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Bangladesh: Economic Reform Measures and the Poor

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Abstract

This paper assesses the impact on the poor of the economic reforms undertaken in Bangladesh under Fund-supported structural adjustment programs. It finds that program-induced changes in production, employment, and incomes have benefitted the poor, while the adverse impact of program-induced price changes has been modest. However, as adjustment efforts are intensified under the current structural adjustment program, more pronounced short-term adverse effects might arise, requiring compensatory measures. The paper reviews special assistance programs for the poor, including those designed to mitigate the potential adverse effects of adjustment, noting that improved targeting would yield sizable fiscal savings that could be used for strengthening social programs.

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Summary

The Government of Bangladesh has addressed the difficult challenge of poverty reduction mainly by promoting economic growth through the policies undertaken in its adjustment programs. Since the trickle-down impact may not reach the poor in the short run and may altogether bypass the most vulnerable groups, the Government has also put in place targeted programs to assist such groups. The massive numbers of poor people and the shortage of budgetary resources have, however, constrained the scope of these efforts.

This paper assesses the impact on the poor of the economic reforms implemented under Fund-supported structural adjustment programs. It finds that structural measures have had a beneficial impact on the production, employment, and incomes of the poor, while the adverse impact of program-induced price changes has been modest. Nevertheless, as adjustment efforts are intensified under the ongoing program supported by the Fund's enhanced structural adjustment facility (ESAF), more pronounced short-term adverse effects might arise, requiring compensatory measures.

The paper also reviews special assistance programs for the poor, noting that improved targeting would yield sizable fiscal savings that could be used to augment these and other social programs.

The analysis concludes that the basic thrust of the Government's strategy of poverty reduction is appropriate. Given the past emphasis on ensuring national food security, the Government is now correctly turning its attention to improving the income-earning capacity of the poor by focusing on human resource development. Measures are likely to be needed, however, to compensate for the potential adverse effects of certain relative price changes under the ESAF program. It will also be important to continue to strive for improved efficiency of targeted programs, with a greater role provided to nongovernmental organizations.



## 1. Introduction

The elimination of pervasive poverty is the most difficult challenge facing the Government's development efforts. With limited natural resources, high population density, and subject to frequent natural disasters, the challenge is of exceptional dimensions. Poverty in Bangladesh manifests itself in many forms: rapid population growth, low per capita income, landlessness in rural areas, overcrowding in urban areas, widespread unemployment, and inadequate social services (Table 1). The latest household expenditure survey indicates that more than 50 million people, or half the population, consume less than the internationally standardized minimum daily requirement of 2,200 calories; of those, 22 million people consume less than 1,800 calories daily (Table 2). The poorest and most vulnerable groups include small food and cash crop farmers, landless rural laborers and workers in the urban informal sector. Health care, nutrition, and education standards are especially low among women and children. The income-generating capacity of most poor people is limited by their lack of skills, assets, savings, and recourse to credit.

The programs under the Structural Adjustment Facility (SAF) (1986/87-1988/89) and Enhanced Structural Adjustment Facility (ESAF) (1990/91-1992/93) reflect the Government's emphasis on addressing poverty reduction mainly through promoting sustained economic growth. Private investment is being encouraged through the easing of controls, financial reform, and exchange and trade liberalization to help promote labor-intensive agricultural, industrial, and export production and to diversify the economy. Public investment is being facilitated by augmenting domestic revenues, containing government consumption and improving project implementation. In addition to building infrastructure and supporting private sector development, investment is being directed toward strengthening social programs. Measures to reduce inflation are intended to protect the purchasing power of low-income groups who earn mostly fixed incomes.

The potential impact of a growth-oriented approach to poverty reduction can be illustrated by reference to the crossover time, which is defined as the time it would take, in the absence of income redistribution policies, for the average poor person to cross the poverty line if his income grew at the national average per capita rate. <sup>1/</sup> If real per capita income were to continue to grow at the meager 1 percent annual rate recorded in the last decade (3 1/2-4 percent real income growth less 2 1/2-3 percent population growth), the crossover time would be 40 years. If per capita income were to attain the higher 2 1/2 percent annual rate envisaged under the SAF and ESAF

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<sup>1/</sup> See Ravi Kanbur, "Measurement and Alleviation of Poverty: With an Application to the Effects of Macroeconomic Adjustment," Staff Papers, International Monetary Fund (Washington, D.C.), Vol. 34 (March 1987), pp. 60-85.

programs (4 1/2-5 percent real income growth and 2-2 1/2 percent population growth), the crossover time would decline to 16 years. 1/

During the SAF arrangement, growth and investment objectives were not realized because of the disruptions caused by severe floods as well as slippages in the implementation of structural reform (Table 3). Real GDP growth averaged only 3 percent, inflation remained at 10 percent, and per capita income did not increase in real terms. However, the SAF program was successful in expanding the tradeable goods sector, which created employment, and in reforming the agriculture sector, which laid the basis for the subsequent recovery of production and the improved availability of food. The ESAF program maintains the objectives of raising investment and reducing inflation, with a view to achieving 5 percent real GDP growth. Higher incomes and profits resulting from higher investment are expected to permit a rise in per capita consumption while generating increased private savings. A more open and competitive economy, resulting from agricultural, financial, and exchange and trade liberalization, is expected to strengthen production incentives and create employment opportunities.

