The poverty status of the households is also determined by the occupation of household heads. Households headed by agricultural labourers and tenants have a high incidence of poverty as do non-agricultural casual workers and self-employed workers with little capital.[14] The rural people with non-agricultural occupations are better off. In the urban areas, households living in slums and squatters are generally poor although considerable differences exist among these households. In general, households headed by casual or manual labourers have a high incidence of poverty as do participants in the informal sector with little assets.

One of the significant dimensions that characterises poverty in Bangladesh is the existence of marked gender disparities among poor households. The female-headed households generally belong to the vulnerable groups among the poor. These households usually earn less income since poor women have low earning capacity and their wages are lower than male wages in the labour market. The economic well-being of poor women is constrained by their limited access to productive resources. There also exist gender differences in intra-household allocation of resources and a systematic gender bias in access to food, nutrition, health, education and other human development inputs.

The economic and social contexts of the poor reveal interaction of both market and non-market forces that affects their existence e.g. various components of production related activities and human resource status, household instability and vulnerability, crisis-coping capacity and other socioeconomic processes. Along with income-earning activities, the poor spend a significant proportion of their time and efforts in the pursuit of expenditure-saving activities which provide

[13]According to 1998 Poverty Monitoring Survey, 78 percent of household heads in 'never read' category are poor in urban areas compared to 13 percent having Secondary School Certificate or higher education. In rural areas, the corresponding figures are 54 percent and 14 percent. See BBS (1999).

[14]Among the landless in rural areas, 81 percent are poor while only 18 percent of large landowners (with 7.5 acres or more land) are poor. See BBS (1999).

significant avenues for strengthening survival and crisis-coping abilities of poor households.[15] As such environmental conservation and sustainable common property resource management to enhance productivity of ecological reserves have significant poverty-alleviating role in Bangladesh through expanding the scope of expenditure-saving activities of the poor.

The process of vulnerability of the poor, an important element of poverty characteristics in Bangladesh, operates through relatively high incidence of crisis among poor households e.g. crop losses, natural disasters, economic risks and uncertainties, illness and death of income earners, lack of socioeconomic security and other life-cycle and social events.[16] While such crisis-events are often recurrent in nature, an important implication of these events is the risk of income erosion of poor households both through crisis-related expenditures and reduction in income-earning capabilities.

The poverty characteristics in Bangladesh highlight the multidimensional nature of the process suggesting the need to adopt a comprehensive approach to poverty reduction. The anti-poverty policies require to generate high economic growth and a structure of growth that has a strong capacity to strengthen the channels through which the benefits of growth reach the poor. This requires actions on a broad front to enhance the 'voice' of the poor and provide better access to them within a wider set of asset framework: physical assets to increase productivity and income; human assets to enhance capabilities and take advantage of new opportunities; financial assets to undertake productive livelihood options; natural assets to ensure sustainability and diversity of income streams; social assets (e.g. through grassroots mobilisation) to enhance networking capacity; and political assets (e.g. through empowerment and participation) to strengthen their bargaining strength to compete with other interest groups and ensure access to resources and public services.

3. ECONOMIC GROWTH AND POVERTY

It is widely recognised that growth-enhancing public policies are essential for sustainable poverty reduction in Bangladesh.[17] It is pertinent, therefore, to examine: what has been the relationship between economic growth and poverty in Bangladesh? The average rate of GDP growth during 1984–1999 has been 4.4 percent per year (Table 6). There has been variation in GDP growth rate over

[15]The Poverty Monitoring Surveys indicate that expenditure saving activities contribute nearly 20 percent to the annual income of rural poor households. See BBS (1998).

[16]The incidence of crisis for the poor is higher compared to the non-poor in both rural and urban areas in the country. Moreover, the poor households reveal marked inadequacy in crisis-coping capacity and face higher risks of income erosion. Actions to support capacity building to protect the poor against shocks and increase their access to resources and markets are important for poverty alleviation in the country. See BBS (1998).

[17]The Fifth Five Year Plan (1997–2002) envisages a 5.6 percent yearly growth in per capita income to substantially reduce the incidence of poverty by 2002. The targeted annual growth of GDP is 7 percent during the Plan period. See Planning Commission (1998).

