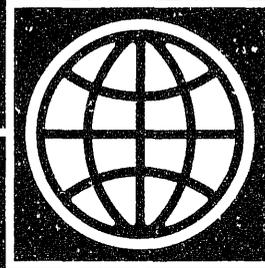


Bangladesh

Promoting Higher Growth and Human Development



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A WORLD BANK COUNTRY STUDY

Bangladesh
Promoting Higher Growth and
Human Development

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Washington, D.C., U.S.A.

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ABSTRACT

This report explores the potential for accelerating the rate of economic and social development in Bangladesh. Part I reviews recent developments and provides a macroeconomic framework for achieving higher overall growth. Part II then discusses the key areas of policymaking where better progress is required and suggests how the Government's policy adjustment program can be supported by more generous and appropriate foreign assistance. However, higher economic growth will not be sufficient to make serious progress in alleviating poverty in Bangladesh. Special interventions are required to assist the most vulnerable -- especially the landless and women -- who tend to be by-passed by the development process. And, despite recent progress, more attention needs to be given to education, health, family planning and nutrition. Part III therefore documents recent progress in promoting human development and suggests directions for the future.

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The report was prepared by a team led by Andrew Steer, consisting of: for Part I, David Hughart, Syed Nizamuddin and Vidya Shetty; for Part II, Ataman Aksoy, Dipak DasGupta, Guenter Reif and Ellen Schaengold; and for Part III, Om Nijhawan, Helena Ribe, Sam Onwona and Janice Jiggins (consultant). Inputs were also provided by Wahida Huq, Pradeep Mitra, Werner Roeder, Thomas Schmidt, Bonita Stanton, Fred Temple and Peter Whitford. Administrative and secretarial support was provided by Sultan Ahmed Khan, Linda Reese and Geny Sauz.

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List of Abbreviations and Acronyms Used

ADP	-	Annual Development Program
BADC	-	Bangladesh Agricultural Development Corporation
BARC	-	Bangladesh Agricultural Research Council
BARD	-	Bangladesh Academy of Rural Development
BARI	-	Bangladesh Agricultural Research Institute
BAU	-	Bangladesh Agricultural University
BBS	-	Bangladesh Bureau of Statistics
BCS	-	Bangladesh Civil Service
BCSIC	-	Bangladesh Cottage and Small Industries Corporation
BHB	-	Bangladesh Handloom Board
BIDS	-	Bangladesh Institute of Development Studies
BJC	-	Bangladesh Jute Corporation
BKB	-	Bangladesh Krishi Bank
BRAC	-	Bangladesh Rural Advancement Committee
BRDB	-	Bangladesh Rural Development Board
BSB	-	Bangladesh Sericulture Board
BSS	-	Bittaheen Samabaya Samity - cooperative society for the resourceless
BUET	-	Bangladesh University of Engineering and Technology
BWDB	-	Bangladesh Water Development Board
CARE	-	Cooperative for American Relief Everywhere
CDST	-	Customs Duties and Sales Taxes
Comilla		
Proshika	-	Centre for Development
CPR	-	Contraceptive Prevalence Rate
CSP	-	Civil Service of Pakistan
DDS	-	Drug and Dietary Supplement
DFC	-	Drainage and Flood Control
DFCI	-	Drainage and Flood Control with Irrigation
DFI	-	Development Finance Institution
Dheki	-	Foot-operated mortar and pestle for rice husking
DOF	-	Directorate of Fisheries
DPEC	-	Departmental Project Evaluation Committee
DTW	-	Deep Tubewell
ECNEC	-	Executive Committee of National Economic Council
EFAS	-	Exchange Fluctuation Absorption Scheme
EPI	-	Expanded Program on Immunization
ERD	-	External Resources Division
FPC	-	Food Policy Committee
FPO	-	Family Planning Officer
FWA	-	Family Welfare Assistant
FWP	-	Food-for-Work Program
FWV	-	Family Welfare Visitor

GB	-	Grameen Bank (Village Bank)
GOB	-	Government of Bangladesh
GWI	-	Groundwater Irrigation
HA	-	Health Assistant
HES	-	Household Expenditure Survey
HTW	-	Hand Tubewell
HYV	-	High Yielding Variety
IAT	-	Institute of Appropriate Technology
ICDDRDB	-	International Center for Diarrheal Disease, Bangladesh
ICOR	-	Incremental Capital Output Ratio
IFPRI	-	International Food Policy Research Institute
IMED	-	Implementation, Monitoring and Evaluation Division
IMP	-	Irrigation Management Program
IRDP	-	Integrated Rural Development Programme
IRR	-	Internal Rate of Return
KSS	-	Krishi Samabaya Samity - farmers' cooperative society
LCG	-	Local Consultative Group
LD	-	Land Development
LLP	-	Low Lift Pump
MBSS	-	Mahila Bittahaen Samabaya Samity - cooperative society for resourceless women
MCH	-	Maternal-Child Health Care
MCC	-	Menonite Central Committee
MIDAS	-	Micro Industries Development Assistance Society
MOE	-	Ministry of Education
MOHFP	-	Ministry of Health and Family Planning
MSS	-	Mahila Samabaya Samity - women's cooperative society
MSWWA	-	Ministry of Social Welfare and Women's Affairs
MUV	-	Manufactured Unit Value
NBR	-	National Board of Revenue
NCB	-	Nationalized Commercial Bank
NEC	-	National Economic Council
NGO	-	Non-Government Organization
NNC	-	National Nutrition Council
O&M	-	Operation and Maintenance
OMS	-	Open Market Sales
OXFAM	-	Oxford Committee for Famine Relief

PATC	-	Public Administration Training Center
PC	-	Planning Commission
PEC	-	Project Evaluation Committee
PFDS	-	Public Food Distribution System
PMR	-	Post Monsoon Rehabilitation
PP	-	Project Proforma
PPI	-	Primary Pumping Irrigation
Proshika	-	Proshika Manobik Unnayan Kendra- Proshika rural development centre
PSE	-	Public Sector Enterprise
QR	-	Quantitative Restriction
RD	-	Rural Dispensary
RFEP	-	Rural Finance Experiment Project
RMP	-	Road Maintenance Program
RPA	-	Reimbursable Project Aid
SAFE	-	Special Accounts in Foreign Exchange
Saptagram	-	Saptagram Nari Swanirvar Parishad - seven village women's self-reliance movement
SFYP	-	Second Five-Year Plan (FY81-FY85)
SSP	-	Senior Service Pool
STW	-	Shallow Tubewell
SWARNIVAR	-	Self-reliance Movement
TA	-	Technical Assistance
TACC	-	Technical Assistance Coordination Cell
TAPP	-	Technical Assistance Project Proforma
TBA	-	Traditional Birth Attendant
TFYP	-	Third Five-Year Plan (FY86-90)
TIP	-	Trade and Industrial Policy
UERC	-	Upazila Employment Resource Center
UGC	-	University Grants Commission
UHC	-	Upazila Health Center
UHFWC	-	Union Health and Family Welfare Center
UMR	-	Usual Marketing Requirement
UNO	-	Upazila Nirbahi Officer
VGf	-	Vulnerable Group Feeding
WFP	-	World Food Program
XPB	-	Export Performance Benefits Scheme

CURRENCY EQUIVALENTS

The external value of the Bangladesh Taka (Tk) is fixed in relation to a basket of reference currencies, with the US Dollar serving as intervention currency. The official exchange rate on March 7, 1987 was Tk 30.77 buying and Tk 30.83 selling per US Dollar. Unless noted otherwise, the rates shown below have been used throughout this report:

US\$ 1	=	Tk 30.80
Tk 1	=	US\$ 0.0325
Tk 1 million	=	US\$ 32,468

The average annual exchange rate for recent fiscal years is shown in Statistical Appendix Table 3.13.

In this report US\$ is sometimes abbreviated to \$.

WEIGHTS AND MEASURES

1 acre (ac)	=	0.405 hectare (ha)
1 maund (md)	=	82.27 pounds (lbs) = 37.3261 kg
1 seer (sr)	=	2.056 pounds (lbs) = 0.933 kg
1 cubic foot per second (cusec)	=	0.0283 cubic meter per second
1 mmcf	=	1 million standard cubic feet
1 crore	=	10 million

FISCAL YEAR (FY)

July 1 - June 30

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COUNTRY DATA - BANGLADESH

<u>AREA</u>	<u>POPULATION (1985)</u>	<u>DENSITY (1985)</u>
143,998 km ²	100.6 million Rate of Growth: 2.4%	699 per km ² of total area 1,062 per km ² of cultivable land

<u>POPULATION CHARACTERISTICS /a</u>		<u>HEALTH /a</u>	
Crude Birth Rate (per '000)	39.0	Population per physician:	5,900
Crude Death Rate (per '000)	15.0	Population per hospital bed:	3,600
Infant Mortality (per '000 live births)	125.0		

<u>INCOME DISTRIBUTION (1982)</u>		<u>DISTRIBUTION OF LAND OWNERSHIP (1978)</u>	
% of national income, highest quintile:	42	% owned by top 10% of owners:	49
% of national income, lowest quintile:	12	% owned by smallest 10% of owners:	2

<u>ACCESS TO PIPED WATER (1980)</u>		<u>ACCESS TO ELECTRICITY (1980)</u>	
% of population - urban:	26	% of population - urban:	3.5
% of population - rural:	40	% of population - rural:	..

<u>NUTRITION (1983)</u>		<u>EDUCATION</u>	
Calorie intake as % of requirements:	84	Adult literacy rate (%) (1980/81)	29%
Per capita protein intake (grams):	42	Primary school enrollment (%) /a	62%

GNP PER CAPITA IN 1985: US\$150 /b

<u>GROSS DOMESTIC PRODUCT (1985/86)</u>		<u>ANNUAL RATE OF GROWTH (% constant prices)</u>			
	<u>mill. US\$</u>	<u>%</u>	<u>FY70-75</u>	<u>FY75-80</u>	<u>FY80-86</u>
GDP at Market Prices	15,381	100	-0.8	7.5	3.9
Gross Domestic Investment	2,039	13	0.4	0.1	6.5
Gross National Saving	956	6	..	..	..
Current Account Balance	-1,084	-7	...	...	...
Exports of Goods, fob	819	5	0.8	4.7	1.3
Imports of Goods, cif	-2,364	-15	1.3	6.2	1.1

OUTPUT, LABOR FORCE, AND PRODUCTIVITY IN 1985/86

	<u>Value Added /c</u>		<u>Labor Force /d</u>		<u>V. A. Per Worker /e</u>	
	<u>mill. US\$</u>	<u>%</u>	<u>mill.</u>	<u>%</u>	<u>US\$</u>	<u>%</u>
Agriculture	7,180	46.7	16.8	59	403	82
Industry	2,210	14.4	3.1	11	659	134
Services	5,991	38.9	8.6	30	604	123
Total/Average	15,381	100.0	28.5	100	492	100

CENTRAL GOVERNMENT FINANCE /f

	<u>(mill. Taka)</u>	<u>% of GDP</u>	
	<u>1985/86</u>	<u>1974/75</u>	<u>1985/86</u>
Current Revenues	42,280	5.1	9.2
Current Expenditures	34,560	6.8	7.5
Current Surplus	7,720	-1.7	1.7
Capital Expenditures	40,130	4.1	8.7
External Assistance (net)	31,510	6.2	6.9

/a Data for 1985.

/b World Bank Atlas methodology; base 1983-85.

/c At market prices.

/d Civilian labor force; 1983/84 data. Sectoral distribution data shown are extrapolated from available data on distribution of employed persons.

/e 1983/84 data.

/f Preliminary actual.

.. = Not available.

... = Not applicable.

COUNTRY DATA - BANGLADESH

<u>MONEY, CREDIT AND PRICES</u>	<u>June 1979</u>	<u>June 1980</u>	<u>June 1981</u>	<u>June 1982</u>	<u>June 1983</u>	<u>June 1984</u>	<u>June 1985</u>	<u>June 1986</u>
			(billion Taka outstanding, end of period)					
Money and Quasi Money	29.0	34.3	41.3	45.5	59.0	83.9	105.3	123.4
Bank Credit to Public Sector	18.2	25.4	36.9	43.9	44.4	50.0	55.7	65.1
Bank Credit to Private Sector	11.0	14.3	17.6	23.6	31.0	49.1	68.9	83.6
			(Percentages or Index Numbers)					
Money and Quasi Money as % of GDP	16.9	17.3	17.8	17.2	20.5	24.0	25.1	26.4
General Price Index (1973/74=100)/a	191.3	226.6	255.0	296.5	325.9	357.5	396.6	436.0
Annual percentage changes in:								
General Price Index /a	8.3	18.5	12.5	16.3	9.9	9.7	10.9	9.9
Bank credit to Public Sector	13.8	39.6	45.3	19.0	-1.1	12.6	11.4	16.9
Bank credit to Private Sector	45.9	30.0	23.1	34.0	31.3	58.4	40.3	21.3

BALANCE OF PAYMENTS
(mill. US\$)

	<u>1976/77</u>	<u>1985/86</u>
Exports of Goods, fob	411	819
Imports of Goods, c&f	-865	-2,364
Trade Gap (deficit = -)	-454	-1,545
Non-factor services, net	2	-2
Workers' Remittances	81	586
Other Factor Payments (net)	-31	-123
Current Account Balance	-402	-1,084
Direct Foreign Investment	..	..
Net MLT Borrowing	247	605
(Disbursements)	(277)	(722)
(Amortization)	(-30)	(-117)
Capital Grants	256	546
IMF facilities, net	-2	-3
Other Capital, net	18	17
Change in Reserves (- = increase)	-81	-81
Gross Reserves (end of year)	294	476

MERCHANDISE EXPORTS (1984/85)

	<u>mill. US\$</u>	<u>%</u>
Raw jute	124	15
Jute goods	293	36
Tea	33	4
Leather	61	7
Fish & shrimps	113	14
All other commodities	195	24
Total	819	100

EXTERNAL DEBT, June 30, 1986

	<u>mill. US\$</u>
Public Debt, incl. Guaranteed	6,762.3
Non-Guaranteed Private Debt	..
Total Outstanding & Disbursed	6,762.3

RATE OF EXCHANGE (May 1987)

US\$1.00 = Taka 30.9

DEBT SERVICE RATIO FOR 1985/86

	<u>%</u>
Public Debt, incl. Guaranteed	20.1
Non-Guaranteed Private Debt	..
Total	20.1

IBRD/IDA LENDING, June 1986 (million US\$)

	<u>IBRD</u>	<u>IDA</u>
Outstanding & Disbursed	52.7	2,215.3
Undisbursed	-	1,347.4
Outstanding, incl. Undisbursed	52.7	3,562.7

.. = not available.

/a Consumer Price Index for middle-income families in Dhaka; annual averages.

July 1987

EXECUTIVE SUMMARY 1/

i. Bangladesh is now two years into its Third Five Year Development Plan (TFYP; FY86-FY90). There has been progress and many reasons for encouragement, but also causes for concern. Overall economic growth--averaging about 4% per year so far in the 1980s--is respectable when compared with low income countries generally. But it is not sufficient to permit much progress in tackling the problem of poverty, which remains overwhelming, and the economy continues to perform below its potential. This report therefore assesses the scope for accelerating development in Bangladesh. What are the policy adjustments that would be required to attain the kind of development envisaged in the TFYP? How can foreign donors support this effort? And how can human development programs and special measures to assist the most vulnerable complement the policies designed for higher and more efficient growth?

I: RECENT DEVELOPMENTS AND MEDIUM-TERM OPTIONS

Recent Economic Developments (Chapter 1)

ii. FY86 and FY87 have witnessed significant improvements in economic policymaking in Bangladesh. Macroeconomic management has been sound, and the authorities have embarked upon an ambitious program to improve efficiency and competitiveness in the economy. The current account of the balance of payments and the budget deficits have been brought down to manageable levels, and over the last few months serious efforts have been initiated to restore discipline to the troubled domestic financial system. At the same time, there is some evidence to suggest, albeit tentatively, that real wages and incomes may be rising in rural areas.

iii. But there have also been disappointments. Overall GDP growth in FY86 was 4.4%, well below the TFYP target of 5.4%. Industrial expansion--at about 2% in FY86--has been well below expectations, and agricultural growth (3.4% in FY86) has been due more to special circumstances than to strong policies and programs that can be expected to continue. There is a sense that in some areas progress is slipping.

iv. Economic Management. The Government has continued to make progress towards creating a stable and undistorted economic environment. Monetary

1/ This summary follows the same format as the main report to permit cross-reference.

expansion has been brought under control and in response to prudent demand management, the rate of inflation fell below 10% in FY86, although higher food prices have caused it to rise to about 12% in FY87. The real effective exchange rate depreciated by about 10% between July 1986-June 1987, and the gap between the official and secondary exchange rate has narrowed from 15% in FY85 to about 7% in FY87.

v. The deterioration in credit recovery has been the greatest threat to stability over the last eighteen months. With recovery rates falling to 27% in agriculture and 10% for DFI term loans to industry in FY86, the situation has undermined longer-term growth prospects and permitted serious resource misallocation and harsh inequities. The Government has recently taken strong steps to improve recovery rates, and preliminary data for July-December 1986 suggest some progress. Restoring discipline in the financial sector itself poses difficult issues of macroeconomic management for the Government, since the denial of new credit to defaulters has inevitably resulted in a net contraction of formal credit available in some areas. Some compensatory injection of economic demand may therefore be warranted, possibly in the form of stepped up rural works programs, earlier and more aggressive procurement of rice and wheat crop, and a higher priority to the expansion of innovative credit programs to assetless and near-assetless rural groups.

vi. The Balance of Payments. The current account deficit fell from 8.2% of GDP in FY85 to 7% in FY86, and to 5.6% in FY87. But unfortunately this has been due to a reduction in import demand as investment and consumption growth has slumped, rather than to a growth in exports. The terms of trade fell by more than 20% in FY86 due to falling jute prices, offsetting the gain of 24% in the previous year. Average jute prices were again lower in FY87, but gains in other primary export prices resulted in a largely unchanged terms of trade. Non-traditional exports--notably, ready-made garments and frozen shrimp--continue to perform well.

vii. Aid inflows rose by \$39 million to \$1,306 million in FY86 and are expected to rise by over \$100 million to \$1460 million in FY87. The improved project disbursement performance has been more apparent than real, however, being due mainly to exchange rate changes and to the establishment of special disbursement accounts within Bangladesh. The overall balance of payments moved into surplus in FY86 and is expected to remain in surplus in FY87. Official reserves remain at a comfortable level.

viii. Public Income and Expenditure. Domestic fiscal revenues rose by 17% (in current prices) in FY86, and the FY87 budget proposed another substantial increase this year. However, revenues in the first eight months of FY87 have been disappointing, primarily due to unexpectedly low import levels, once again illustrating the vulnerability of the fiscal balance to the external sector. Substantial additional revenue measures will be required over the next two years to reach the Government's targets.

ix. Expenditures were slightly below what had been expected in FY86, and another larger shortfall is expected in FY87 due to implementation problems. As of May 1987, it appears that ADP expenditures will be about 13% below targeted levels. The shortfalls in revenue and expenditure in FY87 roughly offset each other, which has tended to lead to a lack of urgency in dealing with both. The overall budget deficit (including the development budget) in FY87 is estimated to have risen slightly to Tk 36 billion, but to have declined as a proportion of GDP from 7.4% to 7.0%.

x. Food Availability and Real Wage Developments. Mediocre production performance coupled with delayed imports of foodgrains has recently resulted in an apparent reduction in overall foodgrain availability and sharply lower foodstocks. While there is no immediate cause for alarm, continued low levels of stocks could spark speculative activity and may result in the PFDS being unable to cope with a severe flood or other emergency. More encouraging is the continued expansion of food programs for the poor. The combined distribution of the Food-for-Work Program (FWP), and the Vulnerable Group Feeding (VGF) and Relief Program is expected to amount to about 701,000 tons in FY87; about 80 million days of work is now generated annually by the FWP. Recent assessments of the FWP and VGF are positive and suggest that continued but careful growth is warranted.

xi. Average real wage rates have risen over the last two years in both rural and urban areas and appear to have finally reached their pre-Liberation levels for the first time. An unskilled agricultural laborer now earns an average of 4 kg of rice per day or about Tk 30, up from an average of about 2.8 kg of rice in the 1970-82 period. This data does not provide conclusive evidence that the standard of living among the poor is improving in Bangladesh and it is not clear whether these trends anyway are due to an underlying strength in rural areas. In addition, even at these higher levels, wage rates (at an average of \$1 per day) remain absolutely inadequate to meet even the most basic needs of a family. Nevertheless, if sustained and built upon, these trends represent an encouraging achievement and provide preliminary support for the general direction of government programs and policy in rural areas.

Medium Term Options and Capital Requirements (Chapter 2)

xii. It is unlikely that the small gains in real incomes which appear to have been achieved over the last few years can be sustained without healthy economic growth and specific directed efforts to aid those who tend to be by-passed by the development process. The TFYP emphasis on the need for higher economic growth--5.4% per year in comparison with 3.9% per year achievement during the SFYP--is appropriate. This report suggests that in the coming years this kind of economic growth is feasible and indeed necessary in Bangladesh, but it will require better progress in policy reform and more generous and appropriate foreign assistance.

xiii. This conclusion is not inconsistent with previous analyses which have suggested that the rate of economic growth is expected to be somewhat lower (4.2-4.5% per year) than the TFYP target. The focus of this report is on a "High Policy Case"; what rate of economic growth is feasible and what are the policy and program adjustments and aid levels that will be required to achieve this higher growth rate? The High Case could be a realistic alternative to current trends if the Government were aggressively to address a number of important structural macroeconomic and sectoral issues. It requires good--but not spectacular--progress in a number of areas, most of which have already been identified by the Government. It also incorporates fairly conservative assumptions concerning the external environment. A "Base Case" is also described; what can be expected under a "business as usual" approach to policy reform and aid flows?

xiv. Over the last two years--FY86 and FY87--policymakers in Bangladesh have necessarily focused a good part of their energies on urgent issues of monetary control, fiscal and external balance, and domestic financial discipline. Failing to come to grips with these immediate concerns would have undermined any long-term growth prospects. While these issues will continue to be important--especially raising credit recovery rates--the Government can now afford to devote more of its attention to implementing the development strategy that it laid out in its Third Plan. The Government's strategy to promote higher economic growth can be broadly categorized into three sets of policies corresponding to the three chapters in Part II of this report:

Promoting Efficient Private-Oriented Activity. This involves regaining the momentum of growth in the agricultural sector, continued progress in industrial policy, and reform of the financial system.

Promoting Efficient Public Expenditure. This requires strengthening the capacity to efficiently plan, appraise and implement an expanded public expenditure program. Procedural changes are required and efforts to improve the quality and motivation of public employees need to be strengthened.

Raising Public Revenues. Even with more generous foreign assistance, the current revenue base remains quite inadequate. Tax reform and enhanced revenues from public pricing policies are required for both efficiency and revenue reasons.

xv. Combined, these policies constitute the High Policy Case. In combination these policies are assumed to have three effects. First, the level of investment and savings would be higher. Second, the efficiency of investment would be higher, due to a less distorted incentive framework and improved public expenditure planning. And third, export growth would be faster and import growth slower, due to trade and industrial policy reforms and to more rapid agricultural growth.

xvi. These policies to promote overall economic efficiency must of course be complemented by special interventions to provide economic opportunities to the poor and by social programs--education, health, family planning, nutrition--which raise the quality of life for all income groups. These human resource policies and programs, which are the theme of Part III of this report should also be regarded as components of the High Policy Case; they too are powerful tools for promoting economic growth, although their effect is longer term.

The Overall Outlook

xvii. For the remaining three years of the TFYP period (FY88-90), an annual growth of GDP of 5.1% is feasible under the High Case, while growth of 5.4% per year is projected for the first half of the 1990s, when some of the longer-term policy initiatives begin to bear fruit. Agricultural growth is projected to grow by 3.4-3.6% per year and industry by 7.3-7.5% per year. These growth rates are not unrealistically high in view of the Government's stated program of policy reform. Under the High Case, GDP per person would rise from \$146 in 1986 to about \$190 (in constant 1986 prices) by 1995. Under the Base Case, the economy would grow by 3.9% per year, the average rate for the 1980-1986 period; by 1995, GDP per person would rise to \$170. Under both cases, it is assumed that population grows at a rate of 2.4% per year between 1987 and 1990, and falls to an average of 2.2% in 1990-95.

xviii. Investment and Savings. In order to reach GDP growth of over 5% per year, the proportion of GDP allocated for investment would have to rise by about 2 percentage points--from its FY80-87 average of 13.8% to about 16%. By the standards of most developing countries, this is still modest. The High Case projections suggest that:

- both public and private investment would have to rise, but the private sector would take the major share of investment resources.
- foreign savings (mainly foreign aid) must rise as a proportion of GDP, but would not reach the level of the SFYP period (9%) and would fall as a proportion of total investment.
- domestic savings would have to rise from 3.0% of GDP to 5.7%, not only to finance increased investment but also to compensate for the declining remittances; with the projected growth in income this would still permit average private per capita consumption to rise by 1.8% per year.

xix. Foreign Exchange Earnings. Raw jute prices are now at their lowest level since 1973, and while other export prices are expected to display greater buoyancy than jute, this will not fully compensate for jute's gloomy outlook. The terms of trade are expected to improve slightly in FY88 and thereafter to remain constant or decline well into the 1990s. This will make

the transition to greater self-reliance in financing imports very difficult; it illustrates the urgent need to rationalize the jute sector and to continue diversifying exports.

xx. Non-traditional exports are, over the next three years, expected to overtake traditional exports for the first time. Garments and frozen seafood are expected to continue growing rapidly although not at the extremely high rates witnessed over the last few years. Bangladesh's share in world trade in garments remains sufficiently small that, even with stagnant growth in world demand, its share would remain well below 1% by 1995. World trade in frozen shrimp is certainly more buoyant than for garments, but Bangladesh's share would nonetheless have to rise from 1.1% in FY84 to about 3% in FY95 to achieve the projected 15-20% volume expansion each year. The outlook for remittances, which remain the single largest source of foreign exchange earnings, is highly uncertain despite their unexpected rebound in FY86. With continued low and unpredictable world oil prices, it would be prudent to assume no real growth from this source in the future. The share of imports financed by remittances is projected to fall from 23.5% in FY86 to 18% in FY90 and 14% in FY95.

xxi. The Balance of Payments. The current account deficit as a percentage of GDP is projected to remain in the 6.5% to 7.5% range for the indefinite future. This is judged to be an appropriate and sustainable level given Bangladesh's economic structure and its acute poverty. On the assumption that foreign aid disbursements are available to fill the foreign exchange gap--i.e., that no commercial borrowing will be required--debt service obligations will not be a serious problem. Following the repayments of commercial food loans and repurchases with the IMF in FY87 and FY88, the debt service ratio will fall from about 28% to an average of 21% for the remainder of the decade.

The Role of External Assistance

xxii. About \$5.4 billion in disbursements of foreign aid will be required during the remainder of the TFYP (FY88-90) in order to reach the High Case growth rates. This compares with disbursements of \$3.9 billion over the last three years (FY84-86). For the Fourth Plan period, aid disbursements of almost \$12 billion would be required. Foreign aid disbursements should continue to finance between 50% and 55% of import needs. This level of dependence, however, should not be interpreted in any way as a sign that progress is not being made in self-financing of imports through improved export performance. Export earnings would finance a growing share of imports--from an average of 31% in the SFYP to 37% in FY90 and 44% in FY95. However, the growth of exports would be required to compensate for the declining role of remittances and to substitute for non-concessional borrowing from the IMF and from other sources. This level of foreign aid disbursement should therefore be regarded as an appropriate complement to the policy reforms adopted by the authorities.

xxiii. Commitments of aid in FY86 and FY87 have fallen below expectations, averaging only \$1.6 billion each year in comparison with \$1.7 billion during the FY81-85 period. It is important that for the remaining three years of the TFYP, real commitment levels be restored to the FY81-85 level. This would imply average annual commitments approaching \$2 billion; rising from \$1.8 billion to about \$1.9 billion in FY88, to \$2.1 billion in FY90. In real terms this is equivalent to the level during the FY81-85 period.

xxiv. Project Aid. The undisbursed project aid pipeline is now (mid-1987) estimated at over \$4.7 billion, equivalent to about 37% of GDP, or 75% of the total disbursed outstanding debt. This is too high. Accelerating the rate of project implementation is an important goal of the Government and progress can be made. The High Case projections assume that the ratio of annual disbursements to the beginning year project pipeline will continue to rise from about 17% in FY86 to 20% by FY91. This results in a real increase in project aid disbursements of about 10% per year during the remainder of the TFYP period, even with no real increase in project aid commitments.

xxv. The pipeline of undisbursed project aid may give Bangladesh some breathing space. Aid disbursements can rise fairly rapidly at least until FY90, even with constant project commitment levels; a current account deficit of about 7% of GDP can be comfortably financed if progress is made in project implementation. Thereafter, however, commitments would have to rise substantially if this level of current account deficit is to continue. This enhanced donor support would be fully warranted, however, if Bangladesh undertakes many of the policy measures suggested in this report. It is important, therefore, that over the next two or three years a preliminary investment analysis be undertaken for increased project aid commitments in the early 1990s. In this regard, a comprehensive public expenditure review is required. A first stage of such a review will be undertaken over the next twelve months with assistance from IDA.

xxvi. Commodity Aid. Several donors are finding it difficult to justify commodity aid programs, some because of disbursement problems that seem to undercut the argument that this form of aid is urgently needed, and others because they cannot make a sufficiently strong case that the economic policies implicitly supported by this type of aid adequately address the issue of poverty. In this regard, a Commodity Aid Utilization Study, to be completed during the second half of 1987, is currently exploring options for overcoming these constraints and for streamlining procedures on the part of both the donors and the Government. For the coming years it is recommended that commodity aid commitments be expanded by 5% annually in real terms. A shift towards these quick-disbursing funds untied to specific investments is necessary to support the Government's new emphasis on O&M expenditures and to provide foreign exchange urgently needed for private importation of intermediate and capital goods.

xxvii. Food Aid. In the immediate future an increase in food aid would be appropriate, for two reasons. First, stocks are at low levels and food

availability over the last year has apparently declined, leading to higher food prices and inflationary pressures which could undermine the Government's structural adjustment policies. Second, the Government is making serious efforts to redirect food distribution to those needy population groups who cannot be reached through the ration system. Increased food aid, therefore, can have both macroeconomic and humanitarian benefits.