The adverse impact of relative price changes on the poor during the adjustment process is expected to be less than in many other developing countries. The price distortions in Bangladesh are not severe, and this has not only reduced the need for sizable adjustment, but has also allowed the pace of adjustment to be gradual. Moreover, because of shortfalls in policy implementation under the SAF program, several measures that would have affected relative prices were not undertaken. While price changes will play a bigger role under the ESAF program, their impact on the income of the poor is still expected to be limited.

There are, however, likely to be some adverse effects of adjustment on the poor in the short run, arising primarily from increases in public pricing, lower subsidies, public enterprise rationalization and the deregulation of private sector activity. The Government has put in place compensatory and targeted programs to mitigate these negative effects, although the massive numbers of poor people and the shortage of budgetary resources constrain the scope of these efforts. While improved food availability remains the focus of targeted action under the SAF and ESAF programs, efforts are being made to reduce the constraints that impeded the development of a comprehensive social safety net in the past.

The Government's policies have been effective in improving food security over the years. The Public Food Distribution System (PFDS) has been the primary means of support to low income families. The availability of foodgrains has been greatly enhanced through aid-financed imports, open market operations to stabilize prices, and improved marketing, transport,

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1/ Crossover time  $T = \{\ln(z/y_p)\} / \{\ln(1+g)\}$ , where  $z$  is the poverty threshold income level,  $y_p$  the mean income of the poor, and  $g$  is the annual per capita growth rate in real terms.

and storage facilities. Food security has been facilitated by appropriate agricultural policies, including incentive procurement pricing, which have brought about gains in productivity and near self-sufficiency in production. Policies under the ESAF program are increasingly aimed at greater efficiency and equity in targeted food distribution programs, and further improvements in agricultural productivity. The consequent reduction in the cost of food operations is designed to help release budgetary resources for other social programs.

The World Bank, other donors, and nongovernmental organizations (NGOs) have assisted the Government's poverty alleviation efforts. The Bank's lending operations have supported health and family planning, emphasizing maternal and child health care, and primary education, including better access for girls and vocational and technical education. In recent comprehensive reports, the Bank has examined the poverty impact of the public expenditure program and the social and economic situation of women. The United States and other bilateral donors have helped to improve food availability. Canada, Netherlands, and the Scandinavian countries have directed their aid programs increasingly toward the social sectors.

This paper seeks to assess the impact on the poor of the adjustment measures taken under the SAF program and those envisaged under the ESAF program. Starting with an introductory poverty profile, the paper first focuses on the changes in the key relative prices and then examines the impact of program-induced changes in production, incomes, and employment. Finally, the paper reviews programs that are specifically targeted for the poor, including those designed to mitigate the possible adverse effects of adjustment. The role of NGOs in providing direct assistance to the poor is examined in this context. The analysis is supported where possible by quantitative assessment, although this is limited by data deficiencies.

## II. Profile of Poverty

### 1. Poor groups

The most recent estimates of poverty in Bangladesh, based on the 1985/86 household expenditure survey, indicate that 51 million people were below the poverty line, defined as 2,200 cal/day/person or a monthly income below Tk 2,000 necessary for this level of consumption. This group is made up of 44 million people in rural areas and 7 million in urban areas, representing 51 percent of the rural population, and 56 percent of the urban population, respectively. Within this group, 22 percent of the rural population and 19 percent of the urban population may be regarded as the ultra poor, namely, households whose consumption is 1,800 cal/day/person or whose monthly income is below Tk 1,500. Although the ultra or hard core poor are sometimes used as the target groups for poverty programs, it should be noted that, given the depth and intensity of the poverty problem in Bangladesh, the segments of the other poor groups are almost as seriously deprived as the ultra poor. This view is supported by the pattern of income

distribution in Bangladesh which is not as skewed as in most other developing countries, and reflects more a generally low resource endowment than the absence of inequality.

## 2. Sources of income

In a predominantly agrarian economy such as Bangladesh, ownership of land is the main determinant of rural incomes. However, as a result of growing population pressure on cultivable land and the application of local (religious) inheritance laws, holdings are typically very small and excessively fragmented. Available data show that landlessness (represented by households with less than 0.5 acres of land) increased from 35 percent to 45 percent of total rural households between 1960 and 1984, and this trend is estimated to be continuing. The small size and fragmentation of holdings make them increasingly nonviable by reducing labor productivity, making labor management difficult, and constraining private investment in irrigation equipment and mechanization.

The rural poor are comprised mainly of landless agricultural labor who work on jute, rice, and wheat farms and the marginal farmers who produce barely enough for their subsistence. Given the large surplus of agricultural labor and the uncertainty of finding wage employment, marginal farmers prefer to rent land from larger landowners, by sharecropping, to make their farming activities viable, rather than to sell their meager land and join the labor market. Small farmers engaged in food crop and jute production or in raising poultry and other livestock constitute another class of the poor. Still another segment consists of those employed in unskilled jobs and in nonagricultural, frequently informal, activities, such as cottage industries or small-scale trading.

The 1985/86 household expenditure survey shows that 50 percent of the earnings of the lowest 20 percent of total rural households, the ultra poor, are derived from wages and salaries (Table 4). These largely represent the earnings of the landless rural laborers noted above and marginal farmers. About 22 percent of the income of the rural ultra poor is accounted for by agricultural income, mostly earnings of small farmers. Another 10 percent is made up of earnings from small-scale business and commerce. The survey also shows that 3 percent of income of the ultra poor is made up of gifts and assistance. This figure probably includes only cash transfers, and even then appears to be an underestimate. The table also shows that in the next higher 30 percent of households, the share of wages and salaries decreases to under 40 percent of total income, while the share of agricultural and business income increases, reflecting the larger numbers of small and medium farmers and small traders in this group.