Table 6

Annual Growth Rates of GDP

(Percent)

	1984–1999	1984–1992	1992–1996	1997–1999
GDP	4.4	3.9	4.6	5.4
Agricultural GDP	2.3	2.0	1.2	4.8
Non-agricultural GDP	5.7	5.2	6.5	5.9
Per Capita				
GDP	2.5	1.9	2.6	3.8
Agricultural GDP	0.4	0.1	–1.1	2.4
Non-agricultural GDP	3.6	3.2	4.1	4.5

Source: Author's calculations.
Note: The growth rates are expressed at constant 1984-85 prices.

different sub-periods which increased from 3.9 percent per year during 1984–1992 to 5.4 percent in 1997-1999. The variation has largely been due to fluctuations in agricultural GDP—from 1.5 percent per year during 1992–1996 to 4.8 percent during 1997–1999. The growth rate of non-agricultural GDP is relatively stable. The per capita GDP increased at a rate of 2.5 percent per year over the entire period: 0.4 percent for agricultural GDP and 3.6 percent for non-agricultural GDP. The growth rate of per capita GDP accelerated to nearly 4 percent per year during 1997–1999 from 1.9 percent in 1984–1992. The per capita GDP originating in agriculture remained mostly stagnant in the 1980s and experienced a decline until the mid-1990s. The 1997-1999 period, however, experienced rapid increase in per capita agricultural GDP at a rate exceeding 2 percent per year. A comparison of the growth rates, particularly over different sub-periods, with annual changes in incidence of poverty (see Table 2) reveals some links between growth and poverty. The incidence of poverty increased during the 1984–1992 period due to increase in rural poverty when the growth rates of both GDP and per capita GDP were relatively low (3.9 percent and 1.9 percent respectively). The period also witnessed a relatively low rate of agricultural growth. Other sub-periods, despite increasing per capita GDP, witnessed slow decline in poverty. It is, therefore, important to analyse why poverty declined slowly despite economic growth achieved during the period.

While data limitations do not permit us to conduct any rigorous analysis into the nature of relationships between economic growth and poverty, available evidence points to several factors which constrain the capacity of economic growth to reduce poverty in the country. It is clear that an average rate of growth of around 4 percent per year is not rapid enough to make any significant impact on poverty.[18] Moreover,

[18]The experience of Southeast Asian countries e.g. Malaysia, Thailand and Indonesia before the East Asian crisis may be cited. These countries experienced relatively high growth rates with decline in both the proportion and absolute number of the poor.

a high economic growth is not always sufficient to ensure that benefits of growth will reach the poor to initiate a process of rapid poverty reduction in a country. Along with a high rate, structure of economic growth is important which determines the mechanisms through which benefits of growth are transmitted to the poor.

Agricultural Growth—Poverty Linkages

In terms of structure and sectoral composition of economic growth, the poverty alleviating role of agriculture is often emphasised in Bangladesh [Mujeri (1999); World Bank (1998)]. The poverty profile, presented in Section 2, highlights that the poor in Bangladesh live mostly in rural areas and depend on agricultural activities. A resident in rural areas is also more likely to be poor. While this points to the importance of rural economic growth as the key to poverty reduction, the past pattern indicates that trend growth is higher in non-agricultural sector—which are mostly urban based—than in the agriculture sector.[19] The relative contribution of agriculture to GDP has been declining: the share of agricultural value added in GDP is around a quarter now compared to nearly 50 percent in the 1970s. The share of agriculture in employment, however, remains high with more than 60 percent of the employed labour engaged in agricultural activities. Given these structural characteristics, agricultural growth in Bangladesh has built-in advantages in accelerating economic growth and in promoting a structure of growth that has high capacity to reduce poverty. A high association between GDP growth and agricultural growth still exists despite decline in agriculture's relative importance.[20] The poverty trends and growth rates of GDP and agriculture over different sub-periods indicate that declining poverty in general is associated with relatively high GDP growth originating in agriculture although the association seems to have weakened in the 1990s (Table 7). During 1989–1992, for instance, poverty increased despite relatively high average agricultural growth. It may, however, be argued that a major factor which influenced poverty trends during the period was the devastating floods of the late 1980s.