Uncertainties in the Analysis

xxviii. The High Case outlook which is presented in detail in this report assumes good progress in the Government's adjustment program, moderately generous foreign assistance, and the absence of any further sharp fluctuations in Bangladesh's terms of trade or any serious worsening in protective barriers facing Bangladesh's exports. While not unrealistic, these factors should not be taken for granted.

xxix. The Base Policy Case. The policy adjustment program that Bangladesh has embarked upon will not be easy. Many developing countries have attempted such reforms and a good number have failed in the face of political pressure or destabilizing economic shocks. A "Base Policy Case" is therefore also presented to illustrate the probable outcome under a "business as usual" policy environment. It assumes no serious progress in domestic resource mobilization or in improving the efficiency of investment. Annual investment under the Base Case is therefore 12% lower than under the High Case by FY90 and 24% lower by FY95, and the economy could only afford to grow by 3.9% per year. By FY95 the total size of the economy under the Base Case would be about 12% smaller than under the High Case; per capita incomes would be \$19 per year lower (in FY86 prices), investment per capita \$6 lower, and foodgrain availability tighter despite higher food imports.

xxx. Foreign Assistance and the External Environment. The mediocre performance projected under the Base Case could occur even if the Government were successful in implementing its policy reform package. This would happen, for example, if aid commitments remained at their current levels. Even with an improved policy environment, Bangladesh needs to be able to sustain a current account deficit equivalent to 6.5-7.5% of its GDP. Without increased aid, its sustainable deficit would continuously fall. If, for example, Bangladesh were required to limit its deficit to say 5% of GDP, it could probably only afford to grow by about 3.5% per year. The role of donors would become even more significant in the event that the international marketplace deteriorates for Bangladesh. If for example, the Government is unable to negotiate continually rising quotas for its garment exports, or if the price of jute were to fall further, additional increases in commodity aid would be needed to achieve the High Case growth rates.

II: POLICIES FOR HIGHER GROWTH

Promoting Efficient Market-Oriented Growth (Chapter 3)

xxxi. The report describes four components of the Government's strategy for promoting higher and more efficient market-oriented growth; these are policies with regard to agriculture, trade and industry, the jute sector and the domestic financial system.

Issues in Agriculture Policy

xxxii. Agricultural production has grown at a rate of about 3.0% per year during the period FY80-85--a sound performance, by any standards. But recent developments are cause for concern. FY86 was a disappointing year with foodgrain production, fertilizer consumption, agricultural credit, and investment in minor irrigation equipment all falling for the first time in many years; and the rebound in FY87 is not expected to be robust. If potential growth rates in agriculture are to be met and if other related objectives--agricultural diversification, adequate nutrition and rural employment growth--are to be achieved, difficult issues will have to be addressed in the near future.

xxxiii. Water Development. Despite major investment in water development, there remains a huge untapped potential; coverage of low-cost drainage and flood control could be raised from 15% of inland cultivable areas to 35-40%, and irrigation from 22% of cultivated area to at least 50%. The draft National Water Plan, which was completed in July 1985, but which still needs to be operationalized, provides a good framework for the Government's program. Achieving the TFYP targets will require progress in two related areas. First, implementation of the minor irrigation program--which has been the major engine of development over the last decade but which has slumped badly over the last two years. While solutions are not clear-cut, it is clear that the institutional weaknesses of BADC will need to be addressed. Second, the efficiency of investment must be raised. Average investment costs of water development are much higher than they need be. The average command area for irrigation equipment is only about 35% of its potential, indicating great inefficiency. Expanding command areas will require major institutional support to the Irrigation Management Program (IMP).

xxxiv. Rainfed Crop Development. The potential for progress in rainfed crops is impressive. While the proportion of cereals produced using High Yielding Variety (HYV) seeds--which can double average yield--has risen from 8% to 16% over the last decade, the potential is estimated at 50% under existing conditions. But realization of this will require an expansion of research and extension services on rainfed areas, and a renewed effort to develop and disseminate improved varieties and practices for non-cereal crops (pulses, oilseeds, vegetables, fruits, sugarcane, and cotton).

xxxv. Fisheries Development. The natural resources to support a growing fisheries sector are abundant, but fish production has grown at only 3% per year since 1980. Rapid growth in inland fisheries will require investment in hatcheries, the establishment of a system of leasing of public water bodies and a mechanism for resolving conflicts with other water users. Coastal brackish water shrimp farming also offers excellent scope for continued rapid growth. This will require resolution of conflicts with rice farming in coastal areas and public investments in polder development for which cost recovery measures will be needed. And the Directorate of Fisheries will need staffing and management improvements to facilitate more effective policy analysis and investment planning. Slow progress in these areas is currently causing delays in obtaining external assistance to finance required investments in the sector.

xxxvi. The Efficiency of Agricultural Institutions. Examples of inadequate services are a weak cooperative system which has failed to resolve difficulties in farmer group formation and input supply, inefficiency in sales and servicing of irrigation equipment, reduced effectiveness of extension and research services, low efficiency of water use, and a credit system which reaches only 15% of farm households and where many farmers don't repay their debts. The Government has recognized the need for institutional strengthening, and has begun studies on the reorganization of BWDB and BADC, and initiated reforms of the agricultural credit system. An analysis of the appropriate role for BRDB is also expected to be undertaken in the near future; emphasis here should be given to defining priorities and desirable shifts in current activities, and identifying managerial and staffing constraints.

Industrial Policy

xxxvii. Over the last five years significant progress has been made in shifting to a more efficient and faster pattern of industrial growth. Major industrial policy reforms have included exchange rate adjustments, import liberalization, and improved support for the private sector through reduced controls on private investment and privatization of state-owned enterprises. In response, manufacturing output grew by an estimated 9% in both FY84 and FY85. FY86, however, was a disappointing year with growth slumping to only 2%, due primarily to special problems in jute, textiles and engineering. In addition to addressing the problems in these sectors, it will be important for the Government to strengthen industrial policy reforms in a number of areas, in order to accelerate potential industrial sector growth to 7-8% per year. Preliminary production figures for FY87 are encouraging in this regard, but much still remains to be done.

xxxviii. Export Promotion Policies. Over the last eighteen months the Government has made progress in exchange rate management, export finance, improving the duty drawback system, and in strengthening the administration of the Export Processing Zone. However, an efficient system of export

administration that can react swiftly to the changing needs of exporters is still lacking. In addition, backward linkages from garment exports are currently hampered by the lack of a simple, well-defined system for duty and restriction-free importation of raw materials for fabric, yarn and accessories industries. Export diversification will soon require similar capabilities for a larger number of products.

xxxix. The Structure of Protection. The Government is in the process of implementing a medium-term tariff and import regime reform to rationalize the tariff structure, to gradually replace Quantitative Restrictions (QRs) with tariffs, and to move towards unification of the dual exchange rate system. Anomalies in the tariff structure are especially acute in textiles and steel and engineering, which combined account for over half of value added in the manufacturing sector; protection should be lowered to a range of 10-75% from approximately 25-100% in textiles and 2.5-200% in steel and engineering. After changing to a negative and restricted list of imports in FY86, the Government's FY87 Import Policy Order liberalized imports further by shortening the negative and restricted lists. However, the restricted list continues to limit the import of certain raw materials to industrial users only, therefore still penalizing thousands of small and cottage industries.

xl. Public Sector Enterprises. Although significant progress has been made in developing a framework for better performance evaluation of the public sector enterprises (PSEs) by developing a technical unit, an accounting system and, in FY87, by promulgating a Public Corporations Ordinance, the speed and magnitude of implementation has not been sufficient to arrest the deterioration in PSE financial performance. Profits as a percentage of sales of public industrial corporations have consistently declined since FY83 and are now negative. Unless clearer performance criteria are established and greater operational autonomy granted to meet these criteria, public enterprises will continue to be a burden on the economy instead of contributing to industrial growth.

Options for the Jute Sector

xli. The future of the jute sector will significantly influence the rate of economic growth that Bangladesh can afford in the coming decade. While remaining by far the most important source of foreign exchange export earnings--still accounting for half of all exports--it has paradoxically become a large financial drain on the economy; losses of jute mills totaled Tk 2.5 billion in FY86, equivalent to 0.5% of GDP. There are two sets of issues that must be resolved if the sector is to contribute to Bangladesh's development rather than hinder it. First, how can the structural instability in world and domestic markets be ameliorated? Second, how can the longer-term competitiveness of the sector be improved so that Bangladesh can capitalize on its low costs and good quality jute in world markets? While progress will require a major reorientation of institutions to improve their effectiveness, it would also entail significant social costs and sizable financial investments over an extended period of time.

xlii. Instability in the Market. An immediate priority here should be given to the collection, monitoring and dissemination of adequate information on jute market conditions. Absence of such information has been a major cause for inefficiency of the market. The Government is strengthening the jute research and strategy section of the Jute Ministry, but so far, progress has been slow. Direct intervention by the Government is also required; this could be accomplished--over time--by a combination of variable export tax/subsidy policies and direct public buffer-stock operations. The efficiency of such intervention, however, will require organizational improvements of BJC and the Jute Division, improved storage facilities, and sizable financial resources.

xliii. Raising Efficiency in Jute Manufacturing. Current production capacity (up to 1 million tons per annum) is far in excess of demand in the short-term (525,000 tons), and even in the long term (700,000 tons), and a number of units are very inefficient. None of the mills are operating close to capacity levels, and average costs of production as a result are 20-30% higher than they need be. Despite the political and social difficulties, there appears to be no solution possible other than to phase out inefficient mills. In the private sector, this process is inevitable over time, as large annual losses cannot be indefinitely continued. The costs of such a process of slow attrition rather than a managed one is that in the interim, all mills, including potentially efficient ones, will suffer from reduced production and efficiency. The social costs of closing-down inefficient mills in either case are high, and need to be managed carefully; programs to retrain employees could be supported by donors. Rationalizing the jute mill sector would also require further injection of financial resources in the form of much needed write-offs of past accumulated debt (or conversion of debts to equity) and investment in modernization.

The Role of the Financial System

xliv. Resolving the Present Crisis. Restoring discipline in domestic financial markets will be a tough long-term process. However, important preliminary steps have been taken over recent months. Industrial credit recoveries rose by over 200% in July-December 1986 in comparison with the previous year, and agricultural collections were up by 30%. In the industrial sector, defaulters have been denied access to new credit and facilities. The DFIs have initiated legal cases against numerous defaulters, although processing has often been slow. The legal process is being expedited and a new Loan Recovery Act was submitted to the Cabinet during January 1987. A recovery program for agricultural credit is also in place to put pressure on borrowers and rural branches to pay and collect overdue agriculture loans. In particular, banks have been instructed to start certificate cases for all borrowers whose outstanding loans are more than Tk 10,000, and procedural changes to expedite the processing of these cases have been made. Legislation has been introduced which would ban defaulters from holding elected office at the local level, and disbursements of the

second installment of Upazila block grants have been tied to agricultural loan recoveries in each Upazila.

xliv. Longer-Term Reforms. According to policies pursued in the coming years, the financial system will either facilitate efficient economic growth or it will hinder it. As in many developing countries, Bangladesh's financial and monetary control systems are characterized by a heavy reliance on credit ceilings for monetary control, an emphasis on directed lending towards priority sectors and activities--financed by generous rediscount facilities at the Central Bank--and limited concern for credit recoveries on the part of banks and specialized lending agencies. Experience suggests that this kind of structure often leads to a breakdown in credit discipline and usually leads to a high cost, low efficiency intermediation process. For this reason, many countries are seeking to increase the autonomy and accountability of banks, while increasing the supervisory capacity of the Central Bank and relying increasingly on more modern "fractional reserve" and open-market operation methods to control money supply. Bangladesh is now in a good position to begin to move in this direction. Recent reforms have laid the groundwork, and the Banking Commission Report (issued June 1986) provides an important framework for more fundamental change. Four components will be the keys to a successful longer-term reform: (a) providing a more appropriate incentive system to the lending institutions; (b) strengthening the lending institutions and the Central Bank; (c) making costs and subsidies explicit; and (d) changing the methods of monetary management.

Managing Public Expenditure (Chapter 4)

xlvi. Higher and more effective public expenditure will be needed to achieve the Government's growth and equity goals. This will require improving the efficiency of decision-making and implementing procedures and developing a better trained and motivated public workforce. Adapting and strengthening institutions is a long-term process. The report documents recent progress and suggests directions--many of which are under active consideration by the Government--for the coming years.

Development Strategy - The Role of the Planning Commission

xlvii. The Planning Commission is responsible for formulating the Government's development strategy and for translating this into a public investment program. It also ensures that public programs and policies are in conformity with that strategy, through its project approval process, and through its advisory position on the country's two highest economic decision-making bodies--the National Economic Council (NEC) and its executive committee (ECNEC). With the growth in size and complexity of the public expenditure program and the continuous need to ensure that economic policies are consistent with the expenditure program, a strong and well staffed Planning Commission is much needed. In this regard, it is recommended that attention

be given to two areas. First, over the coming years, the Planning Commission should devote less time and attention to detailed project approvals, ensuring only that the project is in conformity with national priorities. This would enable more time to be given to the formulation and monitoring of development strategy and for broader policy issues. For example, a stronger leadership role could be taken in setting the agenda and providing analyses and recommendations for NEC and ECNEC. Second, in view of this upgraded role, the Commission's capacity to undertake economic analysis would need strengthening. In this regard, the disciplinary mix at the senior levels of the Planning Commission currently appears to be inappropriate. Rotations, promotions and enhanced training opportunities could be used to prepare the Commission for its key role in the development process.

Project Initiation and Approval

xlvi. Streamlining Project Approval. There are two major deficiencies with the current Project Proforma (PP) process which the Government is seeking to address. First, the process takes too long, with most of the delays due to bureaucratic impediments rather than substantive issues. Second, too much attention is paid to relatively minor budgetary and administrative details--personnel, vehicles, equipment and technical assistance--with Planning Commission staff frequently concentrating on these details, while important issues such as project design and technology choice, economic viability, and sectoral context are sometimes neglected. The Planning Commission is currently reviewing this process, with the aim of substantial reform.

xlix. Strengthening Ministry Planning Units. Many ministries play a relatively passive role in reviewing the details of proposed projects, assuming this will be done by the Planning Commission and the Project Evaluation Committee. Recognizing this problem, the Government has begun to strengthen ministerial planning cells/units by transferring Planning Commission staff to them. In the meantime consideration might be given to hiring local consultants on a short-term basis to strengthen the planning units and to assist in project identification, preparation and statistical work in the line ministries.

1. Reviewing Technical Assistance Projects. Delays in approving Technical Assistance proposals (TAPPs) are a major cause of slow project implementation; there is an urgent need for procedures to be streamlined and reoriented. Donors on their part should refrain from suggesting studies automatically whenever difficult problems are encountered and be more selective about proposing foreign rather than local consultants. The Government's preference to use grant funds for TA is reasonable, but an inflexible application of this policy is causing delays in the development program, flexibility is especially important when TA is an essential part of an investment project (e.g., design and supervision for civil works). Proposals for TA should also be scrutinized on their merits, rather than be subject to arbitrary rules.

Budgeting Public Expenditure

li. Operation and Maintenance (O&M). The urgent need to provide for adequate resources for O&M has increasingly been recognized at all levels of Government. In the FY87 budget, for the first time, O&M line items were shown in the budget, but the Government still limits its definition of O&M to materials and services, thus excluding recurrent personnel expenses which are particularly important for projects and programs in education, health, family planning, agricultural extension, and other staff-intensive development activities. In order to ensure adequate O&M provisions (including recurrent personnel costs) in future budgets, line ministries and public autonomous bodies will need to assess the extent of backlog in O&M requirements; establish future needs based on sector-specific plans and standards; formulate medium-term financing plans for O&M; and establish procedures for monitoring O&M implementation. Three key sectors--BWDB flood control, drainage and irrigation projects, national highways, and education--have been selected by the Government as priority sectors. Studies have been commissioned to assess O&M needs in these sectors and new arrangements and procedures will be introduced in FY88.

lii. Improving the ADP Process. During the past five years, progress has been made with respect to the delegation of financial authority to line ministries and project agencies, the streamlining of budgetary procedures and more decentralization of administrative activities. The excessive number of projects in the ADP has been cut every year since 1983; the FY87 ADP includes 638 projects in contrast with 1726 in FY82. The Core Program which was introduced in FY83 to improve discipline in the ADP process, is now creating anomalous situations; sometimes different components of the same project are being designated Core and non-Core, and high-priority new projects can be classified as non-Core because the Core category is full. The system needs rethinking. In a first attempt to introduce multi-year budgeting, the Planning Commission prepared "shadow ADPs" for FY86-88 in parallel with the FY86 ADP; however the process appears not to have been taken very seriously and to have played little or no role in the formulation of the FY87 ADP. The exercise needs to be up-dated on a rolling basis and its results incorporated in the normal development and budgetary planning cycles.

liii. The Possibilities for Budget Integration. Although funds are distributed between the Revenue Budget and ADP through one decision-making process, the two budgets are formulated separately. The allocation of resources might be improved if the two budget processes were merged. Although the distinction between recurrent and capital expenditures would be maintained, integrated budgets could be prepared jointly on a sectoral basis, facilitating a comprehensive assessment of each sector's requirements. Trade-offs among investment in new facilities, rehabilitation or improvement of existing facilities, and O&M requirements could be addressed more directly than at present. Multi-year budgeting could probably also be incorporated

more easily in an integrated budget format, since the relationships between capital and recurrent expenditures would become clearer.

Project Implementation

liv. Delays are experienced in the implementation of almost every development project in Bangladesh. Improvements over the last two years include improved customs and budgetary release procedures and, in the case of IDA funds, the introduction of the Special Accounts in Foreign Exchange (SAFE). However, serious problems remain and further progress is needed in:

- expediting the process of land acquisition;
- improving procedures for the appointment of key staff;
- streamlining procedures and training staff in procurement;
- simplifying consultant appointment procedures; and
- devolving autonomy and accountability to project managers.

The report contains recommendations in each of these areas.

The Quality and Motivation of Public Employees

lv. Reforms of planning and implementation procedures will only be as effective as the people who implement them. The efficiency of public expenditures depends above all on the quality, motivation and sense of common purpose of public employees. In Bangladesh, as in many developing countries, the effectiveness of the public sector could be greatly improved in this regard. Currently, inadequate compensation compared to the private sector and an apparent decline in the prestige of public service seems to be leading to a decline in the quality of recruitment of Class I Officers and to an increase in resignations. In addition, the centralized system of decision-making through the secretariats, supported by a vast, intricate web of formal procedures, leads to further frustrations and bottlenecks, and the heavy reliance on the committee system also tends to reduce the level of accountability and hence motivation of middle level managers. Furthermore, the policy of frequent rotation among Class I Officers tends to encourage a lack of commitment to longer term tasks and strategic thinking. And despite some recent improvement, most promotion decisions continue to be made largely on the basis of seniority, which can discourage able young recruits. Aware of these problems, the Government has recently announced that a high priority will be given to reforming the administrative structure.

Financing Public Expenditure (Chapter 5)

lvi. Even with more generous foreign assistance, substantial increases will be required in domestic revenues to undertake the level of required public expenditures. It is estimated that the ratio of Central Government revenue to GDP will have to rise by about 1.5 percentage points by FY90 and by about 3.0 percentage points by FY95. In addition to these funds needed in the Central Government treasury, substantial increases in revenues will be required from sales of public enterprise products and services in order to restore their financial health, and enhanced charges will be essential for a number of publicly provided services in order to cover their recurrent costs. Approximately another 1% of GDP will be required for these purposes.

Tax Policy

lvii. Achieving the Government's twin objectives of raising public revenues while rationalizing its industrial incentive structure will require careful management. Trade-based taxes account for 55% of tax revenues, and some of the measures needed to promote industrial efficiency and export competitiveness--reducing selective tariffs and expanding the duty drawback system for example--will result in a reduction in revenue. Similarly tax adjustments required to reduce discrimination against some industries (brought about by "cascading" domestic and trade taxes) may also entail a loss of revenue.

lviii. Many developing countries face a similar dilemma. While there is no blueprint applicable to all countries, some lessons are emerging from reform efforts. Common elements to tax reform--whether implemented all at once, as in the case of Indonesia, or more gradually--include (i) a shift away from trade-based taxes towards taxes on consumption, easing collection difficulties by building upon existing tax instruments and collecting at the import or manufacturing level; (ii) replacement of import quotas by non-prohibitive tariffs, which can raise revenues substantially; (iii) a reduction in exemptions on corporate and personal income taxation, which in the case of Bangladesh are very generous; (iv) measures to improve tax administration; and (v) an increased emphasis on other taxes, such as land taxes.

Public Pricing Measures

lix. Since the prices of most publicly provided goods are below their economic costs, raising prices will generally lead to a more efficient allocation of resources. At the margin therefore raising revenue from improved cost recovery is often more efficient than from taxation. Good progress has been achieved over the past five years in improving public pricing policies, primarily by the reduction of large subsidies on foodgrain and fertilizer sales, and by the taxation of petroleum products. However, in other areas--power, natural gas, education, irrigation--public expenditures have risen more rapidly than revenues.

lx. Defined in their broadest sense economic subsidies account for about 3% of GDP in Bangladesh. About one third of these are in three areas which are obviously beneficial and should be retained--primary education, primary health care and special food programs targeted towards the most vulnerable. The remaining subsidies have remained roughly constant in the aggregate during the 1980s but in composition there has been a shift away from the subsidization of agricultural inputs and outputs (fertilizers and foodgrains) towards the subsidization of industrial and commercial sectors (power, natural gas and railways). An additional implicit subsidy, which again tends to indirectly benefit the industrial sector, occurs when fees for services are not collected; collections for electricity in FY86 for example were barely half of what they should have been.

lxi. The report presents an illustrative scenario, under which price subsidies in energy, transport, communications, non-primary education, and non-poverty oriented food programs are phased out by the end of FY90. Public revenues would rise by about 2% of GDP, about half of which would be available to the Central Government as general revenue. The bulk of the price increases would be borne by better-off urban dwellers. The effect on the poor would be small but not negligible. An expansion of the social services and targeted subsidies would therefore be an important complement to the program.

III. PROMOTING HUMAN DEVELOPMENT

Trends in Poverty, Nutrition and Real Wages (Chapter 6)

lxii. Based upon a recently available Household Expenditure Survey and evidence from nutrition surveys and wage and food availability data, the report assesses recent trends in poverty alleviation. While the data are weak some broad conclusions appear warranted.

lxiii. The 1974-82 Period. While the proportion of the population in poverty--those unable to afford a basic recommended calorie intake--apparently fell from 82% to 73%, the proportion in extreme poverty--unable to afford even enough food to live a reasonably active life--rose from 43% to 50%. The number of these "hardcore" poor rose by 13 million during this period. Real wages fell and while calorie intake was helped by a relative decline in the price of foodgrains, the quality of the diet fell sharply.

lxiv. The 1982-87 Period. The poverty situation appears at least not to have deteriorated further over the last five years. More food has been available to lower income groups, partly through the rapid expansion of the Food for Work and Vulnerable Group Feeding programs, and real agricultural wages have risen, recovering in 1986 to their pre-Independence levels for the

first time. Assuming no deterioration in the distribution of income over the last five years, the incidence of poverty would appear to have declined slightly, although the absolute number of poor has certainly risen, from about 67 million in 1982 to 73 million in 1986; equivalent to 60% of the increase in the population during this period. Despite recent progress, food availability and relative price data have led most observers to conclude that the quality of the diet has continued to deteriorate and this needs immediate attention.

lxv. The Outlook for the Future. The causes of the recent rise in real wages appear to be associated as much with the institutional changes and special programs in rural areas as with underlying economic factors. The outlook for the 7 million landless and near landless families in rural Bangladesh is highly uncertain. While there is good scope for continued robust agricultural growth, the need for hired labor is tending to be reduced as average farm size declines; between 1977 and 1987, average farm size has fallen from 3.5 acres to 2.3 acres and will probably fall to 1.5 acres in the next 20 years. Smaller farms tend to generate more employment but less hired employment. Over the next two decades, as fragmentation of agricultural land continues, over 23 million additional people will become dependent on rural non-farm activities or will be forced to migrate to the cities. This is potentially a disastrous situation for landless laborers and for very small farmers, whose farms provide only supplementary income to laboring activities and yet prevent their mobility to urban and other rural areas where job opportunities might be more plentiful. In this regard, the Government recognizes that the promotion of economic and employment opportunities, and access to resources by these disadvantaged people must have the highest priority.

Promoting Income Earning Opportunities Among the Poor (Chapter 7)

lxvi. Even under the High Case growth scenario, probably only about two-thirds of the 1.3 million annual increase in the labor force could be productively employed at current real wages under the present production structure. Special targeted efforts to help the assetless and near assetless are therefore an essential complement to sound macroeconomic and incentive policies. But experience in many developing countries suggests that without special attention, government programs tend to benefit primarily the better-off rural dwellers and usually fail to reach the very poor. The assetless are generally illiterate and lack skills and financial resources to take advantage of productive opportunities as they might arise. Almost inevitably, therefore, the existing rural power structure manages to usurp the benefits of poverty programs for themselves, sometimes with negative effects on the poor. Bangladesh is no exception to this common occurrence. In some instances good progress has been made--e.g., Grameen Bank--but the efficiency of programs could be improved and the scale of the unmet needs is enormous.

lxvii. These concerns are shared by both Government and donors, and the last year has witnessed important initiatives in this area. Experience with ongoing programs leads to the following conclusions:

- In order to prevent the expropriation of cooperative schemes by the local elite and to promote a sense of "ownership" on the part of the poor, it is necessary that individuals be organized into groups based on socio-economic homogeneity and common interest.
- The best chances of achieving economic viability for landless cooperatives is if training in functional skills and market information is made available along with access to credit. This is a complex endeavor requiring a skilled, motivated and unconstrained intermediary.
- It is difficult--but not impossible--to achieve this sense of motivation within public agencies. In this regard, it is desirable that the Government seek to establish a closer partnership with local Non-Governmental Organizations (NGOs), in order to draw upon their unique strengths.
- In view of the importance of employment concerns and the expansion of innovative approaches to poverty alleviation, there is a need for (a) monitoring and evaluating ongoing employment programs to ensure that emerging lessons from experience are disseminated and incorporated in new initiatives; (b) reviewing the Government's overall expenditure program, and assessing the extent to which attention is given to providing opportunities to the most needy; and (c) exploring the overall policy environment and technology development with respect to its impact on employment. The Government has recently announced its decision to establish a policy unit in the Planning Ministry for this purpose.
- While the Food for Work programs have had a remarkably positive impact on rural employment creation, there has been a tendency to regard the program as a form of relief rather than an integral part of the local investment plan; as a result counterpart funds for important complementary investments (bridges, culverts, etc.) are often not provided, and cash allocations for maintenance are quite inadequate. As the FWP expands and diversifies into new activities such as irrigation works, social forestry, fisheries and the construction of schools and markets, it is more important than ever that these programs be coordinated with other local activities such as those financed by the Upazila Development Grant and other ADP-financed projects at the local level.

These were among the most important recommendations stemming from a working level meeting of the Bangladesh Aid Group held in Bonn in November 1986, to consider ways to alleviate the lot of the country's many poor.

Promoting Economic Opportunities for Women (Chapter 8)

lxviii. Acute poverty at the margin appears to be hitting hardest at women, physically, socially, and economically, resulting in a high, gender-specific wastage of human resources. Persistent poverty is changing the family structure, often making women's contribution to household earnings essential. Nuclear families are becoming the dominant household form, and many widows can no longer depend on the protection of extended family networks. Rising dowry demands and higher frequencies of divorce, separation and abandonment are additional signs of acute pressure on family bonding. Particularly among the poor, traditional support networks are breaking down, and women's earning capacity is becoming a matter of survival for growing numbers of poor families. Poor health and nutrition, lack of schooling and limited access to improved technology and social and economic services, result in low productivity of female labor and low wages. Rural women work around 14 hours per day on average--as much as four more hours per day than men do--and earn wages which are generally about half those of men.

Targeted Women's Programs

lxix. Over the long term the best prospects for improving the welfare and quality of life for Bangladesh's women are provided by expanded and improved access to education, health and family planning programs. Social rates of return on investment in these services for women are universally very high throughout the developing world. In this regard, education of girls deserves not only policy commitment but also serious attention to influences now discouraging parents from educating their daughters. It is also essential to expand entry of women teachers and to encourage promising innovative approaches such as non-formal primary schooling; adapting schedules, location and curriculum content to match local circumstances; scholarship programs for secondary and higher education; non-formal and formal skills training to women in organized groups; and expanded use of female community-based volunteers as basic trainers and resource persons. Similarly improving the quality of family planning services to allow women to plan pregnancy and space childbirth with greater confidence and ease, and expanding access to maternal health care will be crucial to encourage a fuller response of women to development opportunities.

lxx. These human development programs must be supplemented by special programs, targeted towards providing women with access to resources and productive services. A number of group approaches have proved particularly successful in reaching women in Bangladesh and offer a basis for larger-scale programs.

lxxi. The Most Vulnerable. Over half a million of the most distressed and vulnerable women are being reached by the Vulnerable Group Feeding Program

(VGF) and two modified Food-for-Work Programs--Post Monsoon Rehabilitation and the Road Maintenance Program (RMP)--which are implemented through union-level committees. The RMP and VGF programs now also include development training in basic health and literacy and have sought to link their clients to the services and support of government and non-government agencies. A recent survey of the RMP showed that about 95% of beneficiaries had never been to school, more than 70% owned no land, and about 40% had no house. After one year in the program, which provides Tk 12 a day throughout the year, the proportion of beneficiaries receiving an inadequate diet fell dramatically, expenditure on health care, housing, cereals and protein increased, and children's school attendance doubled to around 23%.

lxxii. The Working Poor. A number of programs have opened access to traditional small-scale income-earning activities and have strengthened women's economic capacity through homestead-based skills training, input provision, savings mobilization and credit. At least half a million women from landless households and possibly as many as three million are involved in regular group meetings and activities. As a result, their asset holdings and their basic food and non-food consumption have been increasing, and school attendance of their children and family planning has been encouraged; compared to the national contraceptive prevalence rate (CPR) of about 28%, data from BRDB's women's cooperatives for 1986, suggest a CPR of 73% for eligible couples. Group formation is essential for mobilizing rural savings and promoting efficiency and discipline in credit use. With only their savings performance as collateral, women have proven to be an excellent credit risk. Savings and credit activities are characterized by regular meetings, training sessions, rapid turnover of funds, tight peer group accountability, locally recruited field staff, and short managerial spans of control.

Education, Health, Population and Nutrition (Chapter 9)

lxxiii. Countries which give a high priority to education, health, population and nutrition programs are generally those that are most successful economically. Recognizing this, the Government of Bangladesh has repeatedly emphasized its commitment to human resource programs and, over the last decade, has devoted about 13.5% of public expenditures to education, health and population programs. Birth and death rates have declined, and access to health and education services has increased. However, health and education indicators remain unacceptably low, and easily avoidable illnesses still account for a substantial proportion of deaths. Performance in Bangladesh continues to compare unfavorably with other countries at a similar stage of development; child and infant mortality rates, for example, are twice the average rates in low-income countries, literacy rates are among the lowest in the world, and the population per nurse/midwife is still over three times the average in low-income countries in Asia and the Pacific.