As for the urban poor, their numbers have been growing as a result of increasing migration from rural areas. Here again, the poor possess very limited income earning assets, and rates of unemployment are high. In the informal sector, which accounts for the bulk of the urban poor, the main sources of livelihood are a variety of minor trading and service activities.

About 50 percent of the incomes of the urban poor is derived from wages and salaries, and another 20 percent from small-scale business activities.

It is also useful to make some indicative estimates of the sectoral sources of income of the poor. Among the rural poor, some 80 percent of income is likely to be derived from agriculture, of which 50 percent comes from ownership of, or wages earned from, rice farms and 25 percent from jute cultivation. Another 10 percent of income is derived from industry and the remainder from services. Among the urban poor, an estimated 70 percent of income is derived from industry. About 40-50 percent of this comes from export-oriented, labor-intensive manufacturing production such as that of garments, jute products, leather goods and hides, and about 15 percent from construction. The bulk of the remaining 30 percent of urban incomes comes from the service sector.

### 3. Expenditure pattern

The poor spend a relatively higher proportion of their income on food, compared with the total population. This is reflected in the 70 percent share of food and beverages in total expenditure (Table 5). Further, the major share (50 percent) of food expenditure is on foodgrains. This would be much higher were it not for the consumption of on-farm production (in rural areas) and the availability of targeted food programs. The balance of 30 percent of the expenditure of the poor is accounted for mainly by fuel and lighting (around 12 percent), comprised mainly of firewood (6 percent) and kerosene (4 percent); 6 percent each on housing and rent and clothing and footwear; and about 1 percent each on medical care and transportation. While urban and rural expenditure patterns are broadly similar, the urban poor spend slightly more on electricity, transportation, and some food items owing in part to their better access to most goods and services.

### III. Program-Induced Changes in Relative Prices and Their Impact on the Poor

The main relative price changes resulting from the Fund-supported programs are adjustments in ration prices for foodgrains, excise taxes, and public enterprise prices for energy and transportation. The direct impact of these changes on the poor varies, depending on the relative importance of the affected items in their consumption. The first-round impact of the measures can be assessed by reviewing the implications for the purchasing power of the poorer groups. The estimated impact of program-induced relative price changes is a 3 percent income loss in 1986/87-1989/90 and a 4 1/2 percent to 5 1/2 percent income loss in 1990/91 (Table 6). Price changes resulting from exchange rate action are not discussed in this section, although the beneficial impact on output and incomes that followed from the adjustments undertaken in the year preceding the SAF program is discussed in the next section.

## 1. Increases in foodgrain prices

An important objective of the Government's food policy under the structural adjustment programs has been to reduce food subsidies and the budgetary cost of food management operations, partly through increases in ration food prices. Although the availability and cost of food has a major influence on the standard of living of the poor, the impact of changes in ration food prices alone on their income has been limited and is likely to remain so in the future. This is because the poor receive only 20 percent of their foodgrain consumption from the public food distribution system. Out of the 8 million tons of foodgrains consumed by the poor, only 1.5 million tons are obtained through the public system (Table 7). The major share, 4.5 million tons, of their consumption is obtained from their own farm production, while the remaining 2 million tons are purchased from the private market. The urban poor receive a larger share of the food distributed by the public system and also depend more on the private market than the rural poor.

Within the poor groups, the ultra poor receive the bulk of the 1.5 million tons distributed by the public system--for simplicity of exposition it is assumed here that they receive all of it--which represents about half of their total consumption of foodgrains. About 60 percent of the 1.5 million tons is made available to them under the nonmonetized channels of the system as food wages paid for work rendered under the Food for Work and Vulnerable Group Development programs, which are discussed further below. Thus, the increase in ration prices undertaken in the adjustment programs applies to only 0.6 million tons or 20 percent of the food consumed by the ultra poor.

Average ration prices for rice and wheat were both raised by only 6 percent annually during the SAF program, well below the rate of inflation. Assuming that a third of the total poor's income is affected by these increases, the income of poor households would be reduced by about 2 percent annually. Under the first-year ESAF program, ration prices were raised by an average of 7 percent in July 1990. In order to improve the targeting of subsidies, prices were increased by 5 percent for distribution channels available to poorer groups and by 16 percent for channels available to the relatively well-off groups. The 5 percent increase in ration prices would reduce the income of poor households by less than 2 percent.

Although the ration price increases of recent years sought to reduce budgetary food subsidies, the latter increased considerably in 1988/89 and 1989/90 as higher international prices were not passed through to the consumers. While the poor benefitted to this extent, they would have been better off had the ration prices on those channels available to the nonpoor been raised in step with world price increases and the resulting budgetary savings applied toward programs for the poor. The differentiated ration price increase in 1990/91, coupled with a cutback in commercial food imports, will permit a substantial reduction in budgetary food subsidies, from 0.8 percent of GDP in 1989/90 to 0.6 percent in this year.