An important issue which deserves attention is: how does agricultural growth help in raising incomes of the poor? One may identify several channels through which agricultural growth contributes to raising the poor's income. The impact of agricultural growth on rural wages is an important element in the process since, for the poor households, a major share of income originates from wage labour in agricultural and non-agricultural activities.[21] Along with positive impact on real wages, a high agricultural growth creates the synergy for diversification of the rural

[19]At constant 1984-85 prices, the annual growth rate is 2.3 percent in agriculture over the 1984-1999 period compared to 5.7 percent for non-agricultural GDP.

[20]The correlation coefficient between GDP growth and agricultural growth is estimated at 0.74 during the 1981–1999 period. See Mujeri (1999).

[21]A recent survey indicates that agricultural and non-agricultural daily wages constitute 33 percent and 15 percent of the incomes earned by poor rural households in Bangladesh. See BBS (2000).

Table 7

Poverty Trends and Agricultural Growth

Period	Poverty Trends	Annual Growth Rate (Percent)	
		GDP	Agriculture
1984–1986	Declining	4.2	2.5
1986–1989	Increasing	3.5	0.5
1989–1992	Increasing	4.2	2.6
1992–1996	Declining	4.6	1.2
1997–1999	*Declining*	*5.4*	*4.8*

Source: Author's calculation.

economy and development of the rural non-farm sector.[22] Rural diversification benefits the poor through higher labour demand and greater linkages with processing, transportation and other services. In Bangladesh, a rapid growth induced by agriculture is, therefore, likely to be more equitable with greater poverty reduction impact since the benefits of agricultural growth are more evenly distributed particularly in the labour market.[23]

The trends in wage rates of different categories of labour indicate that the real wage rate of agricultural labourers has mostly stagnated compared to other groups (Table 8). Despite technological change and growth of agricultural output, shifts in labour demand could not create much impact on real wages in agriculture. The counteracting growth of agricultural labour force is one of the major factors in depressing agricultural wages.[24] Despite the stagnation, relationships between real agricultural wages and agricultural growth are observed. Out of nine years over the 1982–1998 period during which real wages increased, five were associated with increases in agricultural growth. Similarly, real wage declines in five out of six years were accompanied by declines in agricultural growth [Mujeri (1999)]. This suggests that sustained increase in agricultural wages requires accelerated growth in

[22]The poverty alleviating impact of agricultural growth may, however, vary widely depending on its nature. In the Indian context, for instance, several factors e.g. inequality in endowments, market imperfections and low returns on agricultural assets have been highlighted which tend to constrain the 'trickle down' of benefits of agricultural growth to the poor. A large hard core of rural poverty could persist despite rapid agricultural growth. See Bardhan (1985); Gaiha (1995); Gaiha and Deolaliker (1993).

[23]Based on 1991-92 and 1995-96 HES data, values of net elasticity of poverty with respect to per capita consumption growth in agriculture, industry and services support such a contention. The head count index of poverty in agriculture declines by 1.67 percent with 1 percent increase in per capita consumption of agricultural households. Similar declines are 1.26 percent in industry and 1.25 percent in services. The depth and severity of poverty also declines more with growth in agriculture than in other two sectors. See World Bank 1998. For evidence from India, see Ravallion and Datta (1996).

[24]According to the Labour Force Survey, 34.5 million people are employed in agriculture which constitute more than 63 percent of the employed labour force in 1995–96. During 1985-86, the number of employed persons in agriculture was 17.5 million (57 percent of employed labour). See BBS (1998).

Table 8

Real Wage Rate Indexes of Different Labour Categories

(1969-70 = 100)

Year	General	Agriculture	Manufacturing	Construction
1983-84	90	75	95	99
1985-86	95	82	102	100
1988-89	107	92	110	120
1991-92	107	98	113	104
1995-96	114	104	123	105
1997-98	122	107	137	114

Source: Ministry of Finance (1999).

agriculture. Moreover, a relatively low rate of agricultural growth limits the capacity of Bangladesh agriculture to diversify with greater focus on higher value crops. The inequitable socioeconomic environment that persists in the rural society also constrains the ability of the poor (e.g. landless and marginal farmers) to derive proportionate benefits from technological changes.[25] The past experience indicates that, while agricultural growth matters for poverty reduction in Bangladesh, various processes that 'trickle down' the benefits to the poor have worked slowly creating less than anticipated impact on poverty.