Issues in Health, Nutrition and Family Planning

lxxiv. Internal Efficiency. Existing facilities are underutilized, particularly in rural areas partly due to the low quality of services resulting from inadequate facilities, staff absenteeism, poor training, and a lack of essential supplies; drug allocation in the Upazila Health Centers, for example, is equivalent to only Tk 1 per person per year. Another problem is the mismatch between available skills and the needs of priority activities; while there are a surplus of physicians trained in secondary and tertiary care, the number of well-trained primary health and family planning workers is quite inadequate.

lxxv. Program Management. Performance in the health and family planning sectors has been significantly constrained by delays in recruitment of personnel, inadequate logistics and weak program supervision. In particular, it is hoped that actions for encadrement of Family Planning Officers and their inclusion as members in the Upazila Parishads will improve their performance. In addition, prompt recruitment of additional Family Welfare Assistants and improvement in the distribution of ORT and Drug and Dietary Supplement kits could significantly enhance the immunization, vitamin A and diarrheal programs, and could lead to a reduction in infant mortality.

lxxvi. Strengthening Mother and Child Health Care. Recent efforts to improve MCH care are most encouraging, but considerable more work to strengthen the existing system and develop new approaches will be necessary. Basic antenatal care, for example, remains almost totally absent. Mass education regarding the need for attention while pregnant remains an unmet priority, and effective screening and teaching of pregnant women will require more and better trained field workers.

lxxvii. Planning for Urban Health. Health services in urban areas are inadequate and their coverage may even be deteriorating. The urban areas lack major government health input and the NGOs provide the bulk of urban health services. Programming and priorities of the NGOs are at best loosely coordinated. The health needs and strategies for providing these services are not being formulated and are not reflected in existing budgets.

lxxviii. The Need for a Nutrition Program. A strategy for dealing with problems of malnutrition and institutional arrangements for implementing programs are currently lacking. Principal responsibility for policy and strategy formulation should rest with the Food Policy Committee (FPC). And strengthening the Food Ministry's Food Planning and Monitoring Section would permit it to function as a secretariat to the FPC. Earlier efforts to energize the National Nutrition Council (NNC) and build on its efforts to formulate a draft nutrition policy and program have lost momentum but must be renewed if it is to play an essential advocacy and advisory role. The NNC also needs broadening to include NGOs and other private sector representatives.

lxxix. Role of NGOs. The contribution of local and international NGOs in the expansion of health and family planning programs has been substantial; it is estimated that they provide almost 40% of contraception from modern methods and for the majority of MCH services in urban areas. In order to facilitate their further growth, it will be necessary to improve coordination both among the NGOs and with the Government's programs, and to develop mechanisms to evaluate, supervise and monitor their performance.

Issues in Education

lxxx. Education faces a number of constraints which combine to reduce its effectiveness. These include the burden of a rapidly growing population, low expenditures and an underdeveloped planning, management and administrative capacity. Access to education has only expanded modestly in relation to the growing needs and the quality of education is poor. There is growing discontent and frustration with the poor performance of the system. Some progress is beginning to be made. For example, a reorganization of the Ministry of Education has been initiated, and in primary education, improvements are occurring in field supervision, personnel management, teacher training, curriculum development, textbook supplies and in construction and maintenance of school facilities. Nonetheless, the situation remains very serious. Unless the reforms initiated in primary education are expanded and developed, the primary system will not only remain very wasteful, but will absolutely fail in its task of providing basic literacy and numeracy; currently less than one in five children who enter the system emerges literate. Secondary and higher education is also in urgent need of attention; examination systems must be modified, and programs and curricula must be made more appropriate to the needs of the country.

lxxxii. Reducing High Wastage. High dropout and repeater rates currently greatly increase the cost of producing graduates at all levels of education. Fully 50% of first grade students drop out before the second grade, and repeater rates at the primary level are high. If the system continues to perform as it has in the first half of the eighties, primary enrollments will not even keep up with population growth by 1990. Wastage in the secondary and college systems is most evident in the low pass rates associated with the terminal examinations. Repetition in the secondary system is estimated at between 25% to 30% at each grade level, and degree colleges have an even higher failure rate in their examinations.

lxxxiii. The Need for Cost Recovery. Cost recovery in the education system is almost non-existent. Monthly tuition fees average Tk 5.5 in lower secondary (US 18 cents), Tk 8.5 in upper secondary (US 29 cents), Tk 10 at the degree colleges (US 33 cents) and Tk 12 (US 39 cents) at the honors and advanced degree courses of study. As a result, fees contribute well below 10% of recurrent costs; this places an additional constraint to the prospects for improving quality and expanding educational services. While no charges should be made for primary education, the option of increasing tuition and

fees at the higher levels, while establishing programs of student aid on the basis of need and merit, deserves serious consideration.

lxxxiii. Non-Formal Education Alternatives. Community-based non-formal education approaches are a promising alternative to provide basic numeracy, literacy and skills to youths and young adults who have not been able to enter the formal education system. NGOs have achieved considerable success in implementing innovative non-formal basic education programs and in reaching the rural poor with training, but their progress has been on a small scale. Some--such as the Bangladesh Rural Advancement Committee--have reached fairly high enrollment and low dropout rates (especially for girls) with fairly low operational and minimal capital expenditures. A serious review of these activities with a view to assessing their potential for replication is desirable.

INTRODUCTION

Bangladesh is now two years into its Third Five Year Development Plan (TFYP; FY86-FY90). There has been progress and many reasons for encouragement, but also causes for concern. The overall development targets established in the plan were for the most part appropriate and achievable, but for a number of reasons they are not being met and the economy continues to perform below its potential. Bangladesh's overall economic growth--averaging about 4% per year so far in the 1980s--is respectable by international standards. But it is not sufficient to permit much progress in tackling the problem of poverty, which remains overwhelming. This report therefore assesses the scope for accelerating development in Bangladesh. What are the policy adjustments that would be required to attain the kind of development envisaged in the TFYP? How can foreign donors support this effort? And how can human development programs and special measures to assist the most vulnerable, complement the policies designed for higher and more efficient growth? The report has three parts.

Part I discusses economic trends and assesses the scope for accelerating growth in the coming years. Chapter 1 briefly reviews recent developments in the economy, giving special attention to FY86 and FY87. Chapter 2 takes a longer-term perspective, and discusses the outlook for the economy for the remainder of the Third Five Year Plan period and for the first half of the 1990s. Unlike previous reports which have described the expected outlook for the economy under present economic policies and aid commitments, in this report the focus is on potential growth and development. A "High Case" is defined based on the assumption that the Government continues to make good progress in adjusting the policy environment and that donors are able to support this progress with more generous and appropriate aid flows.

Part II discusses in more detail the development strategy envisaged under the High Case. Chapter 3 explores policies designed to promote more efficiency in the private and public enterprise sectors; how can agricultural, industrial and financial policies and programs be modified to support more rapid market-oriented growth? Chapter 4 discusses the role of public expenditure; how can the process of planning, budgeting and implementing public expenditure be improved? Chapter 5 assesses the scope for improved public resource mobilization; what adjustments in taxation and public pricing policies would be needed to finance the projected increases in public expenditure?

Part III of the report focuses on human development and the poor. Chapter 6 assesses--to the extent possible given the limited data--recent trends in poverty incidence and the outlook for the future. Chapters 7 and 8 discuss the needs of the two most vulnerable groups in Bangladesh--the assetless and women; what lessons are being learnt from the various programs directed towards assisting these two groups? Finally, Chapter 9 reviews progress and prospects in health, population, nutrition and education.

A Statistical Annex is presented at the end of the report.

PART I: RECENT DEVELOPMENTS AND MEDIUM-TERM OPTIONS

Chapter 1: RECENT ECONOMIC DEVELOPMENTS

1.01 FY86 and FY87 have witnessed significant improvements in economic policymaking in Bangladesh. Macroeconomic management has been sound, and the authorities have embarked upon an ambitious program to improve efficiency and competitiveness in the economy. The current account of the balance of payments and the budget deficits have been brought down to manageable and sustainable levels, and over the last few months serious efforts have been initiated to restore discipline to the troubled domestic financial system. At the same time, there is some evidence to suggest, albeit tentatively, that real wages and incomes may be rising in rural areas.

1.02 But there have also been disappointments. Industrial expansion has been well below expectations and agricultural growth has been due more to special circumstances than to strong policies and programs that can be expected to continue. Although overall growth rates are respectable, they are well below the targets established for the Third Five Year Plan and while there are good reasons for these shortfalls, there is nonetheless a sense that in some areas progress is slipping.

Table 1.1: GDP GROWTH - A COMPARATIVE PERSPECTIVE

	Percent Growth Per Annum					
	1973-80 Average	1980-84 Average	1984	1985	1986	1984-86 Average
World	3.4	2.1	4.2	2.8	2.9	3.3
Developing Countries	5.0	2.9	5.2	4.1	3.4	4.2
Low Income Countries	4.7	6.8	9.0	8.8	6.0	7.9
Sub-Sahara Africa	3.4	-1.3	-1.8	2.3	0.9	0.5
China and India	4.9	7.7	10.3	9.8	6.1	8.7
Bangladesh	5.8	3.8	4.2	3.7	4.4	4.1

Note: Data for Bangladesh are in fiscal years, July-June.

Source: World Bank, estimates as of mid-1987.

Sources of Growth

1.03 Overall GDP growth in FY86 and FY87 is estimated at 4.4% and 4.2%, respectively--about average by international standards. These growth rates were slightly above the average for 1980-85 but well below the 5.8% average growth achieved in the 1973-80 period. Table 1.1 places Bangladesh's growth in a comparative perspective. For the time being, Bangladesh continues to grow faster than African countries, but at a much slower rate than the largest low income countries--India and China.

Table 1.2: GDP GROWTH BY SECTORS, FY73-FY87
(percent growth per annum, constant FY73 prices)/a

	FY73- FY80	FY81- FY85	FY83	FY84	FY85	FY86/b	FY87/b	Production as Share of Total FY86/c
Agriculture	3.5	2.8	4.6	1.6	1.0	3.4	1.5	46.3
(Crop Sector)	(4.0)	(2.5)	(4.9)	(1.1)	(1.2)	(4.4)	(-)	(36.4)
(Others)	(1.6)	(4.1)	(3.5)	(3.3)	(0.1)	(0.1)	(-)	(9.9)
Manufacturing	(13.9)	2.5	-1.6	3.6	3.2	1.8	7.7	9.8
Construction & Utilities	7.4	11.2	5.8	18.4	11.8	3.0	10.2	5.6
Services	7.6	4.8	3.5	6.2	6.3	6.6	5.6	38.3
<u>GDP at Market Prices</u>	<u>5.8</u>	<u>3.9</u>	<u>3.6</u>	<u>4.2</u>	<u>3.7</u>	<u>4.4</u>	<u>4.2</u>	<u>100.0</u>

/a In accordance with BBS practice, a base year of FY73 is assumed here. It is recommended that the national accounts series be rebased on FY85 prices in the near future.

/b Preliminary estimates.

/c At constant prices.

Note: Table presents official Bangladesh Bureau of Statistics data. Staff estimates suggest that manufacturing growth for FY84 and FY85 was much higher (about 9% each year) than suggested by official data (see para. 3.21).

Sources: Bangladesh Bureau of Statistics, Planning Commission.

1.04 The agricultural sector, accounting for 46% of GDP, grew by 3.4% in FY86. While this was an improvement on the growth of the previous year, it was due almost entirely to a 50% increase in jute production in response to high producer prices in the year before. Foodgrain production, at 16.1 million tons, was disappointing, falling slightly for the first time since 1982. The main (rainfed) aman rice crop was excellent, rising by over

600,000 tons to over 8.5 million tons, but was more than offset by a 30% decline in the wheat crop and a 6% fall in the boro rice crop.^{1/}

Table 1.3: TRENDS IN AGRICULTURAL PRODUCTION AND VALUE ADDED, FY81-FY87

	FY81	FY82	FY83	FY84	FY85	Est. FY86	Proj. FY87
<u>Production</u> (million tons unless indicated otherwise)							
Foodgrains	15.02	14.65	15.36	15.75	16.12	16.11	16.64
Rice	13.88	13.63	14.21	14.50	14.62	15.04	15.50
Aus	3.28	3.26	3.06	3.22	2.78	2.83	3.13
Aman	7.96	7.20	7.60	7.93	7.93	8.54	8.27
Boro	2.63	3.15	3.54	3.35	3.90	3.67	4.10
Wheat	1.09	0.96	1.09	1.21	1.46	1.04	1.10
Others	0.05	0.05	0.05	0.03	0.03	0.03	0.04
Jute ('000 bales)	4,943	4,646	4,881	5,216	5,111	8,660	6,753
Cotton ('000 bales)	10	55	58	46	29	29	50
Pulses	0.22	0.21	0.20	0.19	0.19	0.18	0.24
Oilseeds	0.25	0.26	0.26	0.27	0.27	0.27	0.27
Sugarcane	6.60	7.14	7.48	7.29	7.00	6.64	7.00
Potatoes	1.00	1.08	1.17	1.19	1.18	1.10	1.15
Sweet Potatoes	0.70	0.69	0.73	0.72	0.69	0.61	0.56
Tea (thousand tons)	40	39	41	42	38	37	40
Tobacco (thousand tons)	48	51	51	49	50	46	50
<u>Real Growth in Value Added</u> (% p.a.)							
Crops	5.9	-0.7	4.9	1.3	1.2	4.4	
Livestock	2.5	5.8	2.4	1.9	2.3	2.4	
Forestry	7.9	10.5	1.9	9.3	-6.5	-5.0	
Fisheries	0.2	5.8	6.8	0.7	2.3	0.3	
Total Agriculture	5.3	0.9	4.6	1.6	1.0	3.4	1.5

Sources: Bangladesh Bureau of Statistics; Ministry of Agriculture; World Food Programme, Dhaka; and mission estimates.

^{1/} Harvesting seasons for foodgrains are: aman (main monsoon season: July-November), aus (early monsoon season: March-July), boro (dry season: December-April), and wheat (dry season: December-April).

1.05 Relative price shifts, and a decline in input use and credit availability played important roles in the FY86 production picture. Low paddy prices dampened incentives for boro and wheat production and, in combination with buoyant prices for some of the minor crops, stimulated some substitution of acreage. Sales of fertilizer and other inputs fell in FY86 for the first time in many years, discouraged by a lower fertilizer-rice price ratio, low cash incomes from jute and the squeeze on agricultural credit. Fertilizer sales had been unusually high the year before as a result of additional use of replanting of crops, but this cannot account for the full decline. Mainly as a result of serious institutional problems (as well as reduced credit availability), sales of irrigation equipment slumped badly; only 4,400 shallow tubewells were sold in comparison with 19,700 in FY85, and sales of deep tubewells fell from 2,170 to 670. The growth in irrigated area was thus only 2% in contrast with 8% in FY85.

1.06 After a period of very rapid growth in agricultural credit programs in which many loans of doubtful legitimacy were made and arrears built up totaling some \$600 million equivalent, a crisis point was reached which required acceptance of short-term costs for the sake of the survival of the institutional rural credit system.^{1/} Gross credit extended to agriculture fell from the equivalent of \$280 million in FY85 to \$215 million in FY86. Recoveries, amounting to \$210 million, rose slightly in absolute terms from FY85, but as a proportion of outstanding loans fell from 38% to 27%. As a result, strong measures have had to be taken to recover overdue loans and to ensure that new credits are repaid.

1.07 Preliminary data for FY87 suggest a reasonably good year for foodgrains. The aman crop was slightly lower than the record level of FY86, and the aus crop appears to have risen by a healthy 11% having moved into some of the jute area. Expansion of the input-intensive boro and wheat crops continued to be constrained by the slow growth in irrigated areas and continued low sales of tubewells; however, combined they should rebound to their FY85 levels.^{2/}

1.08 The jute sector remains a cause for serious concern.^{3/} There has been a 40% decline in real jute export earnings between FY85-87 as average export prices collapsed by more than one-third, a three-quarter fall in the producer prices received by jute farmers, a decline in jute goods production by 14% and annual losses in jute manufacturing exceeding 0.5% of GDP. These

^{1/} In this report \$ always refers to US\$.

^{2/} See Chapter 3 for a more detailed discussion of issues in the agricultural and industrial sectors.

^{3/} See Chapter 3, Section III for a more detailed discussion of issues in the jute sector.

problems have stemmed from cyclical instabilities in jute markets of unusual severity which the Government was unable to control and the political difficulties of closing or trimming employment in inefficient jute mills. As a result of the crisis, longer-term problems of falling world demand and uncompetitiveness with synthetics, declining profitability in jute cultivation and major financial losses in jute manufacturing have been exacerbated.

1.09 Manufacturing output rose by only about 2% in FY86 although preliminary estimates suggest a reasonably healthy rebound in FY87. The slump in FY86 contrasted markedly with growth of 9% in both FY84 and FY85 when high prices for jute and tea, coupled with an expansionary monetary stance and rapid growth in garments exports, resulted in large increases in domestic and external demand. Industrial policy reforms that had been implemented--especially since FY82--had enabled the industrial sector to respond to these demand increases by raising output rather than prices. Domestic demand collapsed in FY86 due to depressed incomes, and to a tighter monetary environment coupled with efforts to improve credit recovery rates. Exports of non-traditional products, which are largely manufactured products, rose by only 14% compared with 30% annual growth over previous years. This was due to the imposition of quotas on garment imports in OECD countries and uncertainties associated with internal quota allocations.

1.10 Other economic sectors tended to follow the lackluster performance of agriculture and industry in FY86. Growth of construction and utilities fell from an average of 15% in the previous two years to only 3% due to declining private investment and to shortfalls in the public investment program. This appears to have been reversed in FY87 as construction growth and utility expansion have rebounded to more normal levels, aided by the resumption in manufacturing and input-intensive (boro and wheat) agricultural growth.

Economic Management

1.11 The Government has continued to make progress towards creating a stable and undistorted economic environment. Table 1.4 presents some "stability" and "incentive" indicators, the first indicate the extent to which economic activity can be undertaken without undue risk of macroeconomic instability, and the second indicate the extent to which the incentive system is biased, leading to resource misallocation.

1.12 Macroeconomic Stability. The authorities have successfully brought monetary expansion under control over the last eighteen months. In contrast with a growth of 42% in FY84, broad money rose by 17% in FY86 and would have grown less had the balance of payments (net foreign assets) not shown unexpected strength during the year. Broad money is estimated to have risen by a further 17% in FY87, largely due to improvements in net foreign asset position. As credit expansion has decelerated, the Government has ensured that the public sector's need to borrow has not squeezed out the private sector. The rate of growth of credit expansion to the public enterprises has

been lower than or in line with that to the private sector, and net credit to the Government actually fell in FY85 and FY86 and has grown only marginally in FY87. This has been due to a decline in the overall budget deficit from 9.2% of GDP in FY84 to 7.3% in FY86, and to about 7% in FY87.

1.13 In response to prudent demand management the rate of inflation fell below 10% in FY86. However, in the first half of FY87, inflation rose, led by higher food prices. A lower-than-expected (but still respectable) aman crop and delays in shipments of foodgrain from Europe resulted in sharply higher rice prices, which in March 1987 were more than 17% above their level of a year earlier. For FY87 as a whole, an inflation rate of about 12% is expected. This increase is due to supply rather than demand problems and should not be countered by a tighter monetary policy, but rather by efforts to restore food stocks (see para. 1.31).

1.14 The deterioration in credit recovery on the part of the four nationalized commercial banks (NCBs), the two development finance institutions (DFIs) and the agricultural credit bank has been the greatest threat to stability over the last eighteen months. In FY86, only 27% of current dues and overdues were collected for agricultural loans, and for industrial term loans, the percentage was only 10%. This situation undermined longer-term growth prospects and permitted serious resource misallocation and (because most of the defaulters are relatively well off) harsh inequities. Aware of the seriousness of the situation, the Government has taken strong steps to improve recovery rates, and preliminary data for FY87 suggest some modest progress.1/

1.15 Restoring discipline in the financial sector itself poses difficult issues of macroeconomic management for the Government. In view of the magnitude of the problem, the denial of new credit to defaulters has inevitably resulted in a net contraction of formal credit available in some areas. How, therefore, can efficient private sector growth, especially in needy rural areas, be stimulated in this tight credit situation? Some compensatory injection of economic demand may be warranted over the coming months. The jute stockpiling program was helpful in this respect. Other possibilities include more aggressive and earlier procurement of rice and wheat crops, stepped up rural works programs, and a higher priority to the expansion of innovative (and high return) credit programs to assetless and near-assetless rural groups.2/

1/ These issues are discussed in more detail in Chapter 3.

2/ See Chapters 7 and 8 for discussions of new credit programs to landless and women's groups.

Table 1.4: KEY POLICY INDICATORS, FY82-FY86
(percent, unless otherwise indicated)

	FY82	FY83	FY84	FY85	FY86
<u>Stability Indicators</u>					
Growth of Broad Money	6.5	31.9	42.2	25.6	17.1
Growth of Credit	21.5	14.7	30.9	26.2	16.6
to Government (net)	12.7	2.9	21.5	-2.8	-5.8
to other public bodies	28.5	9.0	3.6	26.5	23.0
to private sector	24.3	30.0	58.7	40.2	21.3
Inflation (CPI)	16.3	9.9	9.7	11.0	9.8
Government Budget Deficit (as % of GDP)	-8.7	-11.2	-9.2	-7.6	-7.4
Agricultural Credit Recovery Ratio /a	.49	.42	.42	.38	.27
Industrial Credit Recovery Ratio /a	n.a.	.15	.12	.11	.10
<u>Incentive Indicators</u>					
Real Effective Exchange Rate /b Index 1980 = 100	83.6	84.4	91.7	89.4	78.8
Annual Change (%)	-10.7	0.9	8.7	-2.5	-11.9
Real Interest Rates /c 1-2 year deposits (end of period)	3.6	-2.0	3.9	2.7	3.8
Ratios of Domestic Agricultural Prices to International Prices /d					
Rice	.91	.98	1.05	1.35	1.09
Wheat	.80	.84	.80	.77	.80
Jute	.90	.95	1.05	1.15	.80

/a Collection of interest and principal as proportion of current dues and overdues. Industrial data is for development finance institutions only.

/b Trade-weighted exchange rate adjusted for differential rates of inflation; (- indicates depreciation).

/c Deflated by consumer price index.

/d Ratio equals 1.0 in absence of trade barriers and in competitive domestic market.

Sources: Bangladesh authorities and staff estimates.

1.16 The Incentive Framework. The official exchange rate has been adjusted frequently and in small steps over the past two years in order to improve and maintain competitiveness. Coupled with the weakening of the US dollar, the trade weighted exchange rate depreciated by 20% in FY86. The real effective exchange rate (adjusting for differential inflation rates) depreciated by 12%, although a small appreciation of 4% has occurred in the first half of FY87 due to higher domestic inflation. Related to this, the authorities have expanded the share of transactions being conducted at the (free) secondary market rate. In FY87 73% of total export earnings will be sold in this market, up from 53% in FY86 and 27% in FY85, while 42% of imports will pass through this market, up from 28% in FY86 and 26% in FY85. At the same time, the gap between the official and secondary exchange rate has also been narrowed from 15% in FY85 to 9.5% in FY86 and to an expected 7.0% in FY87.

1.17 Most interest rates continue to be maintained at positive real levels, and while there is a need to increase the flexibility of the interest rate structure, their general levels are sufficient to encourage savings and the appropriate allocation of loanable funds.^{1/} Agricultural pricing policies are also more efficient than in many other countries. For the most part, domestic farmgate prices reflect international prices, thereby providing appropriate signals to farmers.^{2/} Finally, trade and industrial policy--tariffs, quotas, restrictions and licenses--has been improved markedly since 1982, but especially in FY86 and FY87. However, these improvements are only the first step in a phased program, and distortions in the trade system--especially those brought about by high and variable tariffs--are still excessive.^{3/}

Savings and Investment

1.18 The gap between domestic investment and national savings--equivalent to the current account deficit--fell to 7.1% of GDP in FY86 from 8.2% in the previous year. This gap declined further in FY87 and is consistent with net aid flows (foreign savings). New commercial borrowing from abroad, therefore, is currently not necessary to any significant extent.

1.19 Macroeconomic and sectoral management is currently hindered by a lack of reliable and timely data on the demand side of the national accounts (private and public consumption, savings and investment), and it is hoped

^{1/} See Chapter 3, para. 3.55 onwards.

^{2/} Issues relating to the need to stabilize farmgate jute prices are discussed in Chapter 3 (para. 3.50).

^{3/} See Chapter 3 for a more detailed discussion of trade and industrial policy.

that improvements in their quality will soon be made.^{1/} The levels of savings and investment shown in Table 1.5 probably underestimate true values by up to 3-5% of GDP. However, their trends are probably fairly accurate. They suggest that the recent improvement in the basic macroeconomic balance has been due unfortunately not to an increase in the rate of savings but to a decline in the level of investment. Private investment in agriculture, mainly in the form of minor irrigation and intensification, slipped badly in FY86 and industrial investment was discouraged by low demand and a tougher credit stance on defaulters. FY87 appears to have witnessed a modest recovery in private investment; more vigorous growth is expected in FY88.

Table 1.5: MACROECONOMIC BALANCES, FY81-FY86
(Percent of GDP)

	FY81	FY82	FY83	FY84	FY85	FY86
Foreign Savings (Current Account Balance)	9.6	11.5	8.4	6.8	8.2	7.1
Gross Domestic Investment, Total	13.1	15.0	13.6	12.3	13.3	13.1
Public	7.2	6.1	6.3	5.6	6.1	5.9
Private	5.9	8.9	7.3	6.7	7.1	7.1
Domestic Savings	1.2	1.1	0.8	1.5	2.7	3.2
National Savings	3.5	3.5	5.2	5.5	5.1	6.0
<u>Memorandum Items:</u>						
Share of Gross Domestic Investment Financed by Foreign Savings (%)	73.3	76.7	61.8	55.3	61.7	54.2
Workers Remittances (as % of GDP)	3.3	3.2	5.2	4.3	2.7	3.6

Sources: Bangladesh Bureau of Statistics and staff estimates.

^{1/} The Bangladesh Bureau of Statistics has recently been assisted by a UNDP project to improve its national accounts estimates. A report has been completed containing detailed recommendations and the expenditure side of the accounts were singled out as in need of special attention. A National Income Commission is to be established in the coming months with the purpose of assessing ways of improving the quality and coverage of official data. The demand side of the national accounts should be given a high priority.

1.20 Domestic savings at 3.2% of GDP in FY86 remain among the lowest in the world. Remittances from Bangladeshis working abroad (mostly in the Middle East) rose from \$441 million in FY85 to \$555 million in FY86, permitting national savings to rise.^{1/} Over the longer term, however, the importance of remittances as a share of domestic investment is expected to fall requiring that domestic savings rise if investment is not to fall. Managing this transition will be a major challenge for policymakers in the coming years.

The Balance of Payments

1.21 The counterpart to the savings-investment gap is seen in the balance of payments. While the decline in the current account deficit to 7.1% of GDP in FY86 and to an estimated 5.6% of GDP in FY87 was cause for encouragement, it has unfortunately been due more to import contraction than to export expansion.

1.22 Average export prices fell by 22% in FY86, more than offsetting a 12% increase in volume. Raw jute and tea prices, which fell by 50% and 53%, respectively, were responsible for the bulk of this decline. The terms of trade fell by 24% offsetting the gain of the previous year. Average jute prices are estimated to have been lower again in FY87, but gains in other primary export prices probably resulted in a slight improvement in the terms of trade.

1.23 Table 1.6 shows the performance of export volumes and values and Figure 1.1 portrays graphically the continued vulnerability of export earnings on fluctuations in traditional export prices and volumes. Non-traditional exports--particularly, ready-made garments and frozen shrimp--continue to perform well.

1.24 Import developments are shown in Table 1.7. The need for foodgrain imports fell from the all time high of 2.6 million tons in FY85 to 1.2 million tons in FY86. Foodgrain imports are expected to increase to a more normal level, 1.87 million tons, in FY87. Lower petroleum prices saved about \$63 million in the import bill in FY86 and are expected to save an additional \$80 million in FY87. The value of fertilizer imports fell by 21% in FY86 due to low agricultural demand and are estimated to have fallen sharply again in FY87 due to the commissioning of the new capacity. Intermediate imports for the industrial sector fell due to depressed demand in FY86, although some recovery is expected in FY87.

^{1/} Domestic savings are those generated within the country. National savings are those generated by Bangladeshi nationals wherever they are living. The current account deficit is identically equal to gross domestic investment minus gross national savings.

Table 1.6: EXPORT VOLUMES AND VALUES, FY81-FY87
(Value in US\$ million)

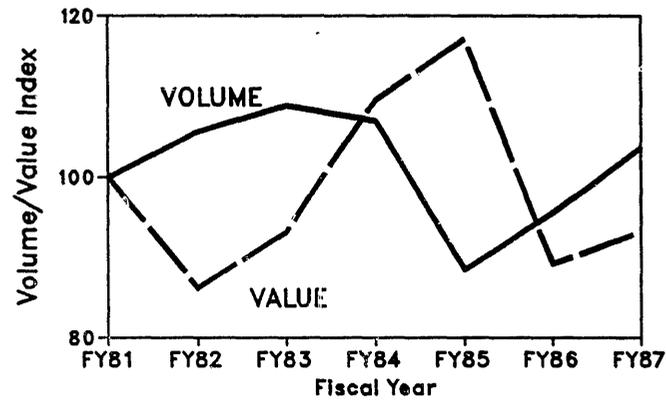
	FY81	FY82	FY83	FY84	FY85	FY86	FY87/a
Traditional							
Raw Jute	119	102	110	117	151	124	96
mn. bales	1.9	1.9	2.3	1.9	1.4	2.3	2.3
Price Index	100.0	87.3	80.0	100.8	175.2	88.0	68.3
Jute Goods	357	291	320	357	390	293	305
thousand tons	501.4	539.0	531.0	538.0	461.0	495.0	505.0
Price Index	100.0	75.9	84.6	93.2	118.8	83.2	84.8
Tea	41	38	46	69	61	33	33
mn. lbs.	65.7	69.0	67.7	67.7	57.4	65.5	52.0
Price Index	100.0	88.7	109.7	164.5	171.0	80.6	103.2
Leather	56	63	58	85	70	61	119
mn. sq. ft.	80.6	87.3	93.9	102.9	81.8	71.5	123.5
Price Index	100.0	102.9	88.6	118.6	121.4	121.4	137.1
Non-traditional							
Frozen Shrimp	40	53	72	77	87	113	140
mn. lbs.	16.6	20.7	27.5	31.2	38.2	46.5	52.5
Price Index	100.0	106.6	108.7	102.5	94.2	100.8	110.0
Garments	3	7	11	32	116	131	231
Price Index	100.0	99.5	97.5	95.4	94.9	101.0	108.3
Naptha, etc.	49	43	31	26	21	17	10
Price Index	100.0	99.5	97.5	95.4	94.9	101.0	108.3
Others	46	30	38	48	39	47	46
Price Index	100.0	99.5	97.5	95.4	94.9	101.0	108.3
TOTAL	711	626	686	811	934	819	980
Traditional	573	494	534	628	671	511	553
Non-traditional	138	132	153	183	263	308	427
Memo Items:							
Volume Index (FY81=100)	100.0	103.2	108.7	112.4	110.4	125.2	142.1
Value Index (FY81=100)	100.0	88.0	96.5	114.1	131.4	115.2	137.8
Export Price Index	100.0	85.3	88.9	101.5	119.1	92.1	97.0
Import Price Index	100.0	99.2	92.0	89.7	84.5	85.7	85.6
Terms of Trade Index (FY81=100)	100.0	86.0	96.6	113.2	140.9	107.4	113.3
Terms of Trade Change (%)	-21.9	14.0	12.3	17.2	24.5	23.7	5.5

/a Preliminary estimates.