## 2. Increases in administered prices

The rationalization of public enterprises under the adjustment programs has led to increases in prices of several public goods and services, some of which imply higher consumption costs for the poor. This impact was limited during the SAF program because some planned price increases were not implemented, and those that had been carried out accounted for only a small share in the consumption of the poor. During the SAF program, administered prices were increased for electricity (20 percent), natural gas (35 percent for household consumers), and transportation (10 percent). Gas and electricity prices were further increased by 16 percent and 8 percent, respectively, in 1989/90. However, the impact on the income of the poor during this four-year period is estimated at only 0.4 percent annually for changes in transport fares and energy prices.

The Government is raising prices more aggressively during the ESAF period to strengthen public enterprise finances. Increases that have already been implemented include natural gas (15 percent), electricity (6-17 percent), railway fares (15 percent), and petroleum products (85 percent). However, even increased prices for energy products of this magnitude have limited impact on the rural poor, except for kerosene, although the impact of increases in transportation costs is somewhat higher for the urban poor. In the case of kerosene, prices have been raised by 92 percent, largely reversing its previous cross-subsidization against other petroleum products, which the authorities believed had encouraged smuggling across the land borders. This price increase will cause a reduction of 2 1/2 percent in the real income of the poor. However, this effect is likely to be less given that the poor would substitute less expensive firewood for kerosene.

## 3. Increases in excises

The SAF and ESAF programs include, as part of the revenue mobilization effort, increases in excise taxes for sugar, tobacco, natural gas, and certain services, which result in higher prices. Such effects are not substantial for the poor since these goods together account for less than 10 percent of their consumption. During the SAF program, price increases on these items are estimated to have reduced the income of the poor by less than 1 percent annually. Further, the Government usually attempts to levy excises mainly on goods and services largely consumed by the better off groups, including bank transactions, telephone services, and luxury consumer goods. In order to assist the poor, proposals in the original 1990/91 budget for higher excise duties on kerosene, which represents an estimated 4 percent of their total consumption expenditure, were subsequently withdrawn.

## 4. Wage developments

Statistics of wage developments during the SAF period are not available. In the public sector, as in the past, changes in wage rates were

primarily related to changes in the cost of living. These higher wage rates were also paid by the public enterprises which enabled jute sector employees to maintain their real wages despite the implications for the financial position of the industry. In the private sector, the limited information that is available suggests that larger firms with unionized work forces tended to match the increases paid in the public sector. However, new jobs that were created in the export oriented industry, especially garments, paid lower wage rates.

With the modest rates of growth of real GDP during this period, a large proportion of the urban labor force continued to be paid at rates that were barely adequate to meet basic needs. As for the rural poor, agricultural real wage rates are estimated to have declined during the SAF period partly owing to the adverse impact of the floods, but are likely to have revived in 1989/90 and 1990/91 in step with the strong recovery in agricultural output. The ESAF program is intended to generate improvements in real wages for the poor, both by increasing productivity and demand in the agricultural and labor-intensive export sectors that employ them, as well as by reducing the overall rate of inflation. An assessment of the overall impact of the adjustment program on the poor needs to take into account the loss of real income owing to price changes as well as the trends in real wages that are discussed above. However, given data limitations and the complexity of such an exercise, a quantitative assessment is not feasible at this stage.

#### IV. Implications of Structural Measures for the Production, Employment and Incomes of the Poor

In contrast to the limited adverse effects of relative price changes, program-induced changes in production, incomes and employment are substantially benefiting the poor. Under the SAF program, such effects were most evident in the impetus given to agricultural output and the diversification of export production. The implementation of measures under the ESAF program is expected to increase incomes and employment opportunities in both agriculture and industry.

##### 1. Agricultural policies

The agricultural policies in the SAF and ESAF programs have sought to raise foodgrain output. The Government has taken measures to increase the role of the private sector in the distribution of inputs, including the liberalization of the fertilizer market and irrigation equipment imports, to strengthen research and extension services, and to extend the provision of rural credit. The crop replanting and intensification program launched in the aftermath of the floods included free distribution of fertilizer and seeds to small farmers, and assistance with procurement and repair of minor irrigation equipment. These policies benefit the poor by increasing food security, strengthening incomes and generating employment opportunities. The productivity of small farmers is enhanced by their improved access to

irrigation equipment and support services. As a result of the higher level of activity, additional jobs become available for farm laborers and sharecroppers. In addition, landless rural workers and the urban poor gain from the resulting moderation of retail foodgrain prices.

Improvements in the public food distribution system have had a beneficial impact on farmers' incentives, production decisions, and poverty alleviation. A key objective has been greater stability of market prices, which has been achieved partly through foodgrain imports and greater recourse to open market operations in foodgrains. The system has provided improved incentives for domestic producers through average increases in foodgrain prices of about 7 percent during the last four years. These policies have helped maintain prices paid by private traders. Beneficiaries have included the small farmers who market about 2 million tons of foodgrain annually.

Agricultural reform will continue to be stressed in the ESAF period. Planned measures aim at an increased share of agriculture in public development spending, flexible pricing and a greater private sector role in distribution of inputs, improved extension services and research, and financial support for marginal farmers and landless groups. Public sector food procurement and distribution operations will be further improved to sustain market prices at economic levels, especially in years of strong harvests, and realistic support prices, to be enforced through effective and timely domestic procurement, will be introduced for farmers. However, a political consensus has not emerged for the implementation of land reform that could have potentially far-reaching implications for poverty alleviation.