Role of Rural Non-farm Sector

A significant aspect of the ongoing growth process in the country is the expansion of rural non-farm sector and associated changes in the labour market. The labour force has grown at a much higher rate than the growth of population and the demand for labour. During 1961 to 1991, total population increased by nearly 120 percent—from 50.8 million to 111.5 million—while the labour force grew from 16.9 million to 51.2 million—an increase of 203 percent. In terms of employment, agriculture is the largest sector with more than 63 percent of total employed labour of 54.6 million in 1995-96 [BBS (1998)]. The bulk of recent employment generation has, however, taken place in the informal sector. Total informal sector employment increased from 45.3 million in 1989 to 47.9 million in 1995-96 accounting for nearly 60 percent of additional employment generation during the period. The informal sector, according to 1995-96 Labour Force Survey, provides 87 percent of total employment in the country indicating a process of growing informalisation of the labour market. Moreover, more than 79 percent of those employed in the informal sector during 1995-96 are categorised as 'unpaid family workers' or 'self-employed'.

[25]In 1983-84, 6.4 million households (46 percent of rural households) were landless (owning less than 0.49 ac) and the number increased to 10 million (56 percent of rural households) in 1996. During 1996, small and marginal holdings (with less than 2.5 ac) accounted for 81 percent of the farms with 41 percent of operated land. See BBS (1999).

It appears that several outcomes in the labour market e.g. characteristics of employment opportunities, pattern of sectoral employment, movement in real wage rates and the general failure to provide gainful employment opportunities to all types of labour have created conditions under which the growth process has not been sufficiently pro-poor to create significant impact on poverty situation in the country.

More importantly, growth of nonfarm sector does not seem to have led to any increase in the level of per capita rural non-farm income [Mahmud (1996)]. The evidence suggests that increasing landlessness in rural areas has largely pushed the rural labour force out of agriculture into low productivity self-employment activities in the nonfarm sector. In the event that nonfarm employment is a supplement to farm employment, even a low return from participation in nonfarm sector contributes to enhanced household income and consequent increase in the welfare of labour households. However, if nonfarm employment is the only source of income of informal sector participants, which has largely been the case in Bangladesh, then expansion of informal sector dominated by traditional low productive activities provides subsistence to the participants without much improvement in the overall poverty scenario. The informal sector in the country reveals wide variations in productivity levels among different activities with low productivity of the dominant part of the sector. In effect, nonfarm sector in Bangladesh has emerged largely as a source of 'distress employment' for the poor. Enhancing the poverty alleviating role of the informal sector requires promotion of activities that are technologically efficient, economically productive and can respond to market demand.

Developments in Food Sector and Poverty Implications

To reduce poverty in Bangladesh, it is crucial to develop rural areas where most of the poor people live.[26] The development of the rural economy requires growth of agriculture and nonfarm sectors, improved coverage and quality of social services, improvements in rural institutions and expansion of rural infrastructure. The base of rural growth, however, rests with agriculture in which food sector plays the dominant role in the country. The performance of food sector, and agriculture sector in general, has been influenced by past policy reforms—both macroeconomic and sector-specific. The reforms in trade and exchange rate regimes had significant implications on agriculture sector along with changes in policies relating to markets for agricultural inputs e.g. HYV seeds, fertiliser, irrigation and pricing of agricultural products.

The incentive structures within agriculture, and between agriculture and nonagricultural sectors, have changed significantly over the years. Prior to liberalisation of trade and exchange rate regimes, the macro-policy framework lowered the protection to agricultural commodities creating implicit taxation on the

[26]According to 1995-96 Household Expenditure Survey, nearly 82 percent of the poor live in rural areas. See BBS (1998).

agriculture sector [Mujeri *et al.* (1993); Rahman (1993)]. With introduction of macroeconomic reforms and structural adjustment programmes, anti-agriculture bias has been reduced. In particular, the trade and exchange rate policy for the major crop, rice, is now considered largely neutral in determining domestic prices [Shahabuddin and Rahman (1998)]. The available evidence indicates that policy changes in agriculture have created positive impact: reforms in input market contributed to increased production, prices of irrigation equipment and other inputs declined, and the ownership of irrigation equipment increased for all categories of farms with no clear evidence of adverse distributional consequences [Ahmed (1995); Shahabuddin and Zohir (1995); Hossain (1996)].