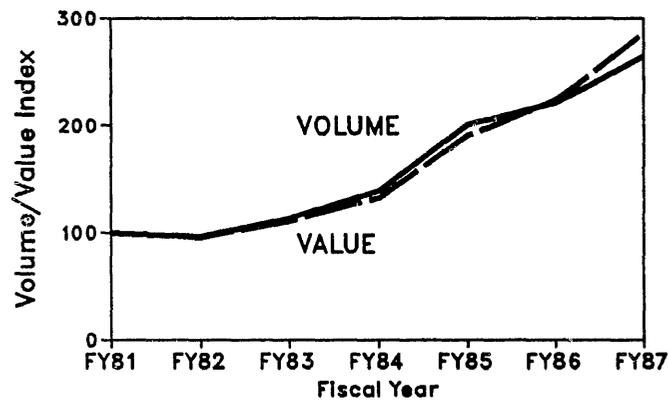
Sources: Bangladesh Bank, Export Promotion Bureau and staff estimates.

FIG. 1.1 BANGLADESH: EXPORT VOLUME AND VALUE INDEX (FY81=100)

TRADITIONAL EXPORTS



NON-TRADITIONAL EXPORTS



TOTAL EXPORTS

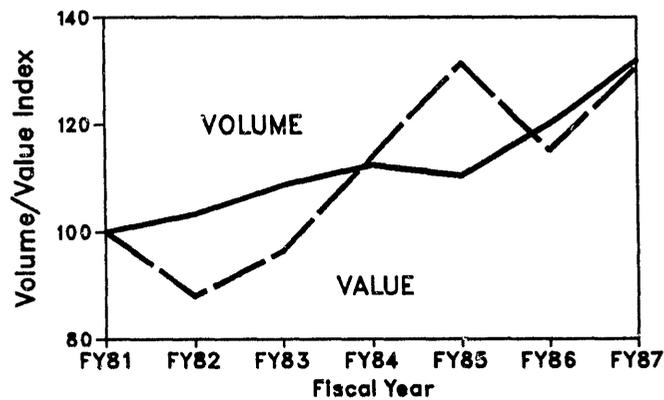


Table 1.7: IMPORT VOLUMES AND VALUES, FY81-FY87
(Value in US\$ million)

	FY81	FY82	FY83	FY84	FY85	FY86	FY87 /a
<u>Food /b</u>							
Rice	40	46	97	56	176	8	48
Thousand Tons	83	144	345	181	690	39	235
Price Index	100.0	65.5	57.6	63.3	52.3	42.0	41.4
Wheat	210	239	288	342	322	212	265
Thousand Tons	972	1110	1500	1877	1899	1164	1637
Price Index	100.0	100.0	89.3	84.6	78.9	84.6	75.1
Edible Oil & Oil Seeds	103	76	88	89	109	136	46
Thousand Tons	171	122	146	104	156	272	115
Price Index	100.0	99.8	98.6	133.3	116.1	76.3	65.1
<u>Intermediate Goods</u>							
Crude Petroleum	343	334	240	233	226	177	146
Thousand Tons	1305	1178	928	1004	985	1008	1086
Price Index	100.0	107.9	98.4	88.1	87.1	67.2	52.1
Petroleum Products	160	213	171	122	133	165	100
Thousand Tons	524	583	525	464	570	805	700
Price Index	100.0	119.8	106.9	86.2	76.4	67.1	46.8
Fertilizer	104	105	68	75	137	108	23
Thousand Tons	350	465	312	356	666	639	141
Price Index	100.0	76.2	73.5	71.1	69.4	54.3	52.5
Cement	33	39	44	37	26	57	36
Thousand Tons	446	544	759	748	588	899	1300
Price Index	100.0	98.0	78.9	66.7	59.9	60.0	57.2
Raw Cotton	108	85	56	125	106	52	75
Thousand Bales	256	239	194	388	305	181	319
Price Index	100.0	84.4	68.4	76.3	82.5	68.0	63.0
Other	749	752	539	675	796	769	968
Price Index	100.0	99.5	97.5	95.4	94.9	101.0	108.3
<u>Capital Goods</u>	683	615	655	599	616	680	753
TOTAL	2533	2504	2246	2353	2647	2364	2460
<u>Memo Item:</u>							
Volume Index (FY81=100)	100.0	99.7	96.3	103.6	123.6	108.9	113.4
Value Index (FY81=100)	100.0	98.8	88.7	92.9	104.5	93.3	97.1

/a Preliminary estimates.

/b Minor imports of food items are included in "other" category under intermediate goods.

Sources: Planning Commission and staff estimates.

1.25 The overall balance of payments picture is shown in Table 1.8. Aid inflows rose by \$39 million to \$1,306 million in FY86. A substantial increase in project disbursements more than offset declines in both commodity and food aid. The improved project disbursement performance was more apparent than real, however, being due mainly to exchange rate changes and to the establishment of special disbursement accounts within Bangladesh.^{1/} The overall balance of payments moved into surplus in FY86 and is expected to remain in surplus in FY87. Official reserves rose by \$81 million in FY86 to \$476 million, equivalent to 2.4 months of imports, and by the end of FY87 are expected to have risen to over \$800 million, equivalent to 4.3 months of imports. This is a prudent and comfortable level.

Public Income and Expenditure

1.26 Domestic fiscal revenues rose by 18% (8% in real terms) in FY86. The FY87 budget proposed another significant gain in revenues this year. New revenue measures in the budget amounted to Tk 3.7 billion, equivalent to an impressive 0.9% of GDP. The bulk of this increase came from increased duties on imports of commodities whose price had fallen--notably petroleum and edible oil--so was relatively painless to implement. However, revenue collections have been below expectations, primarily due to low import levels, once again illustrating the vulnerability of the fiscal balance to the external sector. The revenue to GDP ratio is now estimated at 9.4% in FY87 (see Table 1.9). It is clear that substantial additional revenue measures will be required over the next two years to reach the Government's TFYP target of over 12% by FY90.^{2/}

1.27 Expenditures were slightly below what had been expected in FY86. Annual Development Program (ADP) outlays were Tk 2 billion lower than budgeted due to implementation delays, and the food budget outlay was slightly lower than had been expected due to lower imports and domestic procurement of foodgrains. These shortfalls were partially offset by current expenditure overruns on account of salary increases and unexpectedly large losses incurred by the Railway and the Post Office.

^{1/} See para. 4.31.

^{2/} See Chapter 5 for a discussion of public revenue issues.

Table 1.8: BALANCE OF PAYMENTS, FY83-FY87
(US\$ million)

	FY83	FY84	FY85	FY86	FY87/ ^a
Merchandise Exports, f.o.b.	686	811	934	819	980
Merchandise Imports, c.i.f.	-2,246	-2,353	-2,647	-2,364	-2,460
<u>Trade Balance</u>	<u>-1,560</u>	<u>-1,542</u>	<u>-1,713</u>	<u>-1,545</u>	<u>-1,480</u>
Services, Net	-113	-33	-78	-125	-126
Receipts	230	279	286	260	258
Payments	-343	-312	-364	-385	-384
Private Transfers	653	627	477	586	670
(Of which Workers' Remittances)	(634)	(602)	(441)	(555)	(650)
<u>Current Account Balance</u>	<u>-1,020</u>	<u>-948</u>	<u>-1,315</u>	<u>-1,084</u>	<u>-936</u>
<u>Aid Disbursements</u>	<u>1,345</u>	<u>1,268</u>	<u>1,267</u>	<u>1,306</u>	<u>1,469</u>
Food Aid	255	277	244	203	269
Commodity/Program Aid	452	439	432	393	400
Project Aid	638	552	591	710	800
M< Amortization	-73	-72	-110	-117	-138
Trust Fund, Net	-1	-8	-13	-25	-29
Aircraft Loans, Net	-	53	13	1	-7
Food Credits, Net ^{/b}	47	-9	91	-69	-96
Borrowing	(57)	(51)	(190)	(13)	(0)
Repayment	(-10)	(-60)	(-99)	(-82)	(-96)
Short-term and Other Borrowings, Net	-36	-10	-35	1	15
Other Including Errors & Omissions	-74	-113	-36	71	-40
<u>Overall Balance</u>					
IMF, Net	48	20	-6	-3	159
Purchases	102	48	55	92	301
Repurchases	-53	-28	-61	-95	-142
Changes in Gross Reserves (- = increase)	-236	-181	144	-81	-397
<u>Memorandum Items:</u>					
Gross Reserves (end FY)	358	539	395	476	873
(as months of imports)	1.9	2.7	1.8	2.4	4.3
Current Account Deficit as % of GDP	-8.4	-6.8	-8.2	-7.1	-5.6

^{/a} Preliminary estimates.

^{/b} Commercial borrowings on account of food imports incurred by GOB.

Sources: Bangladesh Bank, Bangladesh Bureau of Statistics and staff estimates.

Table 1.9: INCOME AND EXPENDITURE OF THE CENTRAL GOVERNMENT, FY83-FY87

	FY83	FY84	FY85	FY86	FY87	
					Budget	Estimate
(In billions of taka)						
Total revenue	25.40	28.60	35.93	42.28	48.40	48.16
Tax	21.08	23.70	28.87	32.98	40.45	37.98
Non-tax	4.32	4.90	7.06	9.30	7.95	10.18
Total expenditure	57.80	60.65	67.62	76.37	91.12	84.18
Current expenditure	19.20	23.03	27.71	34.56	36.19	40.20
Food account deficit	6.56	3.80	4.26	1.68	2.80	-1.38
of which: foodstock change	(-0.03)	(0.27)	(1.96)	(0.27)	(1.59)	(-2.07)
Annual Development Program (ADP)	29.80	30.11	31.23	36.41	47.64	41.67
Other capital expenditure and net lending /a	2.24	3.71	4.42	3.72	4.49	3.69
Overall budget deficit	32.40	32.05	31.69	34.09	42.72	36.02
Excluding foodgrain stocking	32.43	31.78	29.73	33.82	41.13	38.09
Net foreign financing /b	28.25	27.87	28.67	31.51	37.81	34.46
Project aid	13.44	13.31	14.40	20.17	24.85	24.50
Commodity aid	9.00	9.63	9.62	11.64	13.35	11.01
Food aid	6.40	6.97	4.92	4.99	6.52	5.60
Commercial food borrowing	1.23	-0.41	2.56	-2.27	-3.46	-2.94
Debt amortization	-1.82	-1.63	-2.83	-3.02	-3.45	-3.71
Net domestic financing	4.15	4.18	3.02	2.59	4.91	1.56
Banking system	0.65	2.35	-0.66	-1.35	0.50	0.21
Other domestic	3.50	1.83	3.68	3.94	4.41	1.35
(Annual percentage change)						
Total revenue	9.5	12.6	25.6	17.67	14.5	13.9
Total expenditure	25.3	4.9	11.3	12.95	19.3	10.2
Current expenditure	29.7	20.0	20.3	24.73	4.7	16.3
ADP	11.2	1.0	3.7	16.6	30.8	14.4
(In percent of GDP)						
Total revenue	8.8	8.2	8.6	9.2	9.4	9.4
Tax revenue	7.3	6.8	6.9	7.2	7.9	7.4
Non-tax revenue	1.5	1.4	1.7	2.0	1.5	2.0
Total expenditure	19.9	17.3	16.1	16.6	17.7	16.3
Current expenditure	6.6	6.6	6.6	7.5	7.0	7.8
ADP	13.3	8.6	7.7	7.9	9.3	8.1
Overall budget deficit	11.2	-9.2	-7.6	-7.4	-8.3	-7.0
Excluding food stocking	(11.2)	-9.1	-7.1	-7.3	-8.0	-7.4

/a Comprises non-ADP project expenditure, the Food-for-Work Program, miscellaneous investment (non-development) and net loans and advances. A major part of gross lending by the Government is included within the ADP.

/b Including foreign grants.

Sources: Bangladesh authorities, and staff estimates; see Table 5.3 (page 110) for revenue details.

1.28 Total government expenditure in FY87 was budgeted at Tk 91 billion (\$3 billion). Of this amount Tk 52 billion (\$1.7 billion) was allocated to projects, Tk 37 billion (\$1.2 billion) to the recurrent budget and Tk 2.8 billion (\$90 million) to the food budget. Actual expenditures are likely to be well below these levels, due to implementation problems. Preliminary data for FY87 indicate that total expenditure and ADP expenditures will respectively be about 8% and 13.1% below budgeted levels (Table 1.9).

1.29 The shortfalls in revenue and expenditure roughly offset each other in FY87, which led to a lack of urgency in dealing with both. The overall budget deficit (including the development budget) is estimated to have risen slightly to Tk 36 billion in FY87, but to have declined as a proportion of GDP from 7.4% to 7.0%.

1.30 The financial situation of the public sector enterprises is a cause for greater concern. The consolidated net income for non-financial enterprises amounted to about 3% of book-value of assets in FY84, and has declined continuously since then to only about 0.4% in FY86, partly as a result of very large losses in jute and textiles manufacturing. Public pricing and public enterprise reforms are therefore urgently required to reduce the pressure on budgetary resources; Chapter 5 explores these issues in some detail.

Food Availability and Real Wage Developments

1.31 The Food Situation. The foodgrain situation is seen in Table 1.10. Mediocre production performance coupled with much lower imports resulted in a sharp apparent reduction in overall foodgrain availability from 167 kg per person in FY85 to 156 kg per person in FY86. However, these data exclude private storage, which was probably very high at the beginning of FY86, following the large imports, high prices and late production in FY85. While there is no immediate cause for alarm, official foodstocks in FY87 have fallen to unnecessarily low levels. Delayed imports coupled with higher offtake and lower procurement than planned resulted in PFDS stocks falling to about 690,000 tons towards the end of FY87, the lowest level in three years. This low level of stocks undoubtedly played a role in raising domestic prices and could result in PFDS finding itself unable to cope adequately with a severe flood or other emergency. Stocks are expected to rise to more comfortable levels due to increased imports, but higher stocks of 1.25-1.50 million tons would be appropriate.

Table 1.10: SUMMARY OF THE FOODGRAIN SITUATION, FY81-FY87
(thousand metric tons, unless stated otherwise)

	FY81	FY82	FY83	FY84	FY85	Estimate FY86	Projection FY87
Domestic production							
Gross	15,026	14,650	15,361	15,748	16,124	16,115	16,640
Net /a	13,523	13,185	13,825	14,182	14,512	14,504	14,976
Domestic supply, net /b	13,431	13,066	13,696	14,216	14,315	14,630	14,849
Government operations:							
Domestic procurement	1,033	302	192	270	344	349	130
Imports	1,076	1,256	1,843	2,059	2,590	1,202	1,773
- own resources	264	100	700	569	1,236	113	343
- aided	812	1,136	1,143	1,488	1,354	1,089	1,430
Total distribution	1,546	2,067	1,937	2,052	2,580	1,541	2,075
Ration sales:	1,141	1,468	1,324	1,334	1,459	730	1,133
Statutory rationing	348	312	308	293	282	160	216
Priority groups	611	665	648	641	712	467	662
Modified rationing	182	491	368	400	465	103	265
Vulnerable group programs:	406	441	495	587	708	673	701
Relief	94	103	23	55	113	136	85
Vulnerable Group Feeding	23	39	67	92	23	152	176
Food-for-Work	289	299	405	440	572	385	440
Market sales /c	-	176 /d	118	286	357	138	239
Losses	104	104	103	88	137	51	113
Closing stocks	1,249	616	600	803	1,004	976	691
<u>Total availability</u>	<u>13,914</u>	<u>14,831</u>	<u>15,441</u>	<u>15,998</u>	<u>16,551</u>	<u>15,822</u>	<u>16,794</u>
Population, mid-year, million	89.34	91.67	94.05	96.50	99.01	101.53	104.07
Per capita availability							
kg/year	156.1	161.8	164.2	165.8	167.1	155.8	161.4
g/day	428	443	450	454	458	427	442
ounces/day	15.1	15.6	15.9	16.0	16.2	15.1	15.6
Public distribution as % of total availability	11.1	13.9	12.5	12.8	15.6	9.1	12.4

/a Gross production minus 10% for feed and waste.

/b Adjusted for crop cycle overlap with fiscal year. Overlap: boro 27%, wheat 18%.

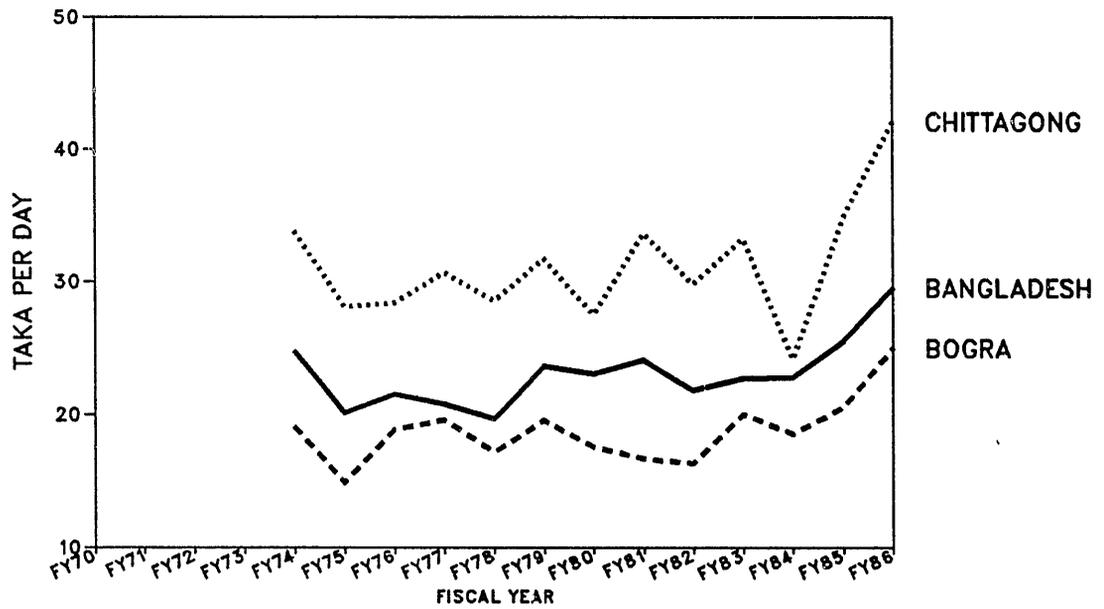
/c Includes market operations.

/d Includes export sales of 20,000 M.T.

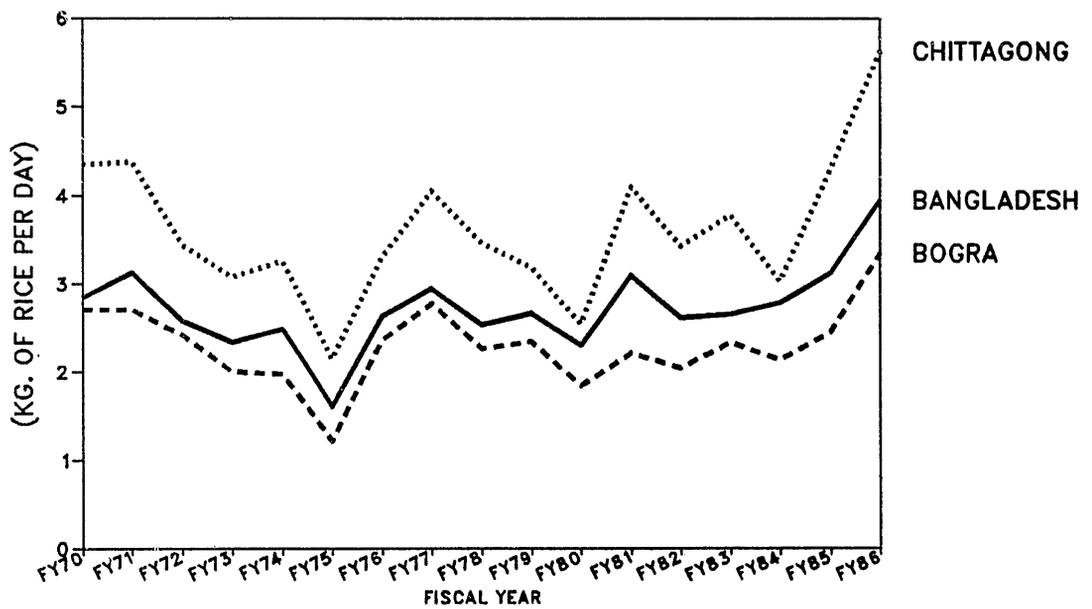
Sources: World Food Programme; USAID; Ministry of Food; staff estimates.

FIG. 1.2 REPRESENTATIVE DAILY WAGE RATES

REAL WAGE RATE (1986 PRICES)



WAGES IN TERMS OF KG. OF RICE



Source: Bangladesh Bureau of Statistics and staff estimates.

1.32 More important and encouraging is the continued expansion of food programs for the poor. The combined distribution of the Food-for-Work Program (FWP), and the Vulnerable Group Feeding (VGF) and Relief Program amounted to 673,000 tons in FY86. An expansion to about 701,000 tons is estimated for FY87. About 80 million days of work was generated by the FWP in both FY86 and FY87. Recent assessments of the FWP and VGF are positive and suggest that continued but careful growth is warranted.^{1/}

1.33 Statutory and Priority Ration Programs continue to decline in importance in accordance with the Government's policy of relying less on food subsidies in the compensation package of public employees. However, subsidies through the Public Foodgrain Distribution System continues to be large, at about Tk 1.0-2.0 billion per annum, which could be better utilized for targeted food programs for the needy. Stability of market prices could be better undertaken through open market purchases and sales. In view of the current tight credit situation in rural areas, there may be a need for earlier and more aggressive domestic procurement and correspondingly higher open market operations than presently planned.

1.34 Real Wage Rate Developments. No up-to-date information is available on recent developments in real incomes. But data on wage rates are encouraging. Average real wage rates have risen over the last couple of years in both rural and urban areas and appear to have finally reached their pre-Liberation levels for the first time. Figure 1.2 portrays real wage developments over the last 16 years for the country as a whole and for representative high wage (Chittagong) and low wage (Bogra) districts. Abstracting from year-to-year fluctuations, real wages remained fairly flat during the 1970-82 period when measured in terms of rice, and declined when deflated by the rural consumer price index. Since 1982, however, there does appear to have been substantial progress in both indexes, especially in FY85 and FY86. An unskilled agricultural laborer now earns an average of 4 kg of rice per day or about Tk 30, up from an average of about 2.8 kg of rice in the 1970-82 period. This data does not provide conclusive evidence that the standard of living among the poor is improving in Bangladesh and it is not clear whether these trends anyway are due to an underlying strength in rural areas.^{2/} In

^{1/} See Chapters 8 and 9 for discussions of the FWP and VGF Programs, respectively.

^{2/} It should be noted that low agricultural prices and modest production growth suggest that real per capita consumption in rural areas may have fallen in FY86 (possibly by as much as 2%). While not necessarily inconsistent with rising real wages for unskilled labor, declining real consumption--if true--helps to put the wage data in perspective. See Chapter 6 for a more detailed discussion of these issues.

addition, even at these higher levels, wage rates (at an average of \$1 per day) remain quite inadequate to meet even the most basic needs of a family. Nevertheless, if sustained and built upon, these trends represent an encouraging achievement and provide preliminary support for the general direction of government programs and policy in rural areas.

Chapter 2: MEDIUM TERM OPTIONS AND CAPITAL REQUIREMENTS

2.01 It is unlikely that the small gains in real incomes which appear to have been achieved over the last few years can be sustained without healthy economic growth in the future. In turn this growth must be supplemented by specific directed efforts to aid those who tend to be by-passed by the development process. The Third Five Year Plan's emphasis on the need for higher economic growth--5.4% per year in comparison with 3.9% per year in the SFYP--is appropriate. This chapter suggests that in the coming years this kind of economic growth is feasible and indeed necessary in Bangladesh, but it will require better progress in policy reform and more generous foreign aid.

2.02 This conclusion is not inconsistent with earlier analyses which suggested that the rate of economic growth is expected to be somewhat lower (4.2-4.5% per year) than the TFYP target. This report describes a "High Policy Case"; what rate of economic growth is feasible and what are the policy and program adjustments and aid levels that will be required to achieve this higher growth rate? The High Case is intended to be a realistic alternative to current trends. It requires good--but not spectacular--progress in a number of areas, most of which have already been identified by the Government. It also incorporates fairly conservative assumptions concerning the external environment. A "Base Case" is also described; what can be expected under a "business as usual" approach to policy reform and aid flows?

2.03 This chapter begins with an overview of the High Case. Overall macroeconomic aggregates are projected for the coming years and assumptions concerning the Government's policy stance are made explicit. In a country as poor and vulnerable as Bangladesh, food availability must remain central in policymakers' minds. Section I, therefore, also describes the outlook for the food situation under continued sound policies. Sections II and III then explore the budgetary and balance of payments implications of the High Case, while Section IV describes the important role of external assistance in supporting accelerated development. Finally, Section V explores the downside risks; what can be expected in the absence of sustained policy reforms and increased aid flows?

I. OVERVIEW OF THE HIGH POLICY CASE

2.04 Development planning inevitably involves a tension between long-term goals and present realities. While it is important that policymakers' long-term vision for rapid poverty alleviation does not detract them from immediate stabilization concerns, it is also important that the urgency of shorter-term macroeconomic management does not divert attention from more fundamental development needs. Over the last two years--FY86 and FY87--policymakers in Bangladesh have necessarily focused a good part of their energies on urgent issues of monetary control, fiscal and external

balance, and domestic financial discipline (see Chapter 1). Failing to come to grips with these issues would have undermined any long-term growth prospects. While these issues will continue to be important--especially raising credit recovery rates--the Government can now afford to devote more of its attention to implementing the development strategy that it laid out in its Third Plan.

Policymaking Under the High Case

2.05 The Government's strategy to promote higher economic growth can be broadly categorized into three sets of policies corresponding to the three chapters in Part II of this report:

- (a) Promoting Efficient Private-Oriented Activity (Chapter 3). This involves, first, regaining the momentum of growth in the agricultural sector by improving the quality of services and infrastructure in rural areas and by removing remaining distortions in the incentive framework facing Bangladesh's farmers and fishermen. Second, it requires continued progress in industrial sector reform through import tariff and export policy adjustments and in accelerating the policy response to changes in the external and internal environment. Finally, it involves financial policy reform so that the banking system can play a more efficient role in mobilizing financial savings, allocating them to productive uses, and promoting discipline in economic activity.
- (b) Promoting Efficient Public Expenditure (Chapter 4). This requires strengthening the capacity to efficiently plan, appraise and implement an expanded public expenditure program. Procedural changes are required and efforts to improve the quality and motivation of public employees need to be strengthened.
- (c) Raising Public Revenues (Chapter 5). Even with more generous foreign assistance, the current revenue base remains quite inadequate to meet the needs for investment and operations and maintenance expenditures in the coming years. Tax reform and enhanced revenues from public pricing policies are required for both efficiency and revenue reasons.

2.06 Combined, these policies constitute the High Policy Case. Making an assessment of the effects of these policy adjustments is of course fraught with difficulties, but rough orders of magnitude can be suggested. In combination these policies are assumed to have three effects. First, the level of investment and savings would be higher. Second, the efficiency of investment would be higher, due to a less distorted incentive framework and improved public expenditure planning. And third, export growth would be faster and import growth slower, due to trade and industrial policy reforms and to more rapid agricultural growth.

2.07 These policies to promote overall economic efficiency must of course be complemented by special interventions to provide economic opportunities to the poor and by social programs--education, health, family planning, nutrition--which raise the quality of life for all income groups. These human resource policies and programs, which are the theme of Part III of this report should also be regarded as components of the High Policy Case; they too are powerful tools for promoting economic growth, although their effect is longer term.1/

Sources of Growth

2.08 Table 2.1 summarizes macroeconomic developments under the High Case. For the remaining three years of the TFYP period (FY88-90), an annual growth of GDP of 5.1% is thought to be feasible, while a higher growth of 5.4% is projected for the first half of the 1990s, when some of the longer-term policy initiatives begin to bear fruit. Agricultural growth is projected to grow by 3.4-3.6% per year and industry by 7.3-7.5% per year. The service sector would grow at just over 6% per year, partly in response to faster agricultural and industrial growth and partly to the huge influx of under-employed workers into the service sector which will increasingly play the role of "employer of last resort".

2.09 These growth rates are not unrealistically high in view of the Government's stated program of policy reform. They will, however, require both higher investment and improved efficiency of investment. Figure 2.1 illustrates the relationship between growth and the level and efficiency of investment. Under the High Case, GDP per person would rise from \$146 in 1986 to about \$190 (in constant 1986 prices) by 1995. Under the Base Case, which is described in more detail at the end of the chapter, the economy grows at 3.9% per year, the average rate for the 1980-1986 period; by 1995, GDP per person rises to \$170. Under both cases, it is assumed that population grows at a rate of 2.4% per year between 1987 and 1990, and falls to an average of 2.2% in 1990-95. It is worth noting that if more rapid progress could be achieved in the family planning program, bringing the population growth rate down to an average of 1.8% per year in the 1990-95 period (the Government's target for the TFYP), GDP per capita could reach \$200 (1986 prices) by 1995.2/

1/ No attempt is made to quantify their effects in this chapter's economic projections.

2/ Issues confronting the population program are discussed in Chapter 9.