## 2. Domestic revenue mobilization

Extensive tax reform measures planned under the SAF and ESAF programs, including the introduction of the value-added tax, aim to improve the structure and elasticity of the tax system. These measures will strengthen economic efficiency and provide the additional resources needed to utilize available project aid, with potentially favorable consequences for output and employment. A major objective of the reforms is to remove impediments to higher private sector output, such as the current bias against export production. It is expected that, with the proposed changes, fiscal incentives for private investors, including tax holidays, could be reduced. This would benefit the poor by promoting employment opportunities in more labor-intensive forms of production.

The poor are not likely to suffer much adverse impact from the tax reform. The total tax burden of the poor is estimated at only 4 percent of their household income (Table 3). The poor do not pay income taxes as incomes below Tk 2,000 per month are tax-exempt. Indirect taxes, which account for 65 percent of total revenues, are levied mainly on commodities that have a substantial import content, and, in most cases, are not consumed by the poor. The introduction of the value-added tax in 1991, to replace a

number of sales and excise taxes in a revenue neutral manner, will broaden the tax base but any additional costs to the poor in the short term will likely be more than offset in the longer run by the additional employment opportunities expected to result from the removal of distortions associated with existing consumption taxes.

### 3. Public expenditure policies

The public expenditure policies in the SAF and ESAF programs support poverty alleviation efforts by raising the allocations for human resource development, welfare, and agriculture and water resource management. The poorer groups will also benefit from the flood control program which will promote better early warning systems, medical services and food security in the event of future disasters. However, expenditure on social programs remained limited during the SAF period (Tables 9 and 10). Current and development spending was limited to 2 percent of GDP for education, 1 percent of GDP for health and population control, and 0.5 percent of GDP for relief and welfare. Moreover, the effectiveness of already underfunded social programs was further constrained by poor targeting and other infrastructural deficiencies.

A number of the problems encountered in the SAF period are now being addressed. A careful prioritization of development expenditures is being undertaken to ensure that available resources are concentrated on the highest priority projects, including poverty-oriented programs. In cooperation with the donor community, the Government will fully fund programs for the expansion of primary education and health and family planning services. The allocation for human resource development in the 1990/91 budget has been increased to 20 percent of total development spending, almost double its share in the final year of the SAF program, while its share in current expenditure has been maintained. Additional expenditure on agriculture and water resource development should help create additional jobs for the poor in rural areas.

### 4. Public enterprise reform

The SAF and ESAF programs include measures to reduce the financial losses of public enterprises by cutting labor and other costs, tightening financial control, and improving profitability. Only limited progress was made under the SAF program in these areas but efforts will be intensified under the ESAF program. The proposed reforms of jute and industrial enterprises, in particular, emphasize employment rationalization, the closing of uneconomic units, privatization, and increased competition from the private sector. The most important of these actions, which relates to the public sector jute mills, could reduce employment by one third or 30,000 people, equivalent to 5 percent of the total public sector work force. To mitigate such consequences, the Government is examining the option of using part of the resulting budgetary savings to provide unemployment compensation and retraining to displaced employees.

5. Financial reform, and exchange rate and trade liberalization

The financial reform and exchange rate and trade liberalization policies incorporated in the SAF and ESAF programs are expected to generate additional employment opportunities, especially in export-oriented and import substitution activities. During the SAF period, improved competitiveness that was assisted by earlier exchange rate depreciation, which amounted to 18 percent in 1985-86, promoted rapid growth in the ready-made garments industry. The expansion of this industry is estimated to have created employment for some 250,000 persons, mainly previously unemployed women. The ESAF program continues the emphasis on strengthening the export base in labor-intensive goods, primarily through tight financial policies and structural reforms. There is potential for export of electronics, toys, luggage and leather products, which are the areas targeted by government policies. The projected 8 percent average rate of export volume growth over the ESAF period is expected to generate 350,000 additional jobs. These gains can help offset the employment losses resulting from public enterprise, import and tariff reforms.

V. Targeted Programs and NGOs

Targeted programs reflect the priority assigned to ensuring food availability to the poor, while reducing budgetary food subsidies primarily by withdrawing benefits available to the relatively better off nonpoor, largely urban population (Table 11). During the SAF period, the targeted programs--the Food for Work (FFW) program, which provides wages in the form of food for temporary rural works and the Vulnerable Group Development (VGD) program, targeted at disadvantaged women and children--have grown to account for 40 percent of the total offtake from the public food distribution system. These schemes are estimated to reach 3 million persons, including 500,000 women, with at least three fourths of the ultra poor receiving some kind of assistance. Their budgetary costs were 35 percent of total rice subsidies and over 80 percent of total wheat subsidies in 1989/90 or two thirds of total budgetary appropriations. In the event of natural disasters, such as the floods and cyclones of 1987/88 and 1988/89, these programs are temporarily expanded. In response to concerns about the predominantly relief orientation of targeted programs, literacy, health, and skill acquisition components are being added during the ESAF period so that participants could improve their income-earning capacity.

In addition, subsidized foodgrains, at prices about 20-25 percent below the market price, are available through monetized channels targeted to the poor. These programs, whose recipients are primarily in the ultra poor category, provided nearly 60 percent of the rice and 25 percent of the wheat distributions in 1989/90. Some progress is being made in reducing the food subsidies available to relatively well-to-do urban groups through other monetized channels of the public system, but further improvements are needed. In the past two years, these channels, which represented 25 percent

of rice distribution and 30 percent of wheat distribution, experienced a reduction in their shares of subsidy as a percent of the total budgetary subsidy. Although the subsidy element is quite modest for most such sales, the price for the Essential Priorities program, which benefits better off urban groups, is over 75 percent subsidized.