Market oriented reforms and dismantling of various forms of state intervention along with reduced regulation and trade and price liberalisation also led to an increase in agricultural growth. The post reform period witnessed changes in real exchange rates, increased real GDP growth rate, decline in real agricultural prices, and rise in agricultural output and productivity (Table 9). The rural poor, a large majority of whom are small agricultural producers, have benefited directly from these reforms.

Table 9

Impact of Reforms on Agriculture

	(Percentage Change)
Agricultural Output	36.3
Real GDP Growth Rate	34.2
Agricultural Productivity Growth	15.7
Real Effective Exchange Rate	23.2
Real Agricultural Prices	–2.9

Source: Author's calculations.

Note: The percentage change refers to five-year post reform period (1993-94–1997-98) compared with five-year pre-reform period (1981-82–1985-86). Agricultural productivity refers to crop value added per unit of land at constant prices. Real agricultural prices refer to index of wholesale price of agricultural products adjusted by GDP deflator. A positive changes in real effective exchange rate indicates depreciation.

An important point to note in the context of Bangladesh agriculture is that the growth of agricultural output has barely kept pace with growth of population. The result has been a stagnation in per capita output which is revealed by the following alternative indices computed for the period 1981–2000:

$$ln\ PCFP = 4.525 + 0.0026\ T \quad R^2 = 0.097 \quad \ldots \quad \ldots \quad \ldots \quad (1)$$
$$(1.39)$$

$$ln\ PCVA = 4.562 + 0.0030\ T \quad R^2 = 0.214 \quad \ldots \quad \ldots \quad \ldots \quad (2)$$
$$(2.22)$$

$$ln\ PCAP = 4.516 + 0.0060\ T \quad R^2 = 0.567 \quad \ldots \quad \ldots \quad \ldots \quad (3)$$
$$(4.85)$$

where *PCFP* = index of per capita food production, *PCVA* = index of per capita value added in agriculture, *PCAP* = index of per capita agricultural production, *T* = time trend, and the terms in parentheses refer to *t* values. The stagnation is particularly evident in per capita food production and value added which parallels the observed lack of any significant improvement in the incidence of poverty, particularly in rural areas.

Real Consumption, Food Prices and Poverty

An important question relating to poverty in Bangladesh is: How do changes in real consumption and food prices affect the poor? While the poor are adversely affected by higher food prices in the short run, the longer term impact depends on adjustments in the economy resulting from higher prices e.g. linkage of wages to food prices and response of agricultural investment to intersectoral movement in terms of trade. For instance, if higher food prices lead to increased investment in food production and enhanced wages for agricultural labour, the poor could be better off despite higher prices.

The recent trends indicate that the relative price of food in rural areas has marginally declined since 1986-87 while, in urban areas, there has been an increase in the relative price (Table 10). The impact of changes in relative food prices on poverty should, however, be seen in terms of changing consumption patterns in rural and urban areas (Table 11). Since the 1980s, two major changes may be noted: shift in consumption pattern from cereals to noncereals within food and from food to nonfood. The above trends are stronger in urban areas. The proportion of expenditure on food declined from 67 percent in 1983-84 to 62 percent in 1995-96 in rural areas while the decline was much rapid in urban areas: from 57 percent to 46 percent. Similarly, the share of cereals declined during the period—from 38 percent to 30 percent in rural areas and from 26 percent to 14 percent in urban areas. However, in case of quantity of consumption of cereals, per capita intake increased in both rural and urban areas. One may also note large differences in food intake between the poor and the nonpoor in both rural and urban areas compared to minimum balanced nutritional requirements [Mujeri (2000)].