Table 2.1: MACROECONOMIC INDICATORS - THE HIGH CASE

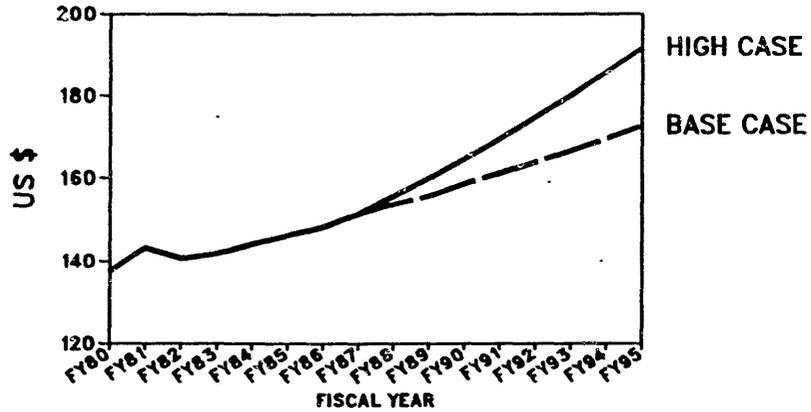
	Second FYP	Third FYP		Fourth FYP
	(FY81-85)	FY86-87	FY88-90	(FY91-95)
-----Annual Real Growth Rates (%)-----				
Gross Domestic Product	2.9	4.3	5.1	5.4
Agriculture	2.8	2.5	3.4	3.6
Crops	2.5	2.0	3.2	3.2
Other	4.1	4.1	4.1	4.1
Industry	5.1	5.5	7.3	7.5
Services	4.8	6.1	6.1	6.3
Investment	3.8	4.4	7.8	5.7
Exports	3.8	13.5	7.2	8.6
Traditional	-1.7	10.5	1.8	1.9
Non-traditional	22.2	19.1	15.4	9.3
Imports	3.0	-3.9	4.0	5.0
-----Shares of GDP (%)-----				
Gross Domestic Product	100.0	100.0	100.0	100.0
Agriculture	48.3	45.7	44.2	42.8
Crops	37.7	36.0	34.5	33.4
Other	10.6	9.7	9.7	9.4
Industry	15.2	15.8	16.6	17.3
Services	36.5	38.5	39.2	39.9
Investment <u>/a</u>	13.5	13.0	14.2	15.6
Exports <u>/a</u>	5.4	5.6	5.7	6.0
Traditional <u>/a</u>	4.4	3.3	3.1	2.9
Non-traditional <u>/a</u>	1.0	2.3	2.6	3.1
Imports <u>/a</u>	17.6	15.0	15.0	15.9

/a Ratio at current prices.

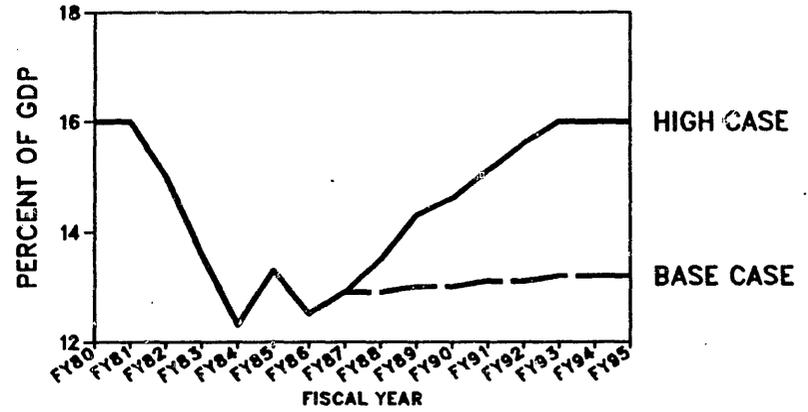
Sources: Bangladesh Bureau of Statistics and staff estimates.

FIG. 2.1 KEY INDICATORS UNDER HIGH AND LOW POLICY SCENARIOS

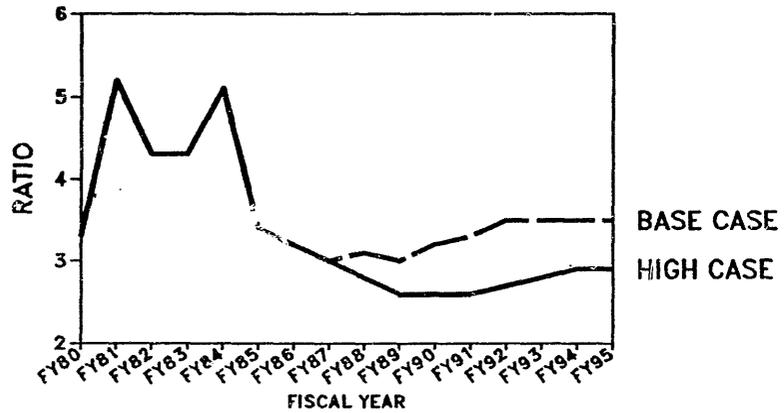
AVERAGE PER CAPITA INCOME
(CONSTANT 1986 PRICES)



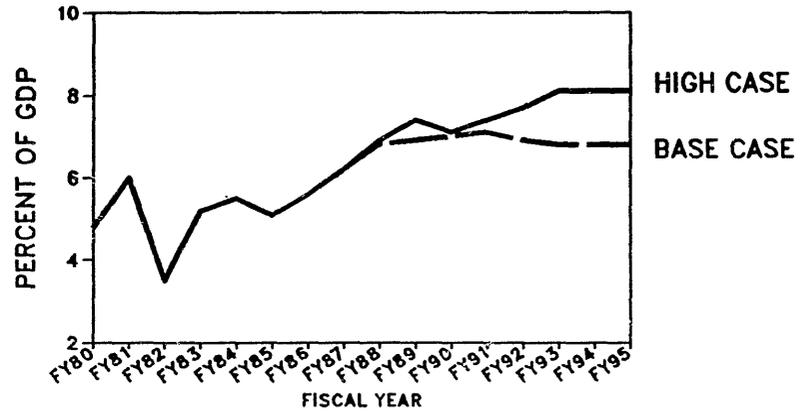
INVESTMENT



INCREMENTAL CAPITAL OUTPUT RATIO



NATIONAL SAVINGS



2.10 The Efficiency of Economic Activity. The relationship between investment and output growth depends on a complex interaction of technology, capacity utilization and the complementarity of investments. The Incremental Capital Output Ratio (ICOR)--a simplified measure of the efficiency and speed with which investment leads to output growth--is shown in Figure 2.1.1/ The ICOR for Bangladesh has always been fairly low, indicating a quick response of output to investment, implying, as would be expected for such a poor country, a relatively labor-intensive production structure. In the second half of the 1970s, Bangladesh's ICOR averaged less than 2, in contrast with an average of about 4 for developing countries as a whole.^{2/} Rehabilitation of infrastructure following the Independence struggle enabled Bangladesh to achieve a healthy rate of growth with little investment. The ICOR rose in the first half of the 1980s to 4.4 due partly to increased capital intensity of the production structure and partly to lower capacity utilization.^{3/} Under the High Case, it is assumed that the ICOR will fall to about 3, while under the Base Case it would stabilize at about 3.5.

2.11 The efficiency of investment matters not only in its effects on overall economic growth, but even more importantly in its effects on employment. During the SFYP period, investment of about \$2,500 (in 1986 prices) was required on average to productively absorb each additional member of the labor force. This figure is related to the ICOR. With an ICOR of 4.4 an investment of \$2,500 led on average to an ongoing value added of about \$570 each year in the future, of which about \$250 (10% of \$2,500) would be required to pay for the capital, leaving \$320 available for labor and profits. When profits and other factors are paid, this would leave just enough to hire one worker for a full year. With an ICOR of 3.0 instead of 4.4, the same income could be available for labor with an investment of only \$1,360 instead of \$2,500. Almost twice as much employment could therefore have been generated for the same amount of investment.

2.12 The Rate of Investment. In order to reach GDP growth of over 5% per year, the proportion of GDP allocated for investment would have to rise by about 2 percentage points--from its FY80-87 average of 13.8% to about 16%. By the standards of most developing countries, this is still modest; for low income countries as a whole, investment accounts for about 25% of GDP, and for China and India the percentage was 28%.^{4/}

^{1/} The ICOR is calculated as the total investment in constant prices over three years (lagged one year) divided by the change in constant price GDP over a three-year period.

^{2/} See for example: U. Tun Wai, A Study of ICOR in Developing Countries; IMF Fiscal Affairs Departmental Working Paper, 1985.

^{3/} Almost all developing countries experienced rising ICORs in the low growth environment of 1980-85.

^{4/} As noted in Chapter 1, however, investment data in Bangladesh probably understate the true investment picture possibly by as much as 3-5% of GDP. The level of increase in investment required to achieve the High Case would, however, be the same.

Table 2.2: FINANCING THE INVESTMENT PROGRAM - THE HIGH CASE
(Percent of GDP)

	Second FYP (FY81-85)	Third FYP		Fourth FYP (FY91-95)
		FY86-87	FY88-90	
Gross Investment	14.1	13.0	14.2	15.6
Public	6.1	6.4	7.0	7.6
Private	7.9	6.6	7.2	8.0
Domestic Savings	1.9	3.4	4.8	5.7
Public		0.7	1.7	2.5
Private		2.7	3.1	3.2
National Savings	5.1	6.3	7.3	8.5
Foreign Savings	9.0	6.7	6.9	7.1
Incremental Capital Output Ratio	4.4	3.3	3.0	3.2

Sources: Bangladesh Bureau of Statistics and staff estimates.

2.13 Table 2.2 illustrates how this higher investment might be split between the private and public sectors and how it might be financed. The following points are worthy of note:

- both public and private investment would have to rise, but the private sector would take the major share of investment resources;
- foreign savings (mainly foreign aid) must rise as a proportion of GDP, but would not reach the level of the SFYP period (9%) and would fall as a proportion of total investment. In addition, the share of foreign savings allocated to finance public investment should fall from almost 90% in FY86-87 to about 65%, to enable the private sector to utilize foreign funds;
- domestic savings will have to rise not only to finance increased investment but also to compensate for the declining relative importance of remittances--i.e., the gap between domestic and national savings will narrow;
- domestic savings would have to rise from 3.0% of GDP to 5.7%. With the projected growth in income this would still permit average per capita private consumption to rise by 1.8% per year. This should be regarded as about the minimum acceptable rate of consumption growth since, at any lower rate, there would be a serious possibility of declining consumption in some cases.

Food Availability and Distribution

2.14 Foodgrain production under the High Case is projected to rise from 16.1 million tons in FY86 to 18.7 million tons in FY90 (see Table 2.3). This is not as high as the TFYP target of 20.7 million tons, but still represents a healthy 3.7% annual growth rate. Import requirements would continue to average about 2 million tons per year through 1990, partly to build up stocks to more comfortable levels. Under continued good policies, production could rise to 22 million tons by 1995, implying imports of about 1 million tons per year.

2.15 Increases in food production and progress towards self-sufficiency are not the only goals of food policy. Ensuring access to increased food supply on the part of the poor is equally important. Careful targeting and management of the Public Food Distribution System (PFDS) is therefore an important complement to broader agricultural policy and investment decisions. Consistent with the Government's policy, projections of PFDS operations are based on the assumption of phased withdrawal of the ration system, continued expansion of the Food-for-Work (FFW) and Vulnerable Group Feeding Programs (VGF) and the expanded use of domestic procurement and open market sales (OMS) as instruments of price stabilization. Phasing out the ration system is an appropriate policy but implementing it will require some care to ensure that total food availability to the public does not suffer. One alternative would be to expand the capacity of OMS channels rapidly to, say, 1 million tons per year by FY89; full utilization of this capacity may not be necessary but would depend on crop success/failure and on price developments. Alternatively, private traders could be permitted to import grain.

II. PUBLIC EXPENDITURE AND FINANCE

2.16 Expenditure. Total public expenditure under the High Case is projected to rise from Tk 90 billion in FY86 to Tk 169 billion in FY90. This represents an average real increase of 9% per year. As a percentage of GDP, total government expenditure would rise slightly from an average of 16.4% in the FY85-FY87 period to 17.6% in FY90; however, it would remain below the FY80-FY84 period average of 18.8%.

2.17 Recurrent expenditures will need to grow rapidly--by about 10% per year in real terms--in order to take better care of the operation and maintenance (O&M) requirements of existing and new infrastructure and to finance increased interest obligations on public debt. Following an extended period of relative neglect, O&M expenditures on infrastructure such as roads and irrigation works and on essential supplies for health centers, schools and the like, will generally have a higher rate of return than funds allocated to new investment.

Table 2.3: FOODGRAIN AVAILABILITY AND DISTRIBUTION UNDER THE HIGH POLICY CASE, FY81-FY95

	FY81	FY86	FY90	FY95
	-----million tons-----			
Gross Production	15.03	16.11	18.73	22.43
Net Domestic Supply <u>/a</u>	13.43	14.64	16.74	20.05
Net PFDS Operations	0.51	1.19	1.88	0.96
[-] Domestic Procurement	1.02	0.35	0.44	0.91
[+] Offtake	1.55	1.54	2.32	1.87
Imports	1.06	1.20	2.04	1.15
Closing PFDS Stocks	1.23	0.98	1.35	1.51
Total Availability	13.93	15.84	18.62	21.01
kg/capita	156.1	156.0	166.6	168.7
Memorandum:	-----thousand tons-----			
PFDS Offtake by Channel:				
Ration Sales	1141	730	300	0
FFW	289	385	569	731
Relief & VGF	117	288	393	507
OMS/MO/FS	-	138	1052	637
	-----as percent of total-----			
Ration Sales	73.8	47.4	13.0	0.0
FFW	22.9	25.0	24.6	39.0
Relief & VGF	3.3	18.7	17.0	27.0
OMS/MO/FS	0.0	9.0	45.5	34.0

/a Adjusted for seed, feed, waste and overlap of crop cycles with fiscal years.

Source: Staff estimates.

Table 2.4: ANNUAL DEVELOPMENT EXPENDITURES IN THE SECOND AND THIRD PLAN PERIODS
(Tk billion in constant 1984/85 prices)

	Second Plan Period FY81-85	Third Plan Period FY86-90	Average Annual Growth Rate %
Agriculture, Rural Development & Water Resources	49.4	70.7	7.4
Industry	15.6	26.0	10.8
Energy & Natural Resources	35.8	56.8	9.7
Transport & Communications	26.6	30.3	2.6
Physical Planning and Housing	8.7	5.5	-9.7
Education	6.7	12.2	12.6
Health	4.4	5.5	4.5
Population Planning	4.0	8.7	16.5
Social Welfare	1.0	3.1/a	25.0
Manpower & Employment	0.9	0.9/b	0.0
Upazilas /c	7.7	29.3/b	30.7
Other	3.0	-/b	-
<u>Total</u>	<u>165.6</u>	<u>250.0</u>	<u>8.6</u>
<u>Memo Item:</u>			
Total ADP as % of GDP	9.0	10.3	-

- /a TFYP figure includes social welfare, women's affairs, youth development, mass media, cultural development, and sports.
- /b TFYP figure may not be comparable with the SFYP figure because of difference in classification.
- /c To the extent that this includes items which previously appeared under other categories (especially agriculture), other growth rates are underestimates.

Note: Figures noted above are preliminary actuals for SFYP and plan outlay for TFYP.

Sources: Ministry of Finance, Planning Commission and staff estimates.

2.18 The TFYP allocation of development expenditures (ADP) among the various sectors is shown in Table 2.4, and contrasted with SFYP actual expenditures. The Plan envisages ADP expenditures in the TFYP period to be 50% higher in real terms than actual expenditures in the SFYP period; this is equivalent to an average annual real increase of 8.6%. Industry, education,

population, social welfare and upazila development are planned to show the largest growth. Under the High Case, ADP expenditure growth is expected to be more modest--8.0% per year for the TFYP as a whole (Table 2.5).^{1/} This lower growth is assumed, partly to accommodate the higher O&M expenditures and partly in acknowledgement of the modest implementation performance during the first two years of the plan period. Even the achievement of this lower rate of growth, however, will require significant improvements in project implementation performance (see Chapter 4).

2.19 Revenue: As a percentage of GDP, tax revenues and total domestic revenues, at 7.2% and 9.2% respectively in FY86, are among the lowest in the world. The Government is committed to raise revenues from both taxation and public pricing measures, and to restructure its tax system away from its current heavy dependence on low elasticity and distortionary foreign trade-based taxes, which currently account for half of all tax revenues. As discussed in Chapter 5, however, this restructuring of the tax system will take some time to plan and implement. The High Case projections assume that this process of reform continues over the next five years or so. At the same time the tax-GDP ratio would have to rise from 7.2% in FY86 to 8.5% in FY90 and to 9.9% in FY95.

2.20 Good progress has been made in reducing expensive subsidies in Bangladesh in recent years; food, fertilizer and petroleum products are notable examples. But given the urgent need for revenues, the Government really has no choice but to continue in this direction. Subsidies on publicly provided goods and services are currently equivalent to about 3% of GDP. About half of these are well targeted and should be maintained and even expanded; these include supplementary feeding programs, basic health care and primary education. But many others are not achieving their goal and are draining scarce funds from other worthwhile programs; some are causing distortions and some are actually detrimental to the poor. Chapter 5 suggests a four-year program for eliminating those subsidies which are not benefiting the poor. These measures, which are assumed under the High Policy Case, would raise revenues by the equivalent of 2 percentage points of GDP by FY90. However, only about half of this added revenue would be available (in a net sense) for central government expenditures; the remainder would be required to restore financial health to the state enterprise sector, much of which has been weakened in recent years by requirements to pay taxes and dividends to the exchequer while not being able to raise the prices on their output.

^{1/} No attempt is made in this report to assess the sectoral composition of the ADP in TFYP program. A separate exercise is currently underway for this purpose. Chapter 9 of this report does, however, stress the importance of a higher emphasis on human resource programs.

Table 2.5: SOURCES AND USES OF GOVERNMENT FUNDS - HIGH CASE, FY81-FY95

	FY81	FY86	FY90	FY95	Real Increase		
					FY81-86	FY86-90	FY90-95
	-----Tk billion-----				-----percent per year-----		
	current prices						
<u>USES</u>							
Recurrent Expenditures	13	34	65	121	14.6	9.9	6.3
Investment Expenditures	25	41	69	135	5.2	7.0	7.4
(ADP) /a	(24)	(36)	(65)	(127)	(4.0)	(8.0)	(7.4)
Food Expenditures	13	12	26	30	-5.5	13.1	-2.5
Amortization	1	3	9	12	10.7	22.8	-0.5
<u>Total Uses</u>	<u>52</u>	<u>90</u>	<u>169</u>	<u>298</u>	<u>6.8</u>	<u>9.4</u>	<u>5.2</u>
<u>SOURCES</u>							
General Revenues	22	42	77	163	8.9	8.8	9.2
Taxes	18	33	64	133	8.5	10.0	8.7
Non-tax Revenues	4	9	13	30	11.5	2.5	10.9
Aid Disbursements	16	37	68	110	13.4	8.7	3.4
Food Revenues	7	10	24	25	3.0	16.1	-5.6
Commercial Borrowing	7	1	-	-	-	-	-
Domestic	7	3	-	-	-	-	-
Foreign	-	-2	-	-	-	-	-
<u>Total Sources</u>	<u>52</u>	<u>90</u>	<u>169</u>	<u>298</u>	<u>6.8</u>	<u>9.4</u>	<u>5.2</u>
--as percent of total-							
<u>USES</u>							
Recurrent Expenditures	25	36	39	41			
Investment Expenditures	48	47	41	45			
Food Expenditures	25	14	15	10			
Amortization	2	3	5	4			
<u>SOURCES</u>							
General Revenues	42	47	46	55			
Aid Disbursements	31	42	40	37			
Food Revenues	13	11	14	8			
Commercial Borrowing	13	-	-	-			
--as percent of GDP---							
Recurrent Expenditures	5.6	7.4	8.6	9.0			
Investment Expenditures	10.2	8.9	9.1	10.0			
General Revenues	9.3	9.2	10.5	12.1			
Aid Disbursements	8.0	8.0	9.0	8.2			
Total Sources/Uses	22.3	19.6	22.3	22.2			

/a Not all of ADP expenditures are included as investment.

Source: Bank staff estimates.

III. THE BALANCE OF PAYMENTS

2.21 The availability of foreign exchange will continue to be a binding constraint on economic growth in Bangladesh for the indefinite future. The very narrow natural resource base implies that investment and industrial production are heavily dependent on imported raw materials, capital goods and components. So far, during the 1980s, Bangladesh has earned from exports and remittances enough to finance about 60% of its imports, or 50% of imports and debt service obligations combined. The remainder--about \$1.5 billion per year--is financed by foreign aid. Even under fairly optimistic assumptions concerning donor behavior, the proportion of imports financed by foreign aid must fall; this represents a major policy challenge to the Government.

2.22 The International Environment. Bangladesh has been treated harshly in international markets in the last two years. As seen in Figure 2.1 the dramatic decline in the price of jute (50% in FY86 and an expected 23% in FY87) caused the terms of trade to fall by over 20% in FY86. Raw jute prices are now at their lowest level since 1973, and the outlook for the future is not bright. A modest price increase is expected next year, but thereafter jute prices are expected to rise by less than 1% per year, implying a decline in real terms.^{1/} While other export prices are expected to display greater buoyancy than jute, this will not fully compensate for jute's gloomy outlook. Thus, following a slight improvement next year, the terms of trade are expected to show a small but continuous decline well into the 1990s. This will make the transition to greater self-reliance in financing imports very difficult; it illustrates the urgent need to rationalize the jute sector (Chapter 3), and may require active exchange rate policy to ensure continual gains in competitiveness to compensate for the declining terms of trade. However the outlook for export prices should not be blamed for too much; while the outlook is certainly not optimistic, it is worth noting that even by 1990, the terms of trade will be slightly above the average for the decade of the 1980s as a whole.

^{1/} Detailed price projections and the outlook for the supply and demand for each commodity are available in: World Bank, Price Prospects for Major Commodities (in 5 Volumes), October 1986. Issues relating to jute sector are discussed in Chapter 3.

FIG. 2.2 TERMS OF TRADE, IMPORT AND EXPORT PRICE INDICES
(FY81 = 100)

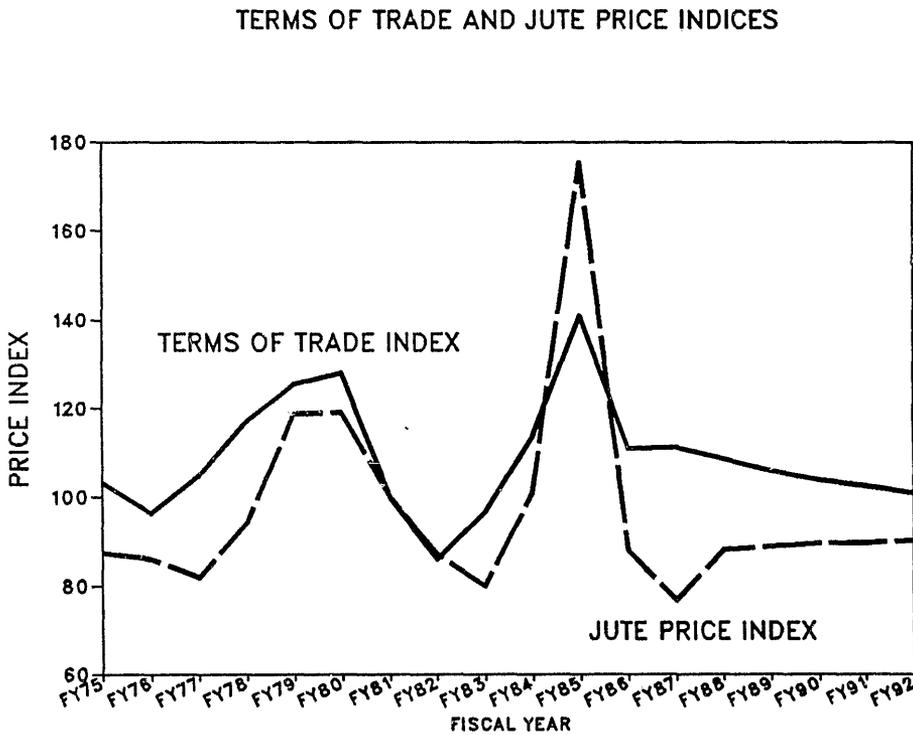
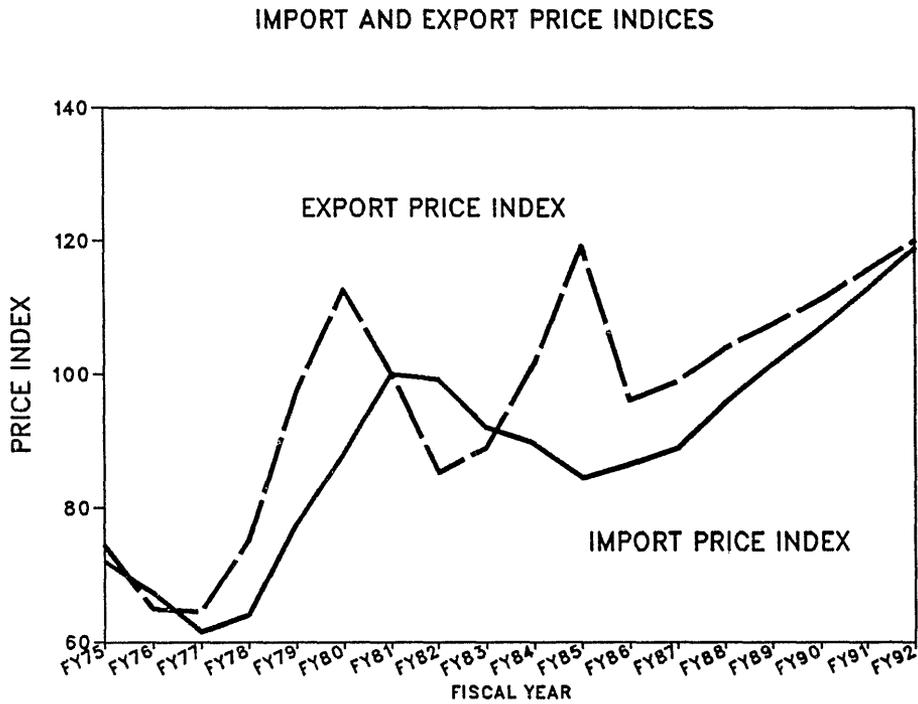


Table 2.6: FOREIGN EXCHANGE EARNINGS - HIGH CASE, FY86-FY95

	FY86	FY88	FY90	FY95	Growth Rate % p.a.		
					Second FYP	Third FYP	Fourth FYP
	US\$ million current prices				--at constant prices--		
Traditional	511	590	632	842	-1.7	4.3	1.9
Jute and Jute Goods	417	460	478	592	-2.0	4.6	1.5
Others	94	130	154	250	0.5	3.0	3.6
Non-traditional	308	467	652	1608	22.2	13.8	9.3
Garments	131	187	257	720	-	11.3	12.0
Frozen Seafood	113	200	295	615	26.0	21.0	15.0
Others	64	80	100	273	21.5	5.4	10.0
Total Exports	<u>819</u>	<u>1057</u>	<u>1284</u>	<u>2450</u>	<u>3.8</u>	<u>8.0</u>	<u>8.6</u>
Service Receipts	260	275	309	430	2.5	-3.8	2.0
Transfers	586	601	650	810	17.9	1.1	-
Workers' Remittances	(555)	(572)	(619)	(770)	(n.a.)	1.5	-
Total Earnings	<u>1665</u>	<u>1933</u>	<u>2243</u>	<u>3690</u>	<u>4.1</u>	<u>6.8</u>	<u>5.7</u>

Note: To obtain constant price (real) growth rates, commodities are deflated by their own price indices (FY81 prices). Services and transfers deflated by unit value of manufactured goods (MUV).

Source: Staff estimates.

2.23 Foreign Exchange Earnings. Table 2.6 presents projections for exports and for remittances and service receipts. Traditional exports--jute, jute goods, tea and leather--are expected to grow slowly in volume terms, with a modest expansion in jute goods partly making up for stagnant raw jute exports. During the next three years, non-traditional exports are expected to overtake traditional exports for the first time. Garments and frozen seafood are expected to continue growing rapidly although not at the extremely high rates witnessed over the last few years. An important consideration here is the extent to which Bangladesh can share in an expanding world market for those products or instead has to take markets away from other exporters. The world market for garments is not expected to grow rapidly, but as seen in Table 2.7, Bangladesh's share in world trade remains sufficiently small that, even with stagnant growth in world demand, its share would remain well below 1% by 1995. World trade in frozen shrimp is certainly more buoyant than for garments, but Bangladesh's share would nonetheless have to rise from 1.1% in FY84 to about 3% in FY95 to achieve the 15-20% volume expansion each year projected under the High Case.

Table 2.7: SHARE OF BANGLADESH'S MAJOR EXPORTS IN WORLD TRADE, FY81-FY84
(as percent of world trade)

	FY81	FY82	FY83	FY84
Raw Jute	75.3	93.1	84.9	83.1
Jute Goods	51.5	49.9	82.7	77.6
Tea	2.6	5.6	4.5	4.9
Garments	0.02	0.07	0.12	0.42
Frozen Fish	0.39	0.70	0.74	1.10

Source: GATT data base.

Table 2.8: PROJECTED IMPORTS - THE HIGH CASE. FY81-FY95
(US\$ million at current prices)

	FY81	FY86	FY90	FY95
Foodgrains	250	220	418	260
Petroleum and Products	503	342	324	658
Capital Goods	683	680	1069	1748
Other Consumption and Intermediate Goods	1097	1122	1617	2841
<u>Total Imports</u>	<u>2533</u>	<u>2364</u>	<u>3428</u>	<u>5507</u>

Sources: BBS and staff estimates.

2.24 Service receipts are expected to decline over the TFYP as a whole, partly due to lower interest earnings (caused in turn by lower interest rates), before rising again in the 1990s. The outlook for remittances, which remain the single largest source of foreign exchange earnings, is highly unpredictable despite their unexpected rebound in FY86. With continued low and uncertain world oil prices, it would be prudent to assume not much growth from this source in the future. Under the projections, the share of imports financed by remittances is expected to fall from 23.5% in FY86 to 18% in FY90 and 14% in FY95.

2.25 Import Requirements. Bangladesh will continue to remain highly dependent on imports. As shown in Table 2.8, annual imports are expected to rise from \$2.4 billion in FY86 to \$3.4 billion in FY90 and \$5.5 billion in

FY95. Foodgrain imports are projected to follow the pattern described in Table 2.3. Petroleum imports are expected to continue to decline for the remainder of the decade due to continued import substitution and low international prices. Capital goods will remain essential to economic growth, and will grow in accordance with investment growth. However, the projections assume a slight decline in the import intensity of investment--from 33% in FY81-87 to 30% in FY90 and 29% in FY95--in accordance with the High Case trade and industrial policies, which would encourage the development of the domestic capital goods industry. Consumption goods imports are expected to grow slightly faster than consumption growth due to trade liberalization measures, and intermediate imports would grow slightly slower than industrial output growth, in accordance with progress in achieving backward linkages in industry.

2.26 The Balance of Payments. Table 2.9 summarizes the overall balance of payments. The current account deficit as a percentage of GDP remains in the 6.5% to 7.5% range, and the model projections have been constrained to ensure that foreign exchange reserves remain adequate. On the assumption that foreign aid disbursements are available to fill the foreign exchange gap--i.e., that no commercial borrowing will be required--debt service obligations will not be a serious problem. Following the repayments of commercial food loans and repurchases with the IMF in FY86 and FY87, the debt service ratio falls to an average of 21% for the remainder of the decade and thereafter drops gradually to FY95.^{1/}

^{1/} These debt service figures omit short-term debt (under one year maturity). Bangladesh prudently limits its short-term debt to trade financing.