Recognizing the limitations in terms of budgetary, technical, and administrative resources which affect the targeted programs, the Government has encouraged greater participation by NGOs in this effort. The NGOs operating in Bangladesh (100 foreign NGOs, 300 foreign-assisted domestic NGOs, and 12,000 voluntary social welfare agencies) assist the poor, especially women, by providing credit, training, primary education, basic health care, nutrition and family planning facilities. The work of many NGOs has been shifting from emergency relief toward development-oriented programs, especially aimed at augmenting employment and income-generating opportunities in rural areas.

The activities of the Bangladesh Rural Advancement Committee (BRAC) illustrate the wide variety of functions undertaken by the NGOs. BRAC provides direct services to the Government on a contractual basis for national programs to control diarrheal diseases, the supply of immunization services, and the training of government health and family planning workers. In collaboration with the Government, BRAC also provides training and supplies to help women recipients of food to become financially independent through poultry raising and other income-generating activities. In addition, BRAC undertakes its own literacy programs for adults, operates 1,600 primary schools for poor students, of whom two thirds are girls, and makes small loans for livestock, horticulture, and fisheries.

Another important NGO is the Grameen Bank, which lends to the very poor in rural areas who do not possess the collateral required to obtain commercial bank credit. Its loans, averaging about \$100 each, primarily meet modest working capital needs for minor trading or agricultural activities of over 700,000 borrowers, of whom nearly 90 percent are women, and the bank's recovery rate is as high as 98 percent. The bank's unique operating system entails lending based on a cooperative group approach and restricted to income-generating purposes, repayment in weekly installments, and close field supervision.

## VI. Concluding Remarks

The basic thrust of the Government's strategy of poverty reduction, aimed at strengthening output growth and ensuring food security, remains appropriate. In addition, under the ESAF program, the Government is increasingly turning its attention to improving the income-generating capacity of the poor through a focus on human resource development. At the same time, the need for improved efficiency of targeted programs will continue to receive importance, with a greater role provided to NGOs. In

view of the modest adverse impact of relative price changes on the incomes of the poor, the Government is being encouraged to reduce food subsidies (for the well-to-do), raise excise duties and adjust public enterprise prices to promote economic efficiency and meet development objectives. However, poverty will remain a pervasive problem in Bangladesh and such progress as may be achieved during the ESAF period should be regarded as only the beginning of a major effort that will need to be wider in scope, demand greater resources, and continue over many years. In this regard, the Government will need to ensure that major programs for the expansion of primary education and health and family planning services are given high priority in the budget process and that full funding is provided to cover the capital and recurrent costs of such programs, in cooperation with the donor community.

Table 1. Bangladesh: Social and Demographic Indicators 1/

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Area:	143,998 square kilometers
Population (1989):	111 million
Rate of growth	2.4 percent per annum
Density:	757 per square kilometer
Population characteristics:	
Life expectancy	51 years
Share of population under 15 years	45 percent
Infant mortality	111 per thousand
Crude birth rate	36 per thousand
Crude death rate	14 per thousand
Urban population	13 percent
Labor force:	
Total labor force	32 million
Females in labor force	7 million
Overall participation rate	29 percent
Health:	
Population per physician	5,210
Population per hospital bed	3,204
Income distribution (1982):	
Highest quintile	42 percent
Lowest quintile	12 percent
Land ownership (1978):	
Owned by top 10 percent	49 percent
Access to piped safe water (1985):	
Rural population	49 percent
Urban population	24 percent
Nutrition (1983):	
Average caloric intake	84 percent of requirement
Per capita protein intake	42 grams per day
Education:	
Adult literacy	33 percent
Primary school enrollment	52 percent

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Sources: World Bank, Social Indicators of Development, 1990.

1/ Unless otherwise indicated, data presented refer to 1987/88.

Table 2. Bangladesh: Nutritional Indicators, 1985/86

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	Number (in millions)	Percent of Population
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Below 2,122 calories/day/person (poor) <u>1/</u>		
National	51.2	51.7
Rural	44.2	51.0
Urban	7.0	56.0
Below 1,805 calories/day/person (ultra poor) <u>2/</u>		
National	21.5	21.7
Rural	19.1	22.0
Urban	2.4	19.0

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Sources: World Bank, Bangladesh: Poverty and Public Expenditures--An Evaluation of the Impact of Selected Programs, January 1990. The tables are based on the Household Expenditure Survey, 1985/86.

1/ Refers to WHO/FAO recommended minimum intake, adjusted for age and occupational profile of Bangladesh (weighted average includes 48 grams of protein).

2/ Defined at 85 percent of recommended minimum intake.