In case of rice, the actual intake of the poor and the non-poor in both rural and urban areas exceeds the minimum requirements for a balanced diet. Two contrasting trends in rice consumption may, however, be noted. First, in rural areas per capita consumption of rice is higher for both the poor and the nonpoor than these groups in urban areas and the consumption of rice is likely to increase as people move out of poverty in rural areas—the average rice consumption of the nonpoor is nearly 20 percent higher than the poor in rural areas. Second, food consumption pattern is less rice-intensive in urban areas for both the poor and the non-poor. Hence the trend of

Table 10

Trends in Relative Food Price in Rural and Urban Areas

(Percent)

	1986-87	1991-92	1995-96	1996-97	1998-99
Measure 1					
Rural	101.3	100.1	99.0	97.9	100.2
Urban	101.1	100.5	101.2	100.1	104.8
Measure 2					
Rural	103.9	100.2	97.1	94.1	101.2
Urban	102.5	101.1	102.9	100.1	111.9

Source: Bangladesh Bureau of Statistics.

Note: Measure 1 gives the ratio of value of food component of consumer price index to value of consumer price index itself whereas Measure 2 provides the ratio of values of food component to nonfood component of the index. The rural and urban relative food prices are based on all rural and all urban consumer price indexes with 1985-86 as the base.

Table 11

Distribution of Monthly Per Capita Consumption Expenditure

(Percent)

	Rural			Urban		
	1983-84	1991-92	1995-96	1983-84	1991-92	1995-96
Food	66.7	69.2	62.4	56.7	56.1	46.3
Of which:						
Cereals	38.0	35.9	29.8	25.6	21.7	14.4
Noncereals	28.7	33.3	32.6	31.1	34.4	31.9
Nonfood	33.3	30.8	37.6	43.3	43.9	53.7
Total	100	100	100	100	100	100

Source: *Household Expenditure Survey* (Various Issues).

accelerated pace of urbanisation in the country is likely to have a moderating impact in total rice consumption. The actual intake of several items e.g. pulses, edible oils, fruits, meat and poultry (which are rich in protein and provide balanced nutrition) is, however, much lower than minimum requirements. The intake is worse for the poor in both rural and urban areas. This suggests the need of the agricultural production system to adjust to the pattern of demand which requires substantial diversification into non-rice crops.

With respect to changes in food prices, households who are net purchasers of food are likely to be affected. The urban households are usually net purchasers but a substantial percentage of rural households also belongs to the category. There exist no direct statistics on the number of net producer or consumer households in rural areas, but some anecdotal evidence can be presented. According to the 1996 Agricultural Census, 29 percent of rural households either do not own homestead land or own

homestead land but no cultivated land. These households are, therefore, net purchasers of food. Moreover, farm households with inadequate land are also dependent on the market for meeting their food requirements. A lower bound of nearly 87 percent of the rural households, consisting of non-farm and small farming households, can be taken as net purchasers of food among all rural households (Table 12). Even some of the medium farmers who have small marketable surplus may be affected by changes in food prices since they typically sell the surplus after harvest when prices are low and purchase food during the lean season when prices are high. It is evident, therefore, that the vast majority of the households in the country are net purchasers of food and adverse price fluctuations affect the poverty status of the resource-poor households.

Table 12

Distribution of Rural Households by Land Status

Land Status	Number (Million)	Percent	Operated Area/ Household (Acre)
Non-farm Households	6.03	33.8	0.09
Small Farm Holdings	9.42	52.8	0.87
Medium Farm Holdings	2.08	11.7	3.99
Large Farm Holdings	0.30	1.7	11.61
Total	17.83	100	1.15

Source: BBS, 1996 Agricultural Census.

Note: Non-farm households include households with no operated area and with cultivated area not exceeding 0.05 acres. Small, medium and large farm holdings are defined as those having 0.05 to 2.49 acre, 2.50 to 7.49 acre and more than 7.50 acres of land respectively.

4. POLICY PRIORITIES FOR POVERTY-ALLEVIATING GROWTH IN BANGLADESH

When poverty alleviation is the overarching goal and the central approach to development, public policy can influence poverty by interactions through several channels. The pursuit of a policy agenda that accelerates pro-poor economic growth can enhance income of the poor with direct impact on income poverty. Public expenditure on social sectors has a direct bearing on human poverty by raising capability of the poor through education, health, nutrition and other interventions. Public spending on social security, particularly targeted to the vulnerable poor, helps in mitigating the severity of poverty and in reducing vulnerability and social exclusion.[27] Social sector investments play an important role in the process through accelerating growth and enhancing the capability and productivity of the poor.