Table 2.9: THE BALANCE OF PAYMENTS - THE HIGH CASE, FY86-FY95
(US\$ million, current prices)

	SFYP						
	Average	FY86	FY87	FY88	FY89	FY90	FY95
Exports of Merchandise, f.o.b.	754	819	980	1057	1162	1284	2450
Imports of Merchandise, c.i.f.	-2457	-2364	-2460	-2777	-3103	-3428	-5507
<u>Trade Balance</u>	<u>-1703</u>	<u>-1545</u>	<u>-1480</u>	<u>-1721</u>	<u>-1941</u>	<u>-2144</u>	<u>-3057</u>
Services, Net	-56	-125	-126	-118	-119	-122	-222
(interest payments)	(110)	(-145)	(-128)	(-130)	(-132)	(-134)	(-216)
Private Transfers, Net	512	586	670	601	625	650	810
(Workers' remittances)	(496)	(555)	(650)	(572)	(595)	(619)	(770)
<u>Current Account Balance</u>	<u>-1247</u>	<u>-1084</u>	<u>-936</u>	<u>-1238</u>	<u>-1435</u>	<u>-1616</u>	<u>-2469</u>
Aid Disbursements, Gross	1253	1306	1469	1638	1778	1949	2650
Repayments							
M&L	-73	-117	-138	-149	-174	-190	-300
Food Borrowing	-42	-82	-96	0	-13	-13	
Other	-1	-29	-42	-41	-34	-22	
Other Capital, Net /a	81	90	-19	-87	-12	50	180
<u>Overall Balance</u>	<u>-29</u>	<u>84</u>	<u>238</u>	<u>123</u>	<u>110</u>	<u>158</u>	<u>61</u>
IMF, Net	53	-3	159	-45	-30	-127	0
Changes in Gross Reserves (- = increase)	-24	-81	-397	-78	-80	-31	-61
End Year Gross Reserves (as months of imports)	333 (1.6)	476 (2.4)	873 (4.3)	951 (4.1)	1031 (4.0)	1062 (3.7)	1420 (3.0)
Memorandum Items:							
C.A. Deficit as % of GDP	9.0	7.1	5.6	6.7	6.9	7.1	7.2
Debt Service Payments (excluding IMF) /b	192	335	411	292	330	342	516
Debt Service Ratio /c	12.3	20.1	19.5	15.1	15.8	15.2	14.0
Debt Service Payments (including IMF) /b	277	467	539	418	435	493	516
Debt Service Ratio /c	18.0	28.1	28.2	21.5	20.9	21.9	14.0

/a Includes errors and omissions.

/b Excludes debt of under one-year maturity.

/c Debt service payments as percent of foreign exchange receipts (exports of goods and services plus private transfers).

Sources: Bangladesh authorities and staff estimates.

IV. THE ROLE OF EXTERNAL ASSISTANCE

2.27 Bangladesh will continue to rely heavily on foreign assistance at least for the next decade. Table 2.10 suggests that about \$5.4 billion in disbursements of foreign aid will be required during the remainder of the TFYP (FY88-90) in order to reach the High Case growth rates. This compares with disbursements of \$3.9 billion over the last three years (FY84-86). This represents an increase of 40% in current prices and about 20% in real terms. For the Fourth Plan period, aid disbursements of almost \$12 billion would be required. This represents a current price increase of 46% and 89% over disbursements in the TFYP and SFYP, respectively.

Table 2.10: FOREIGN EXCHANGE REQUIREMENTS AND SOURCES, FY81-FY95
(US\$ billion, at current prices)

	SFYP FY81-85	TFYP FY86-87 FY88-90		FFYP FY91-95
	-----period totals-----			
<u>REQUIREMENTS</u>				
Current Account Deficit				
Excluding Interest Payments	6.24	1.75	3.89	9.62
Interest Payments	0.53	0.27	0.40	0.90
Amortization /a	0.85	0.76	0.93	1.46
Increase in Reserves	0.12	0.48	0.25	0.39
<u>Total</u>	<u>7.74</u>	<u>3.26</u>	<u>5.47</u>	<u>12.37</u>
<u>AVAILABILITIES</u>				
Aid Disbursements	6.27	2.78	5.37	11.84
Grants	(3.40)	(1.30)	(2.87)	(5.75)
Concessional Loans	(2.87)	(1.48)	(3.00)	(6.09)
Other Capital Flows /b	1.47	0.48	0.10	0.53
<u>Total</u>	<u>7.74</u>	<u>3.26</u>	<u>5.47</u>	<u>12.37</u>

/a Includes repurchases with the IMF.

/b Includes purchases with the IMF.

Source: Bank staff estimates.

2.28 These figures imply that foreign aid disbursements would continue to finance between 50% and 55% of import needs. This level of dependence, however, should not be interpreted in any way as a sign that progress is not being made in self-financing of imports through improved export performance.

Export earnings under the High Case would finance a growing share of imports--from an average of 31% in the SFYP to 37% in FY90 and 44% in FY95. However, the growth of exports would be required to compensate for the declining role of remittances, and to substitute for non-concessional borrowing from the IMF and from other sources.

2.29 This level of foreign aid disbursement should therefore be regarded as an appropriate complement to the policy reforms adopted by the authorities. Indeed, without enhanced aid flows, the Government's structural adjustment program probably would not be feasible. Increased public resource mobilization through tax and public pricing reforms, for example, may be precluded in the face of possibly declining private per capita consumption levels. More generous aid is therefore needed--but is it realistic? Table 2.11 illustrates levels of commitments and disbursements of food aid, commodity aid and project aid that could generate these flows. Of course, there is a certain degree of fungibility among the different forms of aid, so these figures should not be interpreted as being precise. Figure 2.3 shows graphically these levels of commitments and disbursements on an annual basis up to FY95, and contrasts them with historical trends. With regard to the aggregate picture, two points are worthy of note:

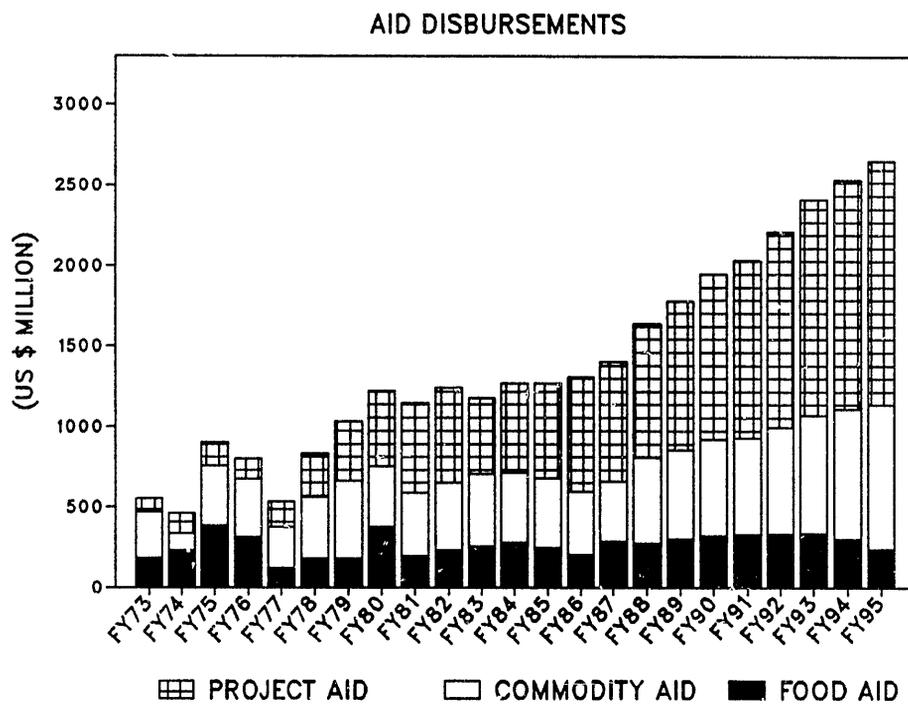
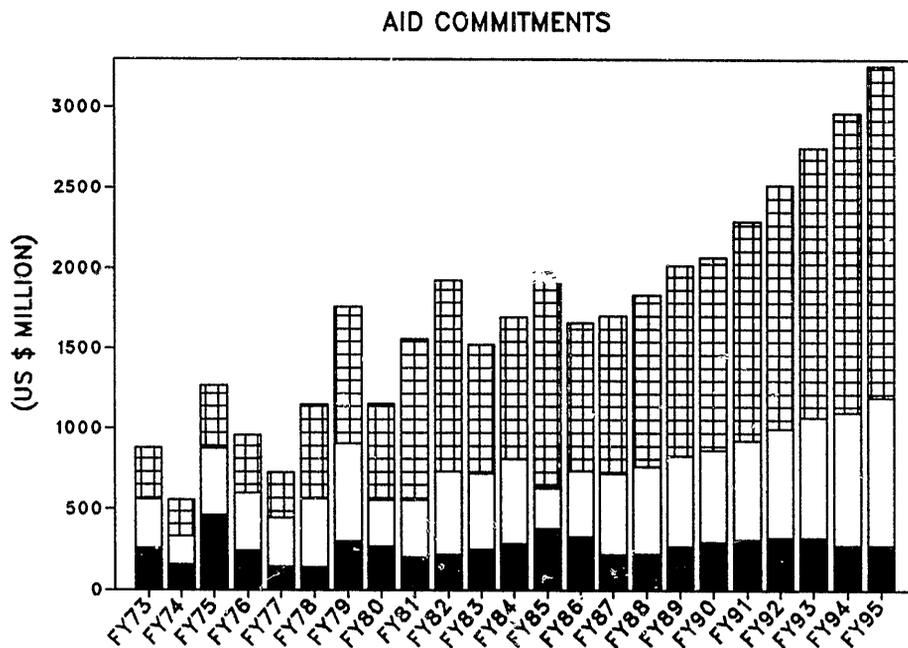
- (i) Disbursements have remained roughly constant during the four year period FY82-85, but in FY86 and FY87 have grown as project implementation has shown improvements. Aggregate disbursements will need to continue to grow--by about 6% per year in real terms--in the coming years, if the High Case growth is to be achieved. The bulk of this growth, however, can come from faster utilization of the existing pipeline.
- (ii) Annual commitments have varied dramatically over recent years. A slight upward trend is observable in current price terms, but much depends upon the starting point and the period considered. Comparing the most recent three year period--FY84-86, during which annual commitments averaged \$1.73 billion--with the previous three years--FY81-83, \$1.67 billion--suggests that donors are willing to maintain real commitment levels about constant. For the remainder of the 1980s, real growth in overall commitments needed to achieve the required disbursement levels under the High Case is 2% per year. While this represents an increase over the recent historical trend, it is certainly not an unrealistic level of support in view of the Government's policy initiatives.

Table 2.11: FOREIGN AID - COMMITMENTS AND DISBURSEMENTS, FY81-FY95
(US\$ million)

	Annual Averages			Fourth FYP FY91-95
	Second FYP FY81-85	Third FYP FY86-87 FY88-90		
<u>Disbursements</u>				
Food Aid	240	236	298	307
Commodity Aid	427	396	562	742
Project Aid	553	755	928	1318
Total	<u>1220</u>	<u>1387</u>	<u>1788</u>	<u>2367</u>
From Pipeline as of July 1987	1220	1387	1108	403
From New Commitments	-	-	680	1964
<u>Commitments</u>				
Food Aid	267	255	280	305
Commodity Aid	425	457	557	756
Project Aid	1042	916	1149	1698
Total	<u>1734</u>	<u>1629</u>	<u>1986</u>	<u>2759</u>
Grants	785	763	958	1324
Loans	949	866	1028	1435

Sources: External Resources Division and staff estimates.

FIG. 2.3 BANGLADESH: AID COMMITMENTS AND DISBURSEMENTS (IN CURRENT PRICES)



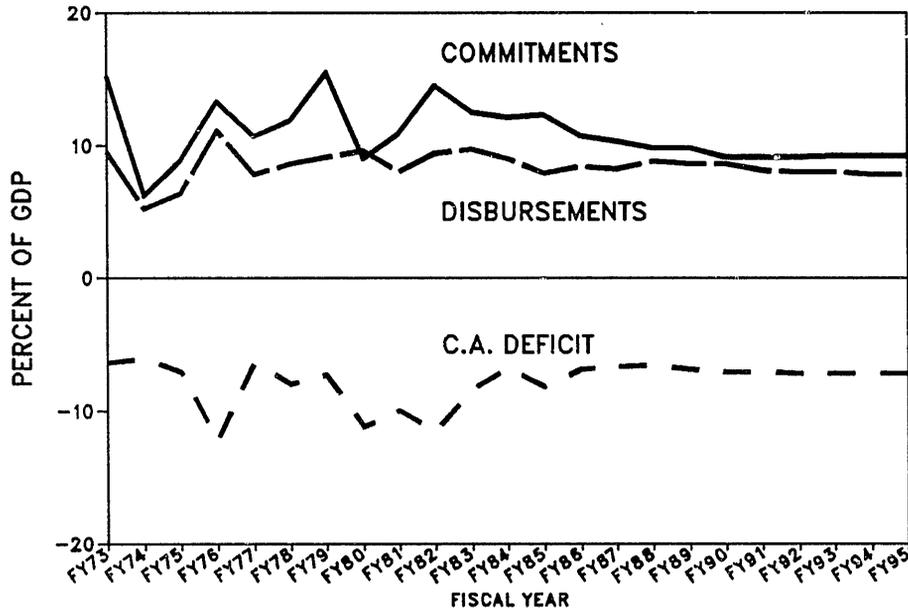
▨ PROJECT AID □ COMMODITY AID ■ FOOD AID

2.30 Project Aid. The starting point for an assessment of future disbursements must be the large pipeline--estimated at \$4.7 billion in March 1987--of undisbursed project aid. Accelerating the rate of project implementation is an important goal of the Government and is discussed in some detail in Chapter 4. The High Case projections assume that the ratio of annual disbursements to the beginning year project pipeline will continue to rise from about 17% in FY86 to 20% by FY91. This results in a real increase in project aid disbursements of about 10% per year during the remainder of the TFYP period, even with no real increase in project aid commitments. As shown in Figure 2.4, the undisbursed balance of aid has grown sharply over recent years and is now equivalent to about 27% of GDP, or 75% of the total disbursed outstanding debt. This is too high. Raising the disbursement ratio to 20% by the early 1990s will bring down the undisbursed balance to about 16% of GDP by FY95.

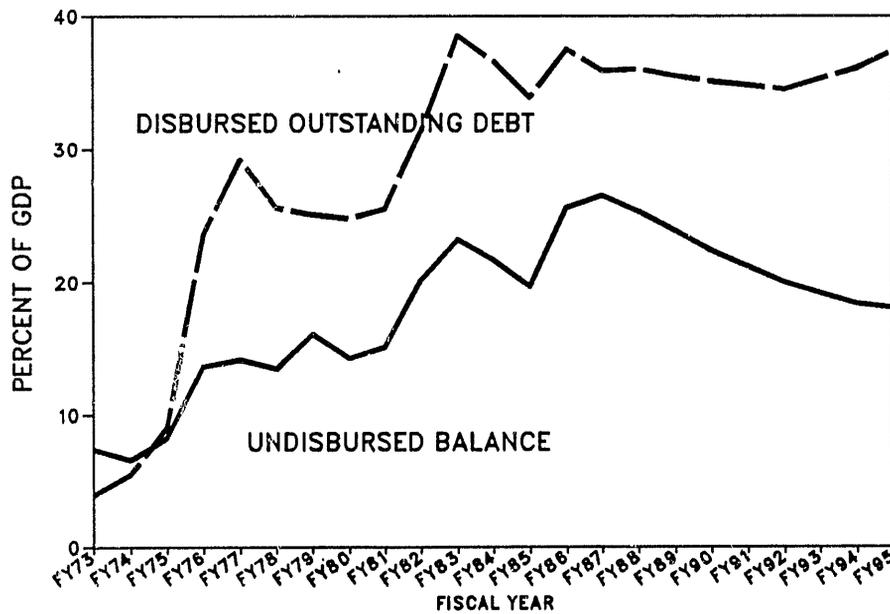
2.31 The next few years, therefore, give Bangladesh a breathing space. Aid disbursements can rise fairly rapidly at least until FY90, even with constant project commitment levels; a current account deficit of about 7% of GDP can be comfortably financed if progress is made in project implementation. Thereafter, however, commitments would have to rise substantially (see Figure 2.3) if this level of current account deficit is to continue. In the judgement of the Bank staff preparing this report, this enhanced donor support is fully warranted if progress continues to be made in the policy environment. It is important, therefore, that over the next two or three years a preliminary investment analysis be undertaken for increased project aid commitments in the early 1990s. In this regard, a comprehensive public expenditure review is required. A first stage of such a review will be undertaken over the next twelve months with assistance from IDA.

FIG. 2.4 BANGLADESH – AID FLOWS (FY73 – FY87)
(AS PERCENT OF GDP)

COMMITMENTS, DISBURSEMENTS AND CURRENT ACCOUNT DEFICIT



DISBURSED OUTSTANDING DEBT AND UNDISBURSED PIPELINE



2.32 Commodity Aid. Higher levels of commodity aid have been recommended for some time now. Commodity aid is not unique to Bangladesh, but it is not for most donors a type of aid that can be handled through routine procedures. Several important commodity aid donors are finding it difficult to justify commodity aid programs, some because of disbursement problems that seem to undercut the argument that this form of aid is urgently needed and others because they cannot make a sufficiently strong case that the economic policies implicitly supported by this type of aid adequately address the issue of poverty. It is important that these and any other issues that are negatively affecting commodity aid commitments be addressed and solutions sought that meet the needs of both donors and Bangladesh.^{1/} IDA's approach is to provide exchange for essentially any imports procured under international competitive bidding procedures in the context of an agreement with the Government on a range of either sectoral issues or wider ranging economic policy and management reforms. For the coming years it is recommended that commodity aid commitments grow by 5% per year in real terms. A shift towards these quick-disbursing funds untied to specific investments is necessary to support the Government's new emphasis on O&M expenditures and to provide foreign exchange urgently needed for private importation of intermediate and capital goods.

2.33 Food Aid. While in many ways equivalent to commodity aid, food aid has a particularly important and distinctive role to play because of its links to nutrition and to employment creation and social welfare programs. It would be unfortunate if progress towards foodgrain self-sufficiency resulted in a reduction of food aid not compensated for by other forms of commodity or program assistance, especially during a period in which the Government was making serious efforts to redirect food distribution to those needy population groups who cannot be reached through the ration system. Such a redirection of the PFDS towards those who lack the purchasing power to secure their nutritional needs from the market is to be welcomed for equity and nutritional reasons; but it will result inevitably in the reduction of "counterpart fund" generation. In the immediate future an increase in food aid would be appropriate. Stocks are at low levels and food availability has declined (para. 1.31). Increased food aid could indeed play an important economic role, helping to stabilize the macroeconomy while the Government undertakes its structural reform program.

2.34 Aid Commitments for FY88. Table 2.12 presents a disaggregated picture of commitments and disbursements that are judged to be appropriate over the coming years. There are many uncertainties involved and these should be judged as indicative suggestions rather than precise recommendations. Overall commitments for FY87 fell below expectations due primarily to problems associated with project preparation. It is important that FY87

^{1/} A Commodity Aid Utilization Study, financed by UNDP, is to be completed in the first part of FY88.

therefore not be regarded as the base on which to judge future aid increases. For FY88, total commitments of \$1.8-2.0 billion are required to generate the needed disbursements in later years. This represents a current price increase of 14% and 11% over FY86 and FY87 commitments, respectively, but still only restores the commitment level of FY85. About 30% of this amount, \$500-600 million, is needed in the form of quick disbursing commodity aid.

Table 2.12: AID PIPELINE, FY81-FY90
(US\$ million, current prices)

	FY81	FY82	FY83	FY84	FY85	SFYP Average	FY86	FY87	FY88	FY89	FY90	TFYP Average
FOOD AID												
Commitments	203	221	248	285	240/ ^b	240	273	237	240	280	320	270
Disbursements	194	231	255	277	244	240	203	269	273	303	319	273
Closing Pipeline ^{/a}	59	49	42	51	56	51	126	94	61	38	39	72
COMMODITY AID												
Commitments	355	513	474	528	253	425	409	505	540	560	570	517
Disbursements	393	420	452	439	432	427	393	400	535	550	602	496
Closing Pipeline ^{/a}	361	454	477	566	412	454	428	533	538	548	516	513
PROJECT AID												
Commitments	1001	1189	800	882	1340	1042	924	907	1055	1189	1202	1055
Disbursements	560	589	638	552	591	586	710	800	830	925	1028	859
Closing Pipeline ^{/a}	2444	3044	3206	3536	4026	3251	4632	4739	4964	5228	5402	4993
TOTAL AID												
Commitments	1559	1923	1523	1695	1833	1707	1606	1652	1835	2020	2069	1836
Disbursements	1147	1239	1345	1268	1267	1220	1306	1469	1638	1778	1949	1628
Closing Pipeline ^{/a}	2864	3547	3725	4153	4494	3757	5243	5426	5623	5865	5985	5628
Memo Items:												

TOTAL AID IN 1984/85 PRICES												
Commitments	1479	1833	1481	1685	1833	1662	1508	1447	1576	1718	1743	1598
Disbursements	1088	1181	1308	1260	1267	1221	1226	1287	1407	1512	1642	1415
Closing Pipeline	2717	3381	3623	4128	4495	3669	4922	4753	4829	4988	5042	4907

^{/a} Represent total available aid at the beginning of the year less disbursements during the year.

^{/b} Some donors--Canada, U.S., WFP--commit food aid on a multi-year basis. Commitments shown for FY85 and later years are the annualized levels of total commitment.

Sources: External Resources Division and staff estimates.

V. UNCERTAINTIES IN THE ANALYSIS

2.35 This chapter has described a High Case set of economic projections. It has assumed good progress in the Government's adjustment program, moderately generous foreign assistance, and the absence of any further sharp declines in Bangladesh's terms of trade or any serious worsening in protective barriers facing Bangladesh's exports. In view of the political and social uncertainties in both Bangladesh and in donor and importing countries, it is not possible to take these projections for granted.

The Base Policy Case

2.36 Table 2.13 contrasts the High Case projections with the "business-as-usual" Base Case. The latter assumes no serious progress in domestic resource mobilization or in improving the efficiency of investment. Annual investment under the Base Case is therefore 12% lower than under the High Case by FY90 and 24% lower by FY95. Aid commitments are assumed to be the same in aggregate terms under both cases as is the external environment, so the difference in performance is due to domestic policy factors alone.^{1/} The composition of aid commitments is assumed to be slightly different, with commodity aid in the 1990s increasingly substituting for food aid, which is less needed. Total disbursements under the High Case, however, would be slightly higher due to improved project implementation. The current account deficit as a percentage of GDP would be higher under the Base Case during the 1990s, and would have to be financed by commercial borrowing, leading to a higher debt service ratio. However, since Bangladesh's access to commercial borrowing is limited, most of the adjustment to the balance of payments disequilibrium would take place by lowering overall growth.

^{1/} In reality, in the absence of policy progress aid commitments would likely be lower. They are assumed unchanged from the High Case here in order to allow the effects of policy reform and aid flows to be disentangled.

Table 2.13: COMPARISON BETWEEN "HIGH" AND "BASE" POLICY CASES

	FY81-85	FY88-90		FY91-95	
		High	Base	High	Base
-----annual real growth rates-----					
Gross Domestic Product	3.9	5.1	3.9	5.1	4.0
Agriculture	2.8	3.4	3.2	3.6	3.0
Non-Agriculture	4.9	6.4	5.2	6.2	5.3
Investment	3.8	7.8	7.0	5.7	4.1
Consumption	4.2	4.4	4.4	4.8	3.4
Exports	3.8	7.2	6.7	8.6	6.5
-----averages-----					
Debt Service Ratio	18.7	21.7	15.9	14.2	16.0
ICOR	4.4	3.0	3.9	3.2	3.7
-----US\$ per person FY86 prices-----					
	<u>FY87</u>	<u>FY90</u>		<u>FY95</u>	
		<u>High</u>	<u>Base</u>	<u>High</u>	<u>Base</u>
Gross Domestic Product	151.4	162.2	156.2	188.7	170.0
Investment	19.4	21.8	19.1	26.1	19.9
Government Expenditure	29.8	37.6	34.2	42.7	39.3
Domestic Revenue	13.5	18.3	15.2	23.4	17.1
Aid Commitments	16.4	16.6	16.0	19.9	19.9
Aid Disbursements	12.5	15.6	15.0	16.2	15.5
Foodgrain Consumption (kg per yr)	161	167	166	169	166
-----Percent of GDP-----					
Investment	13.5	14.8	13.5	15.8	13.5
Exports	5.4	5.6	5.4	7.1	5.4
Current Account Deficit	9.0	7.1	7.1	7.2	8.4
Foreign Debt <u>/a</u>	43.6	40.2	42.7	42.8	50.7

/a Includes use of Fund credit.

Source: Staff estimates

2.37 By FY95 the total size of the economy under the Base Case would be about 11% smaller than under the High Case; per capita incomes would be \$19 per year lower (in FY86 prices); investment per capita, \$6 lower; and foodgrain availability less plentiful despite higher food imports. Foreign debt under the Base Case would rise to over 50% of GDP by FY95 (in comparison with 43% under the High Case), due partly to a lower GDP and partly to higher borrowing. Under the Base Case, the economy could only afford to grow at about 4% per year--not bad by international standards, but certainly not high enough to make serious progress in alleviating poverty. Over the longer term--the period after 1995--the gap between performance under the High and Base Cases would be even greater. The effects of an undistorted versus a distorted incentive environment, for example, will be cumulative. The Government's present policy initiatives, while Bangladesh is still not "locked in" to an inefficient production structure, offer an opportunity for determining the course of development for the next fifty years.

Foreign Assistance and the External Environment

2.38 The mediocre performance achieved under the Base Case could occur even if the Government were fully successful in implementing its policy reform package. This would happen, for example, if aid commitments remained at their present levels (in current price terms). Even with an improved policy environment, Bangladesh needs to be able to sustain a current account deficit equivalent to 6.5-7.5% of its GDP. Without increased aid, its sustainable deficit would continuously fall. If, for example, Bangladesh were required to limit its deficit to say 5% of GDP, it could probably only afford to grow by about 3.5% per year.

2.39 The role of donors would become even more significant in the event that the international marketplace deteriorates for Bangladesh. If for example, the Government is unable to negotiate continually rising quotas for its garment exports, or if the price of jute were to fall further, increased commodity aid disbursements would be urgently required to support the Government's efforts to accelerate the process of development and poverty alleviation.

PART II: POLICIES FOR HIGHER GROWTH

Chapter 3: PROMOTING EFFICIENT PRIVATE-ORIENTED GROWTH

3.01 Reaching the goals that Bangladesh has set for itself will depend first and foremost on the performance of the private sector. The primary role of the Government will be to establish a supportive but unbiased incentive system and to ensure that infrastructure and services are adequate and conducive to efficient private growth.

3.02 Private investment stagnated in FY86 and only modest growth occurred in FY87. But over the coming decade, it is estimated that real private investment will have to rise from 6.6% of GDP in FY86-87 to 8.0% during the first half of the 1990s, if the High Case scenario is to be achieved. The Government is committed to establishing an environment in which private investment will not only grow, but also in which the efficiency of investment will be raised. This chapter describes some of the key components of such a strategy. The chapter is divided into four sections. Section I covers issues in agriculture, while Section II describes the Government's policy agenda in the industrial sector. Section III addresses the special and difficult issues facing the jute sector, which straddles agriculture and industry. Finally, Section IV explores the role of the financial system in promoting efficient private-oriented activity. The term "private-oriented" includes those state enterprises which are expected to compete in the market place and which should be held accountable to commercial standards.

I. ISSUES IN AGRICULTURE POLICY

3.03 Agricultural production has grown at a rate of about 3.0% per year during the period FY80-85, while value added in agriculture has grown by about 2.8% per year. Foodgrain production has been the highest priority, and has grown at a faster rate, by about 3.2% per annum. But despite such progress, recent developments in agriculture are cause for concern. Overall production growth in FY86 and FY87 averaged less than 2.5% each year, and even this rate of growth has been achieved mainly as a result of good weather benefiting the traditional aman rice crop. In contrast, the more input dependent crops such as boro rice and wheat--which have been the prime engines of expansion in earlier years and which still have great potential--have lost some of their momentum. If such trends persist, agricultural growth over the medium term could slow to about 2.0-2.5% per year, instead of a possible 4.0%, the Government target for the TFYP. The growth rate assumed under this report's High Case is 3.6% per year.

3.04 If potential growth rates in agriculture are to be met and if other related objectives--agricultural diversification, adequate nutrition and rural employment growth--are to be achieved, difficult issues will have to be addressed in the near future. This section suggests that progress is especially important in four areas--improving water development and management,

promoting new initiatives in rainfed crop development, encouraging investment in fisheries, and strengthening agricultural support institutions. A fifth important area--pricing policy in agriculture--is discussed in Chapter 5. No simple solutions are readily available in some of these areas, and additional study will be required. In this regard, the Government, IDA and other donors will be undertaking a review of these and other issues in the second half of FY87.

Water Development

3.05 Water resources are abundant in Bangladesh and provide the potential for rapid growth of agricultural output. Water control is required in the wet season and irrigation in the dry season. Between May and October, one-third of cultivated land is deeply flooded (over 3 feet of flooding), and another third is shallow flooded (less than 3 feet). Coastal areas are subject to storm surges, and annual rainfall is erratic. During the dry season (November-April), there is little rainfall, and some 60% of cultivable land area remains fallow.

3.06 All types of water development have potentially high economic rates of return.^{1/} However, drainage and flood control (DFC) facilities are generally ranked lower than irrigation because of lower returns, longer gestation and little or no prospects of cost recovery.^{2/} Similarly, minor groundwater irrigation requires smaller initial public outlay and subsequent O&M expenditures. DFC development has generally concentrated on small schemes (combined with irrigation where feasible) on lands which are shallow flooded or medium low lands (up to 6 feet of flooding), enabling farmers to grow transplant HYV aman (main monsoon season) rice instead of low-yield broadcast local variety aus (early monsoon season) rice and jute, or deep-

^{1/} See: National Water Plan, Draft Final Report, July 1985. There are five principal existing modes of water development: (a) drainage and flood control (DFC); (b) drainage and flood control with irrigation (DFCI); (c) major surface-water irrigation, requiring primary pumping (PPI); (d) minor irrigation from surface water using low-lift pumps (LLPs); and (e) minor irrigation from groundwater (GWI), using various kinds of tubewells, hand-tubewells (HTWs) shallow-tubewells (STWs) and deep-tubewells (DTWs).