Table 3. Bangladesh: Summary of Economic Trends, 1983/84-1992/93

(In percent of GDP; annual averages unless otherwise specified)

	1983/84- 1985/86	1986/87-1988/89 Estimate	1989/90 Estimate	1990/91-1992/93 Projection
Real GDP growth (percent)	4.3	3.1	5.5	4.7
Agriculture	3.1	-0.2	6.3	3.1
Nonagriculture	5.2	5.3	5.0	5.6
Inflation (percent)	10.1	9.9	9.5	6.7
Export volume growth	5.7	11.7	10.5	7.6
Import volume growth	6.4	10.2	3.1	4.7
Gross investment	12.5	11.8	10.8	13.0
Public	5.7	5.6	4.6	5.5
Private	6.8	6.2	6.2	7.5
National savings	5.1	5.7	4.3	6.8
Public	1.0	0.3	-0.8	0.9
Private	4.1	5.4	5.1	5.9
Foreign savings	7.4	6.1	6.5	6.2
Budget revenue	8.7	9.0	9.2	10.2
Budget deficit	8.0	7.6	7.5	6.6
Aid disbursements	8.5	8.6	7.0	7.5
External debt	40.8	48.7	45.4	46.2
Of which: Fund obligations	2.7	3.6	2.7	2.3
Debt service (in percent of current receipts)	23.0	23.8	23.6	19.4
Of which: Fund obligations	5.8	6.6	7.4	4.6

Sources: Data provided by the Bangladesh authorities; and staff estimates and projections.

Table 4. Bangladesh: Sources of Income by Income Groups and Percent of Households, 1985/86

Monthly Household Income Groups (In taka)	Percent of Households	Wages and Salaries	Agricultural Income (Percentage of total monthly income by source)	Business Income	Gifts and Assistance	Other <sup>1/</sup>
Less than 1,500 (ultra poor)	20.0	45.3	21.1	11.3	2.1	20.4
Rural		44.6	22.1	11.1	2.1	20.1
Urban		56.6	3.1	13.8	2.3	24.2
Less than 2,000 (poor)	52.4	39.5	25.3	14.2	1.4	19.6
Rural		38.7	26.8	13.9	1.4	19.2
Urban		52.2	2.7	21.9	1.4	21.8

Source: Report of the Bangladesh Household Expenditure Survey, 1985/86.

<sup>1/</sup> Includes earnings from professional services and imputed income from owner-occupied and rent-free housing.

Table 5. Bangladesh: Consumption Pattern of Poor Households  
(In percent of monthly consumption expenditure)

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	Rural Consumer Price Index	Rural Household Survey <u>1/</u>
Food and beverages	72.2	69.6
Clothing and footwear	5.2	5.6
Fuel and lighting	8.1	11.7
Housing and rent	5.6	6.4
Miscellaneous	8.9	6.7
Total	100.0	100.0

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Sources: Data provided by the Bangladesh authorities; and staff estimates based on the 1985/86 Household Expenditure Survey.

1/ Households with incomes under Tk 2,000 per month in 1985/86.

Table 6. Bangladesh: Impact of Program-Induced Price Changes on the Poor, 1983/84-1990/91

(Annual average percentage change)

	Weight in Consumption (percent)	Price Change				Income Loss	
		1983/84 1985/86	1986/87- 1988/89 SAF Program	1989/90	1990/91 1st year ESAF	1986/87- 1989/90	1990/91
Ration foodgrain prices	33.0					2.2	2.3
Rice		7.2	5.9	8.6	7.0		
Wheat		6.9	5.7	8.7	7.0		
Petroleum products <u>1/</u>	4.0	9.8	0.2	-0.9	85.0	0.2	2.5 <u>2/</u>
Kerosene		-2.3	--	5.8	91.8		
Gasoline		-2.4	--	-38.0	70.7		
Diesel oil		-0.1	--	5.8	91.8		
LPG		13.1	--	9.2	52.7		
Railway passenger fare	3.0	7.2	6.7	3.8	15.0	0.2	0.4
Electricity	2.0	9.0	6.6	7.5	6.5-16.7	0.1	0.3
Natural gas	1.0						
Household		15.3	11.5	16.0	15.0	0.1	0.1
Power and fertilizer		14.3	22.3	15.6	15.0		
Industry		12.0	11.9	16.7	15.0		
Commercial		20.5	21.9	7.5	15.0		
Total income loss						2.8	5.7 <u>2/</u>

Sources: Data provided by the Bangladesh authorities; and staff estimates.

1/ Weighted average.2/ In response to the 92 percent increase in kerosene prices, the poor are expected to substitute less expensive firewood for kerosene, as a result of which the net income loss would be 1.5 percent and the corresponding total income loss would be 4.7 percent.

Table 7. Bangladesh: Foodgrain Balances, 1989/90 1/

(In millions of metric tons)

	Total	Nonpoor	Poor	Ultra Poor	Other Poor
Percent of population	100	50	50	20	30
Production	16.5	10.0	6.5	1.5	5.0
Retained output	9.0	4.5	4.5	1.5	3.0
Sales to private market	6.5	5.0	1.5	--	1.5
Sales to public system	1.0	0.5	0.5	--	0.5
Imports	1.5	--	1.5	1.5	--
Consumption	18.0	10.0	8.0	3.0	5.0
Retained output	9.0	4.5	4.5	1.5	3.0
Purchase from private market	6.5	4.5	2.0	--	2.0
Offtake from public system	2.5	1.0	1.5	1.5	--

Sources: Data provided by the Bangladesh authorities; and staff estimates.

1/ Rice and wheat.