[27]Social security is conceived within a broader framework to include empowerment and participation. In addition to safety-nets to address severe consumption deprivation through public employment and income transfer schemes, social security connotes various risk-insurance mechanisms to address non-income dimensions of poverty.

The pro-poor policy agenda, emphasised in Bangladesh, seeks to accelerate economic growth, enforce higher investments in social sectors and basic services, enhance the poor's crisis-coping capacity and build up their asset base, and promote targeted programmes. The policy framework identifies several key elements to help create the synergy necessary for faster poverty reduction in the country:

Rapid Pro-poor Economic Growth

The Government's key concern is to accelerate economic growth through adopting growth-enhancing public policies and providing policy and institutional support to ensure an enabling environment for private sector-led development. The policies for pro-poor growth emphasise rapid agricultural and rural growth.[28] The thrust is on harnessing existing opportunities and creating new opportunities by disseminating new technologies, providing support services, creating linkages and ensuring policy and organisational support. The policies aim to supplement the market with the Government's pro-active role in selected areas e.g. research, extension, access to credit and support services, agricultural diversification, and exploiting growth potential of the non-farm sector. For creating sustainable links and ensuring productivity growth, infrastructure package emphasises three critical elements: roads, power and telecommunications.

The performance of agriculture points the need to reconsider the strategies in view of emerging developments in the agriculture sector. The policy reforms in the past have created positive impact and contributed to increased production. The reform agenda, however, has fallen short of targets due to several factors e.g. lack of social consensus, incomplete and selective implementation, backsliding of the reform process, inadequate design and sequencing of reforms, emphasis on achieving quantitative targets without facilitating institutional reforms, and politiciSing of the reform agenda. Sustained improvements in agriculture require the Government to pursue pragmatic reforms and adopt a set of clearly defined criteria, based on priorities of agricultural development and sound economic rationale for public sector involvement, for allocating public resources and mobilising private initiatives. While the past focus of policies on cereals (e.g. rice) has paid large dividends, it is unlikely to provide a sustainable engine of agricultural growth in future. The emphasis in agricultural policy needs to incorporate noncereal crops and noncrop agriculture for ensuring growth of an integrated and dynamic agriculture.

[28]There, however, exist considerable differences in understanding of what pro-poor growth actually is or how to promote it. Pro-poor growth may be interpreted as increasing the poor's share in national income with growth but the operational implications and measures needed to bring it are subject to various interpretations e.g. microcredit and microenterprises to enhance the poor's productivity, enabling environment with macroeconomic efficiency, better regulation and competition, transparency and accountability, small and medium enterprises, agriculture and rural development.

Active Social Policies

The social policies aim at increasing human development of the poor. The focus of social development is on provision of education and skills, health and nutrition, housing, water supply and sanitation, and other basic services. The policies emphasise the provision of basic education, integrated health care, and nutrition—support package for the poor. Effective delivery of efficient and quality services is stressed with institutional capacity to reach the poor.

Strengthening Social Welfare

The social welfare network and the programmes of the Government seek to assist the poor in enhancing their crisis-coping capacity by skill acquisition, local capacity building, access to resources and markets, and increased networking capacity to overcome social exclusion and cope better with risks of income erosion. The provision of credit, health and nutrition services, and efforts to strengthen disaster preparedness, prevention and mitigation measures are considered important elements to improve the risk-insurance mechanisms of the poor. The food assisted and other safety nets programmes form the pillars in ensuring food security along with human development of the vulnerable poor and disadvantaged groups.

Institutional Restructuring and Reforms

The empowerment at the grassroots level and participation of the poor are considered necessary requisites to involve the poor in development. The reforms in legal, institutional and administrative framework aim to ensure good governance and human rights. The objective of decentralisation and development of local level institutions is to create demand-driven receiving mechanisms of the poor to build their human, social, economic and political resource base.

In order to ensure sustained poverty alleviation, the rate of reduction of income poverty needs to be substantially increased in Bangladesh. This requires much better use, compared with the past, of available anti-poverty instruments e.g. accelerated growth, human development and more effective use of microcredit and targeted programmes. Given the slow rate of reduction of poverty that persists in Bangladesh, the challenge is to bring a definite break and move beyond the current paradigm of disproportionate reliance on micro-level interventions and create conditions under which ‘macro-failures’ can be avoided.

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