^{2/} Cost recovery in DFC projects is a complex issue. Protection from flooding is considered a government responsibility, and benefits vary from one plot to another depending on land elevation. The Government's current view is that cost-recovery on DFC projects is not feasible, but given the large resources allocated to DFC, potentially high returns to private individuals, and need for public resource mobilization, land benefit taxes may be justified and necessary in the future (see Chapter 5 for further details).

water broadcast rice. Irrigation development has focussed primarily on minor works, using tubewells to tap the shallow aquifer and surface water pumps along rivers to enable farmers to grow boro (dry season) rice and wheat, instead of traditional low-yield dry season oilseeds and pulses (or leaving land fallow).

3.07 Despite major investment in water development--\$1.2 billion over the last decade, accounting for 55% of development expenditures in agriculture 1/ and 13.5% of total development outlays--there remains a huge untapped potential. Drainage and flood control now covers about 15% of inland cultivable areas, compared with 5% a decade ago and 35-40% potentially suitable area for low cost DFC. Irrigation covers no more than 22% of cultivated area, compared to 10% a decade ago, and a potential of 50% (using shallow aquifers and small surface water schemes), and up to 80% if barrages and/or unexplored deep aquifers under possible artesian pressure are found technically and economically feasible. Table 3.1 illustrates the dramatic effects on output and employment generation of combining modern techniques with irrigation facilities in both the wet and dry seasons.

3.08 The water sector continues to receive high priority. For the Third Five Year Plan period the Government proposes to allocate the same proportion of total development spending, 13.5%, to the sector. Some 800,000 ha of DFC facilities (9% of cultivated land) and 1.5 million ha of irrigated facilities (17% of cultivated land) would be added. DFC and major irrigation, implemented by the Bangladesh Water Development Board (BWDB) would account for about 35% of investment and minor irrigation, implemented mainly by the Bangladesh Agricultural Development Corporation (BADC), for about 65%. These are appropriate goals; the draft National Water Plan, which was completed in July 1985, but which still needs to be operationalized, provides a good framework for their implementation. Achieving these targets and, more importantly, generating the related growth in agricultural output will require progress in two related areas.

1/ Its indirect share has been even larger, since many other expenditures in the sector--research, extension, fertilizer--have been geared towards irrigated crops.

Table 3.1: EFFECTS OF IRRIGATION AND MODERN INPUTS ON PRODUCTION AND LABOR ABSORPTION

Crops and Varieties	Yield Rate /a (kgs. cleaned rice per ha)	Labor Use /b (days per hectare)	Fertilizer Use /b (nutrient kgs. per ha)	No. of Times Irrigated /b
Early monsoon rice (aus)				
Local variety	827	143	22	nil
HYV	2,048	198	98	3.0
Monsoon rice (aman)				
Local variety	1,163	125	29	nil
HYV	1,961	163	79	0.9
Dry season rice (boro)				
Local variety	1,554	207	9	3.6
HYV	2,734	242	140	7.3

/a Averages for 1980-85, compiled from official statistics published by the Bangladesh Bureau of Statistics.

/b Averages for 1970-82, compiled from the International Fertilizer Development Center.

Source: Mahabub Hossain, Technological Change and Factor Productivity in Bangladesh Agriculture, International Food Policy Research Institute, September 1986.

3.09 First, implementation of the minor irrigation program must be improved. The expansion of minor irrigation has been the major engine of development over the last decade, accounting (in combination with increased use of HYVs and fertilizers on irrigated land) for over 60% of crop production growth. It was facilitated by a rapid growth in fieldings of shallow tubewells by private dealers in the early 1980s. The last two years, however, have seen a serious slump in sales due to a combination of factors, including difficulties in farmers' group formation, inadequate groundwater information, lower credit availability, a lack of clarity in the relative roles of the private and public sector, uncertainty concerning pricing and rental policy, and reduced incentives to farmers due to relatively lower output prices. While the solutions to these problems are not clear-cut, it seems clear that the institutional weakness of BADC, which retains a virtual monopoly for all irrigation equipment rentals and sales except shallow

tubewells (and which carries very large unsold stocks of equipment), will need to be addressed, either by privatization of its functions, or by a major improvement in its operations. In addition, subsidies on sales and rentals of equipment need to be reduced to improve efficiency and resource mobilization.

3.10 Second, the efficiency of investment must be raised. Average investment costs of water development over the last decade--about \$300 per acre in 1985 prices--are not high by international standards, but in view of the very low costs of minor irrigation--\$100-\$200 per acre at efficient utilization rates--are much higher than earlier expected. The average command area for irrigation equipment is only about 35% of potential, indicating great inefficiency; raising this to, say, 45% could increase the irrigated area by as much as 26%, or 0.5 million ha at relatively low cost. But achieving this potential is a formidable task which will require major institutional support to the Irrigation Management Program (IMP)--administered by the Bangladesh Rural Development Board, BRDB--to reach some 300,000 farmers.

3.11 DFC and major irrigation investments have also not reaped the rewards that had been intended; their effective contribution to crop production growth has been low and rates of return may have been only 8-12%, instead of their potential of over 30%.^{1/} This is partly due to slow project implementation and inadequate attention to maintaining and operating existing assets. For the coming years, it is important that a prioritization of expenditures be clearly established. This will involve assessing trade-offs among new projects, rehabilitation of existing assets and O&M expenditures.

Rainfed Crop Development

3.12 The extensive and high profile work being undertaken in the water sector and the lack of corresponding efforts on rainfed crops by the agricultural development agencies, tends to bias attention and expenditure towards the irrigated crop sectors. As a result individual crop yields for most rainfed crops have remained virtually stagnant over the past decade and rainfed crops are declining in acreage because of low profitability and competition with irrigated food crops.

3.13 The potential for progress is, however, impressive. The introduction of input responsive high yielding varieties (HYV) for wet season cropping can double average yields. While the proportion of cereals produced using HYVs

^{1/} It is estimated that DFC and major irrigation have contributed about 20% to total crop production growth, despite accounting for over half of all development expenditure in water development. The estimate is based on incremental production growth of HYV transplant aman and estimated incremental production in BWDB irrigation project areas (mission estimates).

has risen from 8% to 16% over the last decade, the potential is estimated at 50% under existing conditions (and 80% with full development of flood control and irrigation). In addition, there is scope for crop intensification through dry season (or upland) cultivation of low water using crops, especially during the winter and early summer months. Realization of these potentials requires an expanded emphasis on research and extension services on rainfed areas, and on developing and disseminating improved varieties and practices for non-cereal crops (pulses, oilseeds, vegetables, fruits as well as sugarcane, and cotton). Their potential for growth without requiring expensive investments in irrigation are high--the rapid past growth of wheat cultivation, 50% of which is non-irrigated, is an example.

3.14 Fertilizer use has nearly tripled during the past decade, from 55 kg/ha to 146 kg/ha. There is high complementarity between fertilizer, HYV and irrigation use, but at least one-third of the expansion in fertilizer use could be attributable to diffusion of fertilizer use on rainfed local variety crops. The potential for further rapid expansion is high, since one-third to one-half of local variety crops (covering some 80% of rainfed crops) are still not treated with fertilizer, and average fertilizer application rates are half the recommended levels. Research and extension activities need to redirect efforts towards efficient fertilizer use on rainfed crops and areas, including addressing local agro-economic constraints and micro-nutrient deficiencies. Supply of good quality seeds may also be a major constraint, since only 5% of seed used by farmers are certified, and only one-third of desirable quality. Private investment in the seed industry also requires much greater policy support.

Fisheries Development

3.15 The natural resources to support a growing fisheries sector are abundant. More than 1 million ha of perennial inland water bodies, and over 3 million ha of flood plains (30% of total area of Bangladesh), provide an extensive and highly fertile area suited to inland fish production, while some 4 million ha of coastal and offshore waters contain productive areas and fish stocks to support marine fisheries. Despite such resources, fish production has grown at only 3% per year since 1980.

3.16 Inland fisheries account for about 580,000 tons, or 80% of total fish production, most of which comes from capture fisheries in open waters. Open water fisheries are not expected to support a substantial increase in inland fish production because of overfishing and depletion of natural stocks, and continued expansion of DFC facilities. The biggest potential exists for intensive aquaculture in ponds (now 4% of total production), but more importantly in larger inland water bodies including irrigation tanks, "baors" (old river beds), and independent and smaller drainage basins with controllable water regimes which have been formed as a result of DFC and irrigation projects. The combined water areas of these water bodies is at least 200,000 ha (and potentially up to 500,000 ha), capable of producing about 100,000 tons of fish annually. Intensification of pond aquaculture also offers large

scope for growth. Current yields are very low (300-700 kg per ha), and can be feasibly quadrupled with application of modern techniques (fertilizers, feed, aeration), providing incremental production of 100-300,000 tons per year.

3.17 However, there are some major constraints to realizing this potential. Larger inland water bodies would need stocking with fingerlings and hence investment in hatcheries; private investment would need to be fostered by leasing of public water bodies; and conflicts with other users of water (jute retting, irrigation during the dry season) are potentially serious. Pond fisheries also have similar problems, including absentee ownership, multiple uses, and short-term leases of public ponds.

3.18 Coastal brackish water shrimp farming is already developed and offers excellent scope for rapid growth based on intensive aquaculture practices and favorable export demand. A successful conversion of current low-yielding trapping activities into higher-yielding extensive and semi-intensive operations would raise export quality shrimp production fourfold. The major constraint to this is the conflict with rice farming in coastal areas, and related Government water management (and leasing) policies regarding saline water intrusion in coastal DFC polder areas. Public investments will also be required in polder development, to benefit highly profitable shrimp farming, and cost recovery measures are therefore appropriate.

3.19 In order to support such a basic technological transition from capture fishing to intensive aquaculture techniques, and to manage improvements in policies and public investment, the Directorate of Fisheries (DOF) will need considerable strengthening.^{1/} The Third Five Year Plan recognizes this need and conceives the establishment of an autonomous Aquaculture Development Board. While this may be a helpful development, it will need to be complemented by staffing and management improvements to facilitate more effective policy analysis and investment planning. Slow progress in these areas is currently causing delays in obtaining external assistance to finance required investments in the sector.

The Efficiency of Agricultural Institutions

3.20 As the agricultural sector grows and diversifies, the role of the public institutions charged with serving the sector also grows and becomes more complex. These institutions must continuously evolve so that farmers and fishermen are given the highest possible service at the lowest cost. There is currently considerable scope for improving efficiency of the six major agricultural support institutions: BWDB (surface water), BRDB (cooperatives, credits, Irrigation Management Program), BADC (input supply),

^{1/} See for example World Bank: Institutional Improvement in the Department of Fisheries, draft report, December 1986.

research institutes (Bangladesh Agricultural Research Council and its affiliates), the extension service, and the Directorate of Fisheries. Examples of inadequate services are a weak cooperative system which has failed to resolve difficulties in farmer group formation and input supply (see paras. 7.07-7.10), inefficiency in sales and servicing of irrigation equipment, reduced effectiveness of extension and research services, low efficiency of water use, and a credit system which reaches only 15% of farm households and where the majority of better-off farmers don't repay their debts.^{1/} The Government has recognized the need for institutional strengthening. For example, it has begun studies on the reorganization of BWDB and BADC, initiated reforms of the agricultural credit system, and is committed to strengthening the irrigation management program of BRDB. An analysis of the appropriate role for BRDB is also expected to be undertaken in the near future. In this process emphasis should be given to defining priorities and desirable shifts in current activities, and identifying managerial and staffing constraints (in policy, investment planning and implementation), and in providing an appropriate incentive framework for staff motivation.

II. INDUSTRIAL POLICY

3.21 The industrial and manufacturing sectors in Bangladesh are modest in size, accounting for only about 15% and 9% of GDP, respectively, in FY86. Rapid growth, especially in labor-intensive exports and efficient import-substitution industries are essential to provide adequate employment opportunities and foreign exchange earnings. During FY80-85, significant progress was made in shifting to a more efficient and faster pattern of industrial growth, and the actual rate of growth of about 5% per annum would have been considerably higher, but for the stagnant jute sector. Recent growth has been led by relatively new labor-intensive exports such as garments and shrimp and leather processing, as well as efficient import substitution in chemical fertilizers, basic metals (e.g., ship-breaking) and food processing. Moreover, most of the growth was led by private investment, which doubled between FY80-85 (Table 3.2). Major industrial policy reforms since FY81, including more realistic exchange rates, import liberalization, and improved support for the private sector through increased credit flows, reduced controls on private investment, and a reduced role for the public sector (including denationalization) have been responsible for this improved performance.

^{1/} The issues in agricultural credit are discussed in Section IV of this chapter.

Table 3.2: LARGE AND MEDIUM SCALE MANUFACTURING OUTPUT, INVESTMENT, AND EXPORTS, FY80-FY86

	FY80	FY85	Est. FY86	Annual Growth Rates	
				FY81-85	FY86
	Tk billion, 1974 prices			-----% per year-----	
Manufactured Output (FY74 prices)	5.1	6.6	6.7	5.3%	1.0%
Private Investment in Manufacturing (Tk billion, FY74 prices)	0.5	1.1	0.8	17.1%	-26%
Public Investment in Manufacturing /a	1.0	0.7	0.9	-6.9%	-28%
Non-traditional Exports (US \$ million) /b	130.0	310.0	350.0	19.0%	12.9%
(as % of total exports)	(18%)	(33%)	(43%)	..	..

/a Three-year averages to even out large fluctuation due to lumpy fertilizer plant investments.

/b Includes processed shrimp and leather exports.

Sources: BBS and Bank staff estimates.

3.22 Manufacturing growth has slowed down considerably in FY86, but this reflects primarily the problems encountered in the traditional sectors--jute, textiles and engineering.^{1/} In addition to addressing the problems in these sectors, it will be important for the Government to continue its past industrial policy reforms in several major areas, in order to accelerate potential industrial sector growth to at least 7-8% per annum, and non-traditional exports to about 30% per annum over the next decade. These relatively high rates are achievable given the low starting base, and necessary if some progress is to be made to alleviate the country's severe employment and foreign exchange constraints.

3.23 Last year's report discussed recent developments and policy initiatives in the industrial sector in some detail. Policy recommendations--many

^{1/} These are discussed in paras. 3.34-3.38 below, as well as in the separate Section III on jute.

of which had already been identified by the Government--were grouped under five headings: (a) export policies and administration; (b) the structure of protection; (c) the investment sanctioning system; (d) public sector industrial enterprises; and (e) the industrial credit system. This section briefly reports on progress since that time and suggests areas in which complementary action is needed.^{1/}

Export Promotion Policies

3.24 Over the last eighteen months the Government has taken a series of actions to encourage export growth:

- the real exchange rate has depreciated (see Chapter 1) and XPB benefits ^{2/} have been extended to more products to increase export competitiveness;
- three task forces have been set up to evaluate export financing, backward integration and export credit guarantees;
- a Duty Exemption and Drawback Cell has been established, which over time is to develop and implement more efficient systems for duty free imports for exporters;
- the internal quota allocation system for garment exports has been revised to eliminate its shortcomings, and for FY87 allocations were issued promptly; and
- the orders determining the role and function of the Chittagong Export Processing Zone Authority were amended to give the Zone Authority greater autonomy and facilitate investments in the Zone.

3.25 Despite these encouraging developments, Bangladesh still lacks an efficient system of export administration that can react swiftly to the changing needs of exporters. Lack of a substantial domestic resource base means that most of the non-traditional exports will require significant amounts of imported inputs so future growth will depend crucially on the efficiency and flexibility of the duty drawback system and import rules for raw materials. For example, in order to maximize the benefits from rapid growth of garment exports to the rest of the industrial sector, backward linkages from this activity need to be developed. But despite progress, development of such linkages are still hampered by the lack of a simple,

^{1/} Issues of industrial credit are discussed in Section IV of this chapter.

^{2/} Exporters are permitted to sell foreign exchange earnings in the secondary market, thus earning more taka revenues.

well-defined system for duty and restriction free importation of raw materials for fabric, yarn and accessories industries. Delays in issuing circulars to facilitate supply of fabric and accessories to local firms to the garment industry are currently holding down value added in this sector. Export diversification will soon require similar administrative capabilities for a larger number of products.

The Structure of Protection

3.26 The Government is in the process of implementing a medium-term tariff and import regime reform:

- to rationalize the tariff structure in order to reduce the wide variation of tariffs and ensure that different products have broadly similar and appropriate protection;
- to gradually replace Quantitative Restrictions (QRs) and other administrative controls on imports with tariffs; and
- to move towards unification of the dual exchange rate system by transferring foreign trade transactions from the official to the secondary market.

3.27 Tariffs. Anomalies in the tariff structure are especially acute in textiles and steel and engineering which combined account for over half of value added in the manufacturing sector. The Government has therefore developed a phased three-year program (FY88-90) to reduce net protective tariffs in these sectors (taking into account sales taxes, custom duties, development surcharges and import license fees). Protection would be lowered to a range of 10-75% from approximately 25-100% in textiles and 2.5-200% in steel and engineering. A longer-term program of further tariff rationalization will also be carried out in other subsectors, based on ongoing effective protection studies.^{1/}

3.28 Quantitative Restrictions. After changing to a negative and restricted list of imports in FY86, the Government's FY87 Import Policy Order liberalized imports further by shortening the negative and restricted lists. Restrictions on 140 items have been lifted, including diesel engines, trucks and buses, and inputs for the electric goods industry. The number of restricted spare parts items for the jute and textile industries has been reduced by 537. In terms of four digit ITC categories, the negative list has been reduced from 389 categories to 321 categories (out of a total of 1,192),

^{1/} The Trade and Industrial Policy (TIP) project, financed under IDA's Fourth Technical Assistance Credit has recently completed a series of sub-sectoral studies recommending a program of industrial policy adjustments.

a reduction of 18%. Finally, part of the restricted list pertaining to commercial importers has been eliminated. However, the restricted list continues to limit the import of certain raw materials to industrial users only, therefore still penalizing thousands of small and cottage industries which under a freer system would be able to import their needed raw materials indirectly through commercial importers. The Government hopes to make further progress on this issue in FY88.

3.29 Unification of the Dual Exchange Rate System. The Government has continued to transfer foreign trade transactions from the official to the secondary market. The share of exports in the secondary market increased from 27% in FY85 to 53% in FY86 and an estimated 73% in FY87. As a result, raw jute, tea and wet blue leather will be the only exports transacted at the official exchange rate. Similarly, the share of imports coming through the secondary market increased from 26.1% in FY85 to 28% in FY86 and an estimated 42% in FY87. Following changes announced this year, all non-government imports, except those financed by foreign aid or through barter arrangements, will come through the secondary market. The major items imported through the official market will be foodgrains, fertilizer and certain capital equipment for officially sponsored projects. These policies have resulted in a narrowing of the gap between the official and secondary exchange rates--from 15% in FY85 to an estimated average of 7.5% in FY87.

3.30 While significant rationalization and liberalization has therefore taken place in the system of protection, the magnitude of restrictions and the variance of tariff protection are still very extensive. Some industries continue to suffer as a result of the tariff system. The engineering sector is an example here, where tariffs are much higher on inputs than on output. Some activities on the other hand enjoy too much protection, thus reducing incentives to domestic producers to improve efficiency. Other distortions include the restriction limiting imports of many raw materials to registered industrial firms, which sometimes leads to the formation of firms and the importation of machinery just to be able to import these products to sell in the domestic market. Formation of these "industrial fronts" wastes scarce resources and will only get worse as the investment licensing system is liberalized (para. 3.32). A final problem stems from the remaining extensive import bans, which are causing large-scale smuggling and thus depriving the Government of an important source of revenue as well as distorting the desired pattern of protection.

3.31 In view of these problems, it is suggested that the Government act boldly to:

- increase the speed at which import bans are eliminated and replaced with tariffs. Given the magnitude of smuggling, this shift would also compensate for revenue losses due to tariff reductions;
- eliminate the restriction on the importation of raw materials so as to allow them to be imported by commercial importers as well; and

- rationalize the tariff system more rapidly.

Investment Sanctioning

3.32 The investment sanctioning system was significantly liberalized in FY87 when the Government issued a revised industrial policy which clearly defines the roles of the public and private sectors and lifts almost all restrictions on private investment. Specific changes are:

- (a) The old Investment Schedule which prescribed to priority sectors the quantity of investments that should be undertaken in each of these sectors,^{1/} was replaced by a new Schedule which is indicative only, containing a set of general guidelines for assisting investment decisions and omitting quantitative specifications on additional capacity.
- (b) The Revised Industrial Policy reserves only seven industries for the public sector.^{2/} In addition, the Government has issued a short list of discouraged industries, in which there are either environmental constraints (e.g., deep sea trawling) or very serious over capacity (e.g., jute carpets), where prior permission is required. All other industries (125 out of a total of 144) are now treated as free sectors which do not require prior approval if the investments are funded from investors' own resources.
- (c) The requirement that all investments in industries using more than 20% imported inputs must be approved by the Investment Board has been relaxed by increasing the threshold to 50%.
- (d) Currently when financial institutions give term loans for industrial projects, the projects are considered "sanctioned." However, there are size limits on the financial institutions' sanctioning authority. These size limits have been increased significantly up to US\$1 million for commercial banks and up to US\$2 million for the development finance institutions (DFIs), as a part of the revised industrial policy and will continue to be increased over time. Approximately 90% of investments

^{1/} Investment targets were generally unrealistic and were not binding on private investors. Their primary drawback, however, was that financial institutions tended to follow the schedule closely and used it as a substitute for careful project appraisal in making lending decisions.

^{2/} These are arms and ammunition, atomic energy, telecommunications, air transportation, generation and distribution of energy, mechanized forestry and currency printing.

should now come under these limits. This gradual approach has been adopted primarily because of financial institutions' weaknesses in appraising industrial term loans.

Public Sector Enterprises

3.33 In its efforts to raise the efficiency of the public sector enterprises (PSEs), the Government has sought to enhance enterprise autonomy while establishing clearer accountability and performance criteria.^{1/} Although significant progress has been made in developing a framework for better performance evaluation by developing a technical unit, an accounting system and in FY87 by promulgating a Public Corporations (Management Coordination) Ordinance, the speed and magnitude of implementation has not been sufficient to arrest the deterioration in PSE financial performance. Profits as a percentage of sales of public industrial corporations has consistently declined from 4.9% in FY83 to 1.8% in FY84, -4.2% in FY85 and to -9.8% in FY86. This is clearly a serious and wasteful problem requiring greater involvement of all ministries and enterprises in the monitoring exercise and a much faster rate of implementation of the new public sector administration and evaluation system. Unless clearer performance criteria are established and the enterprises are given greater operational autonomy to meet these criteria, the PSEs will continue to be a burden on the economy instead of contributing to its growth.

The Need for Coordinated Policy - The Experience of FY86 and FY87

3.34 The industrial sector has not been able to achieve sustained high growth over recent years (see Chapter 1) and the poor performance of last year suggests that robust growth still cannot be taken for granted. The past pattern of high growth for a few years to be followed by years of stagnation appears to be continuing. One reason for such variance in growth rates is the lack of diversification in the industrial sector; an exogenous shock to a large subsector can drag down the entire industrial growth rate. Over time it is obviously desirable that the industrial sector becomes more diversified; towards this end the Government is seeking to put in place an incentive structure to encourage new and potential industries. But for the coming years, a few large subsectors--textiles and garments, jute, steel and engineering--will continue to account for the bulk of industrial output and employment. Policies clearly must be also designed to make the best of this heavy dependence. First, these key industries must be made less vulnerable to disturbances; this requires that any impediments to their flexibility and speed of adjustment must be removed. Second, backward and forward linkages must, to the extent that they are economically viable, be encouraged; this requires that policy reforms in one area--for example, licensing policy--must be complemented by reforms in other areas--for example, tariff policy. In

^{1/} This effort has been supported since 1984 by a UNDP-financed project.

this regard, while progress in general has been impressive since 1982, and especially over the last eighteen months, there has at times been a lack of complementarity in reforms, sometimes leading to bottlenecks, and a tendency to implement policy adjustments only after a crisis has occurred rather than in anticipation of the problem.

3.35 The experience of the industrial sector over the last year illustrates the vulnerability of the sector and the need for continued and coordinated reform, where the growth depends not on one policy but the interaction of policies in many areas. The stagnation of industrial activity in FY86 was caused by problems encountered in jute, textiles and engineering sectors,^{1/} as well as slower growth in non-traditional exports such as garments.

3.36 The textile sector in Bangladesh is quite inefficient and has problems in supplying high quality fabrics. Historically, high protection provided to this sector through import bans and very high tariffs has not given domestic producers an incentive to improve their efficiency. Opportunities to supply the growing domestic demand have therefore not been taken. Supply from domestic sources has grown much slower than any estimate of demand growth implying that smuggled fabric and yarn have been taking a larger share of the domestic market. Furthermore, the large and growing demand for higher quality fabrics for garment exports has for the most part not been supplied by domestic factories. A faster and more efficient growth of the textile sector will depend on (a) continued reduction of tariffs and the elimination of quantitative restrictions in order to discourage smuggling and give incentives to local producers to improve their efficiency; (b) streamlining export administration so that local textile producers who supply fabrics to garment exporters can take full advantage of export incentives; and (c) increasing the efficiency of public sector textile mills which still constitute a large segment of the textile sector. If these reforms can be implemented systematically and without delays, the textile sector can grow very rapidly over the next five years. Delays in implementing these reforms will just continue the stagnation that has taken place in FY86.

3.37 Problems encountered by garment exports in FY86 also illustrate the uneven pattern of policy formulation and implementation. The special bonded warehouse system which has been introduced for garments and specialized textiles enabled dramatic expansion of garment exports in FY84-85. However, as in many developing countries, the inability to monitor exports of garments effectively and lack of preparation for an efficient quota allocation system when it was obvious that quotas would be imposed, led to disruption in the garment industry and exports only increased by 14% in FY86. Improvements in the internal quota allocation system were made in FY87, but the monitoring of

^{1/} Jute is discussed separately in the next section.

garment exports is still not organized efficiently; this is likely to create problems as new products are placed under quotas.

3.38 The second large subsector that collapsed in FY86 is the engineering sector which has been hampered both by demand and supply problems. This sector primarily supplies agricultural implements through public sector procurement agencies funded by foreign donors. Given large order sizes and the discontinuous nature of public procurement, firms in this sector face highly uncertain demand. Failure to obtain a contract under these projects can idle a firm for several years. Large stocks of unsold agricultural equipment in BADC and very low sales over the last eighteen months have led to a large reduction in output in this sector. On the supply side, most of the products face negative protection since tariffs on their inputs are much higher than the tariffs on their outputs, reducing their competitiveness and market size. Removal of these tariff anomalies is essential if domestic producers are to become competitive. The replacement of large-scale public procurement by private procurement in smaller batches may also help.

III. OPTIONS FOR THE JUTE SECTOR

3.39 The future of the jute sector will significantly influence the rate of economic growth that Bangladesh can afford in the coming decade. While remaining by far the most important export earner--still accounting for half of all exports--it has paradoxically become a large financial drain on the economy; losses of jute mills in FY86, for example, totaled Tk 2.5 billion, equivalent to 0.5% of GDP.

3.40 There are, essentially, two sets of issues that must be resolved if the sector is to contribute to Bangladesh's development rather than hinder it. First, how can the structural instability in world and domestic markets be ameliorated? How can the level of uncertainty be reduced and the cycle of boom and bust be dampened? Second, how can the longer-term competitiveness of the sector be improved so that Bangladesh can capitalize on its low costs and good quality jute in world markets? How can Bangladesh position itself to be able to compete with synthetics and gain market share from competitor countries in the 1990s?

3.41 The Government is seeking to address these questions, but there are no easy solutions. Progress will require a major reorientation of institutions to improve their effectiveness, significant social costs and sizable financial investment over an extended period of time. But the benefits are also likely to be significant: a jute export sector that is more competitive and viable, providing some room for growth in export earnings rather than a continuing long-term decline, and reduced macroeconomic costs of instability in the sector. This section discusses the short-term developments and prospects in the jute sector before turning to the required longer-term

policy improvements. It draws upon the findings of a recently completed IDA studies of the jute sector in Bangladesh and the world jute economy.^{1/}

The Origins of the Present Difficulties

3.42 The jute market in Bangladesh and in the world was severely disrupted by falling raw jute supplies in FY85, and events since then have followed cyclical patterns observed in the past, with large short-term and longer-term costs to the viability of the sector. Table 3.3 summarizes recent developments in the sector and presents the expected short-term outlook.

3.43 Serious floods in FY85 caused extensive flood damage and coincided with very low stocks, which had been run down since the previous production boom in FY80. A severe shortage of raw jute supplies occurred, and prices doubled (at export level, to \$600 per ton). Since the price of jute goods did not rise as much as raw jute, domestic jute mills should have purchased less. However, the Government, in an effort to maintain production and employment levels, provided liberal credit facilities to the mills and imposed a temporary ban on raw jute exports. This exacerbated the problem; mills were unable to fully utilize the raw jute they procured and were unable to cover costs. In addition, jute goods, which had risen in price by 30%, became uncompetitive vis-a-vis synthetics, causing export sales to decline by 14%, resulting in a large accumulation of finished jute goods stocks.

3.44 High farmgate prices in FY85 resulted in a 50% increase in raw jute production in FY86. Jute prices immediately fell by one-half at the export level, and by nearly one-third at farmgate level. The Government became a major buyer of raw jute, and was relatively successful in preventing a more precipitous collapse in raw jute prices to farmers; buffer-stock operations were extended through the Bangladesh Jute Corporation (BJC), which acquired some 30% of the jute crop, and the jute mills were also persuaded to acquire additional stocks. The performance of the jute mill sector further deteriorated in FY86 as (a) export sales remained low, despite a 35% decline in export prices, as foreign purchasers who had switched to synthetics in early FY86 failed to return to jute, and as prices of synthetics declined with the fall in world oil prices; and (b) financial losses continued as lower sales prices increased wage costs and interest charges on FY85 loans, and reduced overall factor and labor productivity took their toll. The mills now operated at only about 50% of production capacity, and six or seven smaller private mills closed down.

^{1/} See Bangladesh - Prospects and Policy Issues in the Jute Sector, World Bank, draft June 1986; and Prospects for World Jute Markets, World Bank/FAO, December 1986.