Table 8. Bangladesh: Tax Incidence, 1985/86

(Percent of household income)

Tax Sources	Share of Total	Ultra Poor	Poor	Non-Poor	All Groups
Income	14.01	--	--	1.21	0.88
Property	7.24	0.13	0.15	0.57	0.46
Import	40.32	1.60	1.71	2.86	2.55
Sales	14.32	0.51	0.55	1.03	0.90
Exports	0.35	0.01	0.01	0.03	0.02
Other customs	0.83	0.03	0.03	0.06	0.05
Excise	22.42	1.58	1.57	1.44	1.47
Domestic services	0.51	0.02	0.02	0.05	0.04
Subtotal	100.00	3.84	4.00	7.14	6.29

Source: World Bank, Bangladesh: Poverty and Public Expenditures: An Evaluation of the Impact of Selected Government Programs, January 1990.

Table 9. Bangladesh: Poverty Focus of Government Current Expenditure, 1983/84-1990/91

	<u>1983/84-1985/86</u> Average	<u>1986/87-1988/89</u> Average	<u>1989/90</u> Estimate	<u>1990/91</u> Budget
<u>(In percent of total current expenditure)</u>				
Human resource development	21.5	22.6	21.6	21.6
Education	15.8	16.9	16.2	16.2
Health and population	5.7	5.7	5.4	5.4
Subsidies	6.6	4.8	14.0	13.5
Food	6.2	3.7	9.4	8.0
V.C.D. and relief	4.2	6.0	4.5	2.5
Agriculture and water development	3.9	3.8	3.8	3.7
Total	36.2	37.2	43.9	41.3
(excluding agriculture and water development)	32.3	33.0	40.1	37.6
<u>(In percent of GDP)</u>				
Human resource development	1.6	1.9	2.0	1.9
Education	1.2	1.4	1.5	1.4
Health and population	0.4	0.5	0.5	0.5
Subsidies	1.1	0.4	1.3	1.2
Food	0.6	0.3	0.8	0.7
V.C.D. and relief	0.1	0.5	0.4	0.2
Agriculture and water development	0.3	0.3	0.3	0.3
Total	3.1	3.1	4.0	3.6
(excluding agriculture and water development)	2.8	2.8	3.7	3.3

Sources: World Bank, Bangladesh: Managing The Adjustment Process--An Appraisal, March 1990; data provided by the Bangladesh authorities; and staff estimates.

Table 10. Bangladesh: Poverty Focus of Government Development Expenditure, 1983/84-1990/91

	<u>1983/84-1985/86</u> Average	<u>1986/87-1988/89</u> Average	<u>1989/90</u> Estimate	<u>1990/91</u> Budget
<u>(In percent of total development expenditure)</u>				
Human resource development	9.4	10.5	14.6	19.2
Education	4.1	5.0	6.1	10.1
Health and population	5.3	5.5	8.5	9.1
Social welfare	0.5	0.6	0.5	0.8
Agriculture, water resources, and rural development	26.9	20.5	26.3	24.1
Total	36.8	31.6	41.1	44.1
(excluding agriculture and water resources)	9.9	11.1	14.8	20.0
<u>(In percent of GDP)</u>				
Human resource development	0.7	0.8	0.9	1.3
Education	0.3	0.4	0.4	0.7
Health and population	0.4	0.4	0.5	0.6
Social welfare	0.1	0.1	--	0.1
Agriculture, water resources and rural development	1.2	1.4	1.6	1.6
Total	2.8	2.2	2.5	3.0
(excluding agriculture and water resources)	0.8	0.8	0.9	1.4

Sources: Data provided by the Bangladesh authorities; and staff estimates.

Table 11. Bangladesh: The Public Food Distribution System, 1987/88-1990/91

	1987/88	1988/89	1989/90	1990/91 Estimate	1987/88	1988/89	1989/90	1990/91 Estimate
	Rice Volume (In thousands of tons)				Wheat Volume (In thousands of tons)			
Total distribution	469	692	675	843	2,036	2,249	1,489	1,533
Government workers	183	174	164	183	575	627	446	517
Statutory and other	107	93	71	93	524	572	399	466
Essential priorities	76	81	93	90	51	55	47	51
Open market sales	125	167	20	116	82	96	6	37
Targeted sales	147	182	386	350	282	270	349	280
Targeted distributions	14	169	105	194	1,097	1,256	688	699
	Rice Subsidy (In millions of taka)				Wheat Subsidy (In millions of taka)			
Total subsidy	1,056	2,396	2,809	3,735	7,630	8,628	5,311	5,348
Government workers	738	694	783	784	653	616	313	193
Statutory and other	135	61	21	23	405	343	76	70
Essential priorities	603	632	762	761	248	273	237	263
Open market sales	--	--	--	--	--	--	--	--
Targeted sales	185	120	1,002	963	218	162	643	507
Targeted distributions	133	1,582	1,024	1,989	6,760	7,850	4,355	4,648
	Rice Subsidy (In percent of total)				Wheat Subsidy (In percent of total)			
Total subsidy	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Government workers	69.9	29.0	27.9	21.0	8.6	7.1	5.9	3.6
Statutory and other	12.8	2.6	0.8	0.6	5.3	4.0	1.4	-1.3
Essential priorities	57.1	26.4	27.1	20.4	3.3	3.2	4.5	4.9
Open market sales	--	--	--	--	--	--	--	--
Targeted sales	17.5	5.0	35.7	25.8	2.9	1.9	12.1	9.5
Targeted distributions	12.6	66.0	36.4	53.2	88.6	91.0	82.0	86.9

Sources: Data provided by the Bangladesh authorities; and staff estimates.