Table 3.3: KEY DEVELOPMENTS IN THE JUTE SECTOR, FY84-FY89

	Actual		Prelim.	Estim.	Proj.	% Change	
	FY84	FY85	FY86	FY87	FY88-89	FY85-87	FY84-87
EXPORTS							
<u>Export Prices (US\$/ton)</u>							
- Raw Jute	329	600	337	250	320	-58%	-24%
- Jute Goods	642	852	620	595	625	-30%	- 7%
<u>Export Prices (constant 1985 Dollars)</u>							
- Raw Jute	331	600	298	215	271	-64%	-35%
- Jute Goods	647	852	549	511	530	-40%	-21%
<u>Price of Synthetic Substitutes /a (1984=100)</u>							
- Current	100	96	82	89	95	- 7%	-11%
- Constant	100	94	72	76	81	-19%	-24%
<u>Export Volume ('000 ton)</u>							
- Raw Jute	352	259	407	414	360	+50%	+11%
- Jute Goods	538	461	442	510	530	+19%	- 2%
<u>Export Earnings (million US\$)</u>							
- Current Prices	461	548	411	398	446	-33%	-21%
- 1985 Constant Prices	464	548	364	384	378	-36%	-24%
PRODUCTION, INCOMES							
<u>Jute Production ('000 tons)</u>							
- Raw Jute	965	946	1,550	900	850	- 6%	- 8%
- Jute Goods	586	568	490	525	565	- 8%	-10%
<u>Year End Stocks ('000 tons)</u>							
- Raw Jute	176	180	765	580	200	+322%	+329%
- Jute Goods	121	190	198	156	120	-18%	+29%
- Raw Jute Held by BJC	20	25	349	290	116	..	..
<u>Growers' Prices (Tk/md)</u>							
- Jute/Rice Price Ratio	0.83	1.77	0.74	0.44	0.70	-75%	-47%
- Real Incomes from Jute (Tk billion)	5.6	11.8	6.3	2.3	4.1	-80%	-56%
(as % of Ag GDP)	(4.0)	(8.3)	(4.2)	(1.5)	(2.7)	..	..
<u>Net Profits/Losses of Jute Mill Sector (Tk billion)</u>							
- As % of GDP	0.1	-2.5	-2.5	-0.5	-0.9	..	..
	..	-0.6	-0.5	-0.1	-0.3	..	..

/a Polypropylene cloth.

Sources: Jute Division, Bangladesh Bank, Ministry of Finance, mission estimates.

3.45 A relatively normal jute crop was produced in FY87. But in view of the continued large stocks of jute and jute goods, prices of raw jute fell by a further 25% to reach the lowest level in the past decade. The Government was unsuccessful in preventing the decline in prices because BJC's capacity was overstretched; its stocks of raw jute at end FY86 were already at a level of 1.9 million bales, mostly of low quality jute, and bank borrowing had exceeded \$100 million. The fall in raw jute prices will benefit the mills, and their losses are expected to moderate to about Tk 500 million, while export sales are expected to pick up with a further reduction in sales prices; however, jute goods remain uncompetitive vis-a-vis synthetics in most markets.

The Medium-Term Outlook

3.46 The outlook for the jute sector is not bright. Table 3.4 presents the World Bank's best estimates of longer-term trends in jute and jute goods prices and the prices of synthetic substitutes and rice (which competes for land with jute). While recovering from their very low levels of FY87, jute prices over the next ten years are expected to decline from their average real levels of the 1980-85 period. This is partly due to a continued real decline in synthetics prices due to lower oil prices and technological change.^{1/}

3.47 The total world import demand for jute is not expected to rise. However, with appropriate policies Bangladesh could raise the volume of its exports--both raw jute and jute goods--by about 1.5% per year over the next decade. Moving into markets currently supplied by other jute producers will be possible for two reasons. First, Bangladesh is potentially very competitive; jute production is highly labor intensive and wage rates are lower than elsewhere, and Bangladesh possesses the best quality of jute land. Second, as in the past decade, other major jute producing and exporting countries, such as India, China, and Thailand, are expected to have difficulties in maintaining their exports, given large and growing domestic requirements. The share of Bangladesh in world exports could rise as a result of these factors to about 55% for jute goods (compared to 45% in 1985, and 39% in 1976), and 84% for raw jute (compared to 77% in 1985, and 81% in 1976).

^{1/} A rough estimate of the relationship between polypropylene (PP) product prices and oil prices is that a 10% change in oil prices will cause a 3% change in PP product prices, with all other factors held unchanged. For more detail on the outlook for world demand and supply in jute and petrochemicals, see World Bank: Prospects for Major Commodities, October 1986.

Table 3.4: LONG-TERM JUTE PRICE AND SUPPLY ASSUMPTIONS AND PROJECTIONS, 1976-1995

	Average	Average	Est.	Proj.	Percentage Change	
	1974-78	1983-87	1987	1995	Actual 1976-85	Predicted 1985-95
						total period change
<u>Real Prices</u>						
(1985 dollar per ton)						
PP Cloth, USA (1985=100)	111	100	84	90	-10%	-10%
Jute Goods, fob, Bang.	654	623	511	562	- 5%	-10%
Raw Jute, fob, Bang.	476	347	215	300	-27%	-14%
Rice, fob, Bangkok	531	223	189	214	-58%	- 4%
Jute/Rice Price Ratio,	0.70	0.90	0.44	0.84	+29%	- 7%
Bangladesh						
Petroleum Prices	17.2	21.6	13.7	17.4	+26%	-19%
(\$ per barrel)						
<u>Jute Exports and Supply</u>						
('000 tons)						
World Import						
Demand Potential	1718	1603	..	1590	- 7%	- 1%
- Raw Jute	557	475	..	430	-15%	-10%
- Jute Goods	1161	1128	..	1160	- 3%	+ 3%
Export Supply from Bangladesh						
-----per annum----						
<u>High Case</u>						
- Raw Jute	389	365	389	360	-0.7	-0.2
- Jute Goods	453	499	525	640	1.1	2.5
- Total	842	864	914	1000	0.3	1.5
- Export Earnings (US\$ m)	<u>481</u>	<u>438</u>	<u>352</u>	<u>467</u>	<u>-1.0</u>	<u>0.6</u>
<u>Base Case</u>						
- Raw Jute				250	..	-3.7
- Jute Goods				535	..	0.7
- Total				785	..	-1.0
- Export Earnings (US\$ m)	..	..	..	<u>375</u>	..	<u>-1.5</u>

Sources: Mission estimates and Economic Analysis and Projections Department, World Bank.

3.48 However, there is no certainty that Bangladesh can meet the projected demand for exports, especially given the current situation in the jute sector. It is more likely that if current policies and situation persist long-term jute export supply from Bangladesh could fall by about 1% per annum. The absolute difference in annual real export earnings between the High and Base Cases would, by 1995, be about \$90 million.

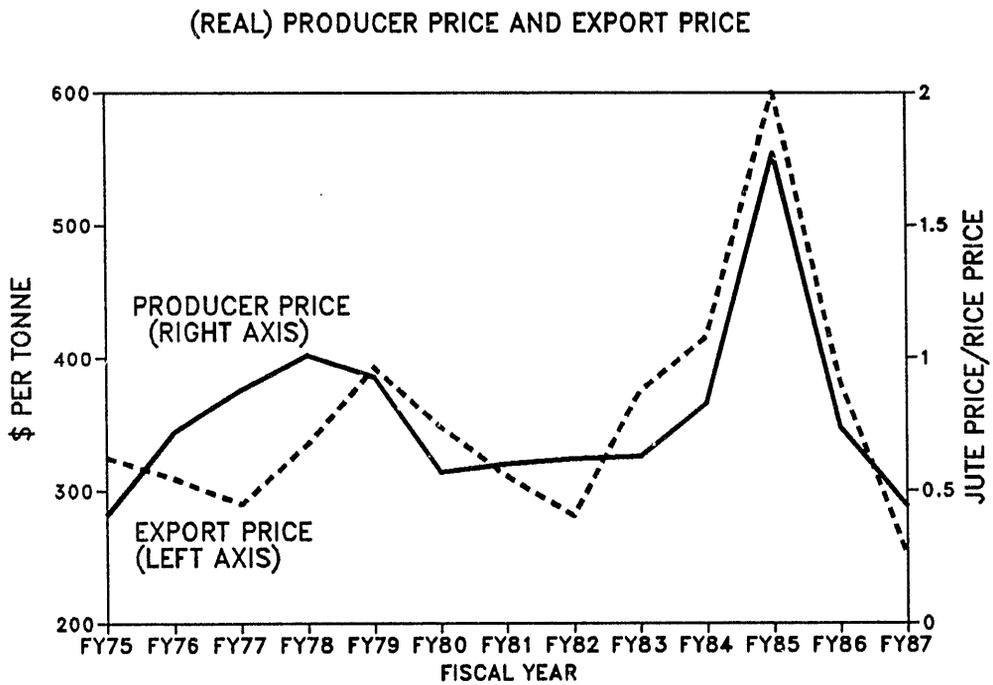
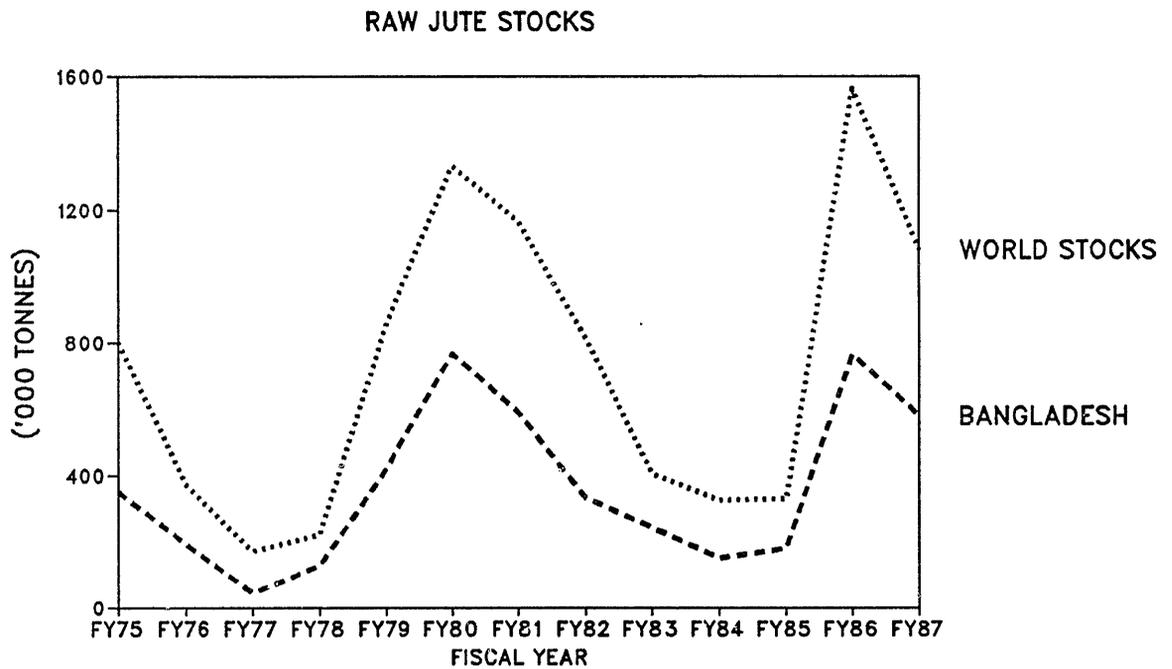
Policies for Jute Sector Growth

3.49 In order to realize the potential for longer-term growth in jute exports and employment, progress must be made in three areas: reducing instability in the sector, raising the quality and reliability of raw jute supplies, and improving the efficiency of jute manufacturing.

3.50 Instability in Jute Supplies and Prices. Of 30 major primary commodities traded internationally, only about 6 have a greater degree of price and supply instability than jute. Instability stems from large periodic fluctuations in world supply, which given relatively inelastic short-term world demand, results in even greater fluctuations in prices. The long-term effects are a major incentive for consumers to shift out of jute to synthetics permanently, reduced input use and supplies at given prices by risk averse farmers, and large macroeconomic costs to the Bangladesh economy.

3.51 In the Government's efforts to stabilize jute prices and supply, the first priority should be given to the collection, monitoring and dissemination of adequate information on jute market conditions. Absence of such information has been a major cause for inefficiency of the market, as reflected in a lagged response of farmers' production decisions only to previous years' prices, and the lagged response of market prices primarily to jute stocks in the previous year; this pattern is illustrated in Figure 3.1. If farmers in Bangladesh (and in other producing countries) had reacted to better information on expected lower prices in FY86, rather than on the high prices of FY85, the jute price cycle would have been much less severe; similarly, if traders had been more responsive to current year, FY87, expected stocks (580 thousand tons) rather than the previous year's, FY86, actual stocks (765 thousand tons) jute prices would not have collapsed to the extent they have in FY87. It would be possible to improve information on prices, production, and stocks and thus to reduce uncertainty and inefficiency in decision-making. The Jute Ministry has a research and strategy section, but only very slow progress has been made in its staffing and training.

FIG. 3.1 RAW JUTE STOCKS, EXPORT AND REAL PRODUCER PRICES



3.52 Direct intervention by the Government is also required to stabilize jute prices and supply, in view of the highly price responsive short-term supply (elasticity of 0.9) and inelastic short-term demand (elasticity of 0.3) within the sector. This might be accomplished by a combination of (a) variable export tax/subsidy policies designed to stabilize the export prices to an acceptable level of variation or "band" (e.g., +15%) around pre-determined "target" prices (determined by reference to longer-term price forecasts); and (b) direct public buffer-stock operations, again designed to stabilize producer prices to farmers within an acceptable band around pre-determined target price levels (derived by reference to long-term export target prices).^{1/} The efficiency of such intervention, however, will require major organizational improvements of BJC and the Jute Division, improved storage facilities, and sizable financial resources. Financial losses in the long term are likely for public agencies involved, and will require long-term financing, either through an average small export tax on jute exports, or some other fiscal measure. Accompanying these measures, there should be efforts directed to ensure a more efficient role for the private storage market, including jute farmer cooperatives, and adequate spread of prices to allow profitable private intra-year stockholding operations and to limit the degree of public intervention.

3.53 Improvements in Raw Jute Supply. The cultivation of high quality jute is currently hampered by unnecessary price uncertainty faced by farmers and by inadequate jute research and extension. Jute lands are currently being reduced as irrigation facilities expand. This is appropriate, but this land could profitably be replaced by shifting out of low yield traditional aus rice cultivation into jute in a number of areas. There has been some concern about the role of the Ministry of Agriculture in ensuring adequate support to raw jute cultivation; for example, the Intensive Jute Cultivation Scheme has been effectively discontinued, and the jute extension service has been merged with general extension. Jute seed supply arrangements also need greater support.

3.54 Raising Efficiency in Jute Manufacturing. Improved efficiency and profitability of the jute manufacturing sector are essential for longer-term growth in jute exports, but the constraints to such improved performance are deep rooted, both in the public and private sectors. Current production capacity (up to 1 million tons per annum) is far in excess of demand in the short-term (525,000 tons), as well as in the long term (700,000 tons) and a number of units (about 10 mills) are very inefficient. None of the mills are operating close to capacity levels, and average non-raw jute costs of produc-

^{1/} The Government has been maintaining buffer stocks, but problems such as uncertainty regarding the appropriate target price levels, and the low quality of jute procured require further study before they can be resolved; the FY87 Jute Policy of the Government endorses the idea of buffer stocks.

tion as a result are 20-30% higher than they need be. Despite the political and social difficulties, there appears to be no solution possible other than to close down inefficient mills. In the private sector, this process is inevitable over time, as large annual losses--if not financed by the injection of non-collectible loans from banks--cannot be indefinitely continued. The costs of such a process of slow attrition rather than a managed one is that in the interim, all mills, including potentially efficient ones, will suffer from reduced production and efficiency. The social costs of closing-down inefficient mills in either case are high, and need to be managed carefully; programs to compensate employees should be provided.^{1/} However, the social costs of continuing to run an inefficient loss-making mill system are also high; funds which could be used for poverty-oriented programs are currently needed to subsidize the jute mills. Employment in all mills is excessive as a result of additions to labor force during a long period of public ownership. Wage costs per unit of production are therefore high, although wage rates remain relatively low, which is neither conducive to improved labor productivity nor labor relations. Again, a managed process of attrition of excess labor force and rationalization of wage policies is urgently required. Only if such longer-term problems are addressed would further injection of financial resources into the mill sector in the form of much needed write-offs of past accumulated debt (or conversion of debts to equity) and investment in modernization make sense. Otherwise, financial assistance offered to the mills now will only grant temporary relief. The Government understandably is reluctant to undertake a serious rationalization program without further study. Continuous delays in taking these difficult actions, however, will be expensive in terms of public funds and jeopardize the sector's longer-term prospects.

IV. THE ROLE OF THE FINANCIAL SYSTEM

3.55 The formal financial system has played an important role in facilitating private sector growth in agriculture and industry in the 1980s. Indeed, enthusiasm for private sector expansion has sometimes been at the expense of efficiency and sound banking practices. This section first describes the origins of the present difficulties facing the banking system. It then reviews the Government's current efforts to restore financial discipline. Finally, it discusses some of the longer-term issues that must be addressed if the financial system is to play an appropriately supportive role in the development process in the 1990s.

^{1/} Such programs, financed by external donors, have been successfully developed in other countries to rationalize employment levels in sectors facing long-term adjustment difficulties.

The Origins of the Present Difficulties

3.56 The last decade has witnessed a dramatic shift in the pattern and growth of the formal credit system in Bangladesh. During the 1970s, the primary function of the credit system was to finance the public sector (50% of total advances) and trade (25%). Credit to the private sector in agriculture and industry was a residual task, accounting for only about one-fifth of advances. Term lending as a percentage of sectoral GDP was, for example, only 0.6% in agriculture and 1.5% in private industry.

3.57 The late 1970s and early 1980s saw an important and positive shift in the Government's strategy. As a component of its policy of accelerating agricultural growth, institutional credit to farmers and fishermen was dramatically expanded in terms of both short-term crop loans and term lending for minor capital investment.^{1/} And as part of the new emphasis on denationalization and private industrial growth, the two development finance institutions (DFIs) began to focus their lending on the emerging private manufacturing sector. Table 3.5 shows the dramatic shift in the structure and scale of bank lending since that time. As a percentage of sectoral GDP, credit outstanding to agriculture has risen from 2% in FY78 to 11% in FY87; for private manufacturing, the percentage has risen from 13% to 53%.

3.58 The successful aggregate picture outlined in Table 3.5 hides the problems that have been created as a result of this transformation. While the intentions of the Government in identifying these two priority sectors were commendable, the process by which credit was channeled to these sectors has in some ways defeated the objectives. Such a rapid expansion into new areas would only have been sustainable had the lending institutions had the capacity to appraise the viability of loans and been made accountable for the soundness of their investments. This was not the case. First, despite a good deal of technical assistance from donors, a sound project appraisal system to identify viable borrowers and projects has not yet been developed. Second, in many "priority" areas, lending institutions have not been given the autonomy to select their borrowers and projects, but have been instructed to whom to lend by the authorities. Third, the desire to promote higher investment and growth fostered an incentive system for banks based on the magnitude of disbursements rather than on recoveries. Finally, accounting and debt collection systems were inadequate to identify and remedy emerging problems of loan recovery.

^{1/} The specialized agricultural lending institution--the Bangladesh Krishi Bank (KKB)--took the lead in this expansion, but later the nationalized commercial banks (NCBs) participated heavily. Associated with this new emphasis on agricultural development, the number of rural bank branches increased from 1,592 in FY78 to 3,335 in FY85.

Table 3.5: STRUCTURE OF SCHEDULED BANK ADVANCES, FY78-FY86

	FY78	FY80	FY82	FY83	FY84	FY85	FY86
----- as percentage of total advances -----							
Private Agriculture	10.5	12.4	17.0	23.0	25.3	29.5	27.0
Private Manufacturing <u>/a</u>	11.4	10.9	16.6	15.7	19.0	18.5	18.9
Public Manufacturing <u>/a</u>	40.4	34.9	28.4	17.8	11.3	6.3	6.4
Total Manufacturing <u>/a</u>	51.8	45.8	45.0	33.5	30.3	24.8	25.3
----- as percentage of sectoral GDP -----							
Private Agriculture	2.0	3.2	5.8	8.0	9.6	12.0	11.3
Private Manufacturing	12.7	14.3	26.7	26.4	39.6	46.1	52.9
Public Manufacturing	45.0	45.7	45.4	29.9	23.5	15.6	18.0
Total Manufacturing	57.7	60.0	72.1	56.3	63.1	61.7	70.9

a/ Excluding BSRS and ICB, which are not scheduled banks.

Sources: Bangladesh Bank, and staff estimates.

Table 3.6: DISBURSEMENTS AND COLLECTIONS IN AGRICULTURE AND INDUSTRY
(Tk billion)

	FY78	FY80	FY82	FY83	FY84	FY85	FY86
<u>Agriculture</u>							
Disbursements	1.57	2.82	4.24	6.79	10.05	11.32	6.51
Long-Term	(0.31)	(0.65)	(1.19)	(1.97)	(2.91)	(3.40)	(2.37)
Short-Term	(1.26)	(2.17)	(3.05)	(4.82)	(7.14)	(7.92)	(4.14)
Collections	0.94	1.48	3.17	3.42	5.18	5.84	6.62
Collection Rate (%) <u>/a</u>		43.1	48.9	41.9	41.7	38.5	27.0
<u>Memo:</u>							
BB refinancing as a proportion of disbursements	44.3	59.7	41.8	69.9	62.4	69.5	n.a.
<u>Industry /b</u>							
Disbursements	-	-	2.04	2.18	2.13	1.65	0.91
DFIs	(0.22)	(0.84)	(0.98)	(1.00)	(0.79)	(0.49)	(0.21)
Collections	-	-	0.89	0.75	0.98	1.23	1.18
DFIs			(0.68)	(0.53)	(0.62)	(0.63)	(0.76)
DFI Collection Rate (%) <u>/a</u>				15.3	12.3	10.9	9.9
<u>Memo:</u>							
Disbursements as a proportion of private investment	-	-	106.5	68.5	54.9	30.5	19.3

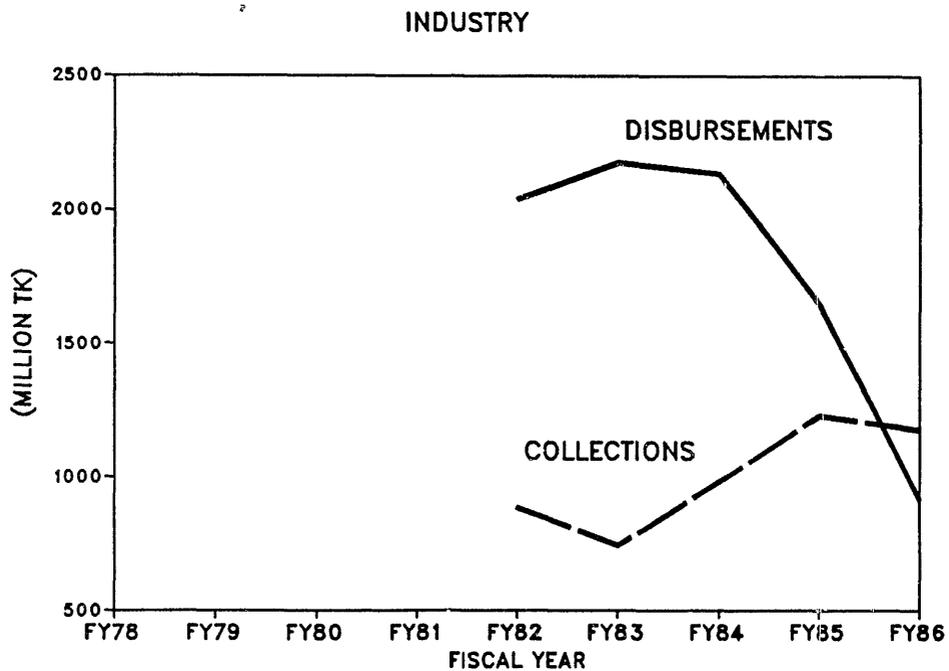
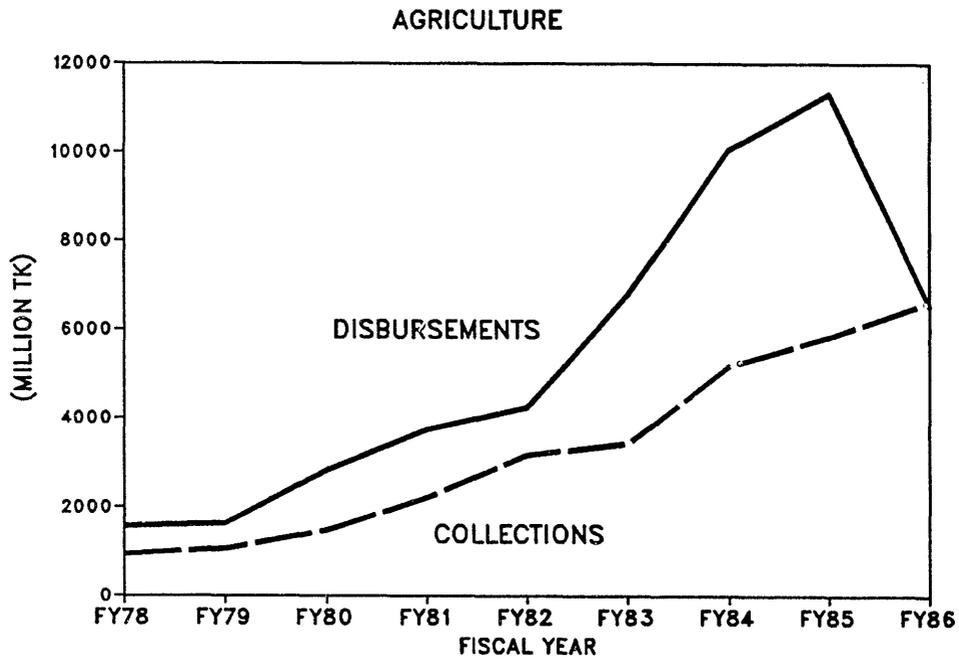
/a As a percent of arrears and current dues.

/b All industrial disbursements are term loans.

Source: Bangladesh Bank.

3.59 The expansion and consequent contraction of credit is shown in Table 3.6. Collection rates have never been high, but generous refinance facilities at the Central Bank made the problem less immediate. As the non-viable investments matured and the credit recovery rates fell, the proportion of credit that was refinanced rose, reaching 70% in agriculture. This continuous injection of new credit into the economy without corresponding collections led to serious inflationary pressures in 1984 and 1985. The Government appropriately responded by curbing monetary growth, which in the absence of improved collections necessitated an actual decline in lending to agriculture and industry. This is shown graphically in Figure 3.2.

FIG. 3.2 DISBURSEMENTS AND COLLECTIONS OF AGRICULTURAL AND INDUSTRIAL CREDIT (IN CURRENT PRICES)



Resolving the Present Crisis

3.60 Over recent months, the Government has taken important preliminary steps towards restoring discipline in financial markets, and credit recovery rates in both industry and agriculture have risen in FY87. DFI and NCB collections on industrial term lending in the first half of the year rose by 210% and 230%, respectively, compared with the first half of FY86. Agricultural credit recoveries have also risen by over 30% during the same period.

3.61 Industrial Credit. Based on a portfolio audit of industrial lending, the Government announced an Action Program in June 1985 to strengthen the DFIs and improve loan recovery. Its key elements include enhancing the managerial autonomy and legal powers of the DFIs, restructuring their finances, strengthening their internal organization and procedures, restructuring problem projects and applying a variety of pressures on defaulters. A second portfolio audit was undertaken in May 1986 to reassess the provisions for bad and doubtful debts; this was reviewed in July 1986, and the Action Program was revised and updated.^{1/}

3.62 An important element of the Government's recovery strategy has been to deny DFI defaulters access to privileges and facilities such as approval of new investment projects and sponsorships of companies. The most effective sanction has been an instruction to banks not to extend new term credits to defaulters identified by the DFIs--although jute mills and a few individual companies in other subsectors were exempted because of their importance and special problems. In August 1986 Bangladesh Bank instructed the banks to stop all credits to defaulters unless they obtain certificates of no objection. DFIs are empowered to take over defaulters' projects without recourse to the courts, but in practice government clearance has been required and long delays have traditionally occurred. However, in mid-1986 requests to take over twenty defaulters' projects were approved expeditiously, and action has already been taken against most of them. The DFIs have also initiated legal cases against numerous defaulters, but processing is often slow because of administrative bottlenecks in the legal system. The Ministry of Law, in consultation with the Ministry of Finance, is reviewing the status of all legal cases initiated by the DFIs and identifying measures to expedite their processing. In addition, a new Loan Recovery Act was submitted to the Cabinet during January 1987.

3.63 Agricultural Credit. A recovery program is also in place to put pressure on borrowers and rural branches to pay and collect overdue agricul-

^{1/} Government concessions under the Exchange Fluctuation Absorption Scheme (EFAS) will be phased out by June 1988. This had been established to provide relief to borrowers who had borne the exchange risk while the taka depreciated; its phasing out will simplify reform procedures.

ture loans. In particular, banks have been instructed to start certificate cases for all borrowers whose outstanding loans are more than Tk 10,000 and for others which do not avail themselves of interest write-offs starting in March 1987. Institutional and legal arrangements have been made to facilitate the disposal of certificate cases by increasing the number of Certificate Officers and enabling banks to appoint and pay for Certificate Clerks and Process Servers.

3.64 In addition, the Government has introduced legislation which would ban defaulters from holding elected office at the local level. Finally, disbursements of the second installment of upazila block grants have been tied to agricultural loan recoveries in each Upazila, in an attempt to involve local officials more actively in the loan collection process.

Longer-Term Reforms

3.65 Despite its rapid growth, the formal financial system still plays a relatively minor role in financing economic activity in Bangladesh. Term lending to industry, for example, has declined to only about 20% of investment in the industrial sector, and while a good deal of short-term borrowing is rolled over for investment purposes, the bulk of investment is financed through other channels. This will inevitably change in the coming years as the economy slowly begins to modernize. The key issue is whether the financial system will evolve in such a way as to facilitate efficient growth or whether it will hinder it.

3.66 Bangladesh's financial and monetary control systems are characterized by a heavy reliance on credit ceilings for monetary control, an emphasis on directed lending towards priority sectors and activities--financed by generous rediscount facilities at the Central Bank--and relatively loose accountability on the part of banks and specialized lending agencies. This is a fairly common structure in developing countries. It was designed with the best of motives--to encourage banks to promote growth in rural areas and in the fledgling private manufacturing sector, instead of the safer trade and public sectors. But experience in many countries suggests that this kind of structure often leads to a breakdown in credit discipline--as demonstrated by a number of Latin American countries--and usually leads to a high cost, low efficiency intermediation process. For this reason, many countries are seeking to increase the autonomy and accountability of banks, while increasing the supervisory capacity of the Central Bank and relying increasingly on more modern "fractional reserve" and open-market operation methods (rather than directed credit ceilings) to control money supply. Some countries have sought to reform their financial systems all at once. Indonesia was very successful in this regard in 1985; the beneficial effects are already being felt. But many governments opt for a more gradual reform, as the capacities of the lending institutions and the Central Bank are slowly strengthened.

3.67 Bangladesh is now in a good position to begin to move in this direction. Recent reforms have laid the groundwork, and the Banking

Commission Report (issued June 1986) provides an important framework for more fundamental change.^{1/} In broad terms, there are four components to such a reform package: (a) providing an incentive system to the lending institutions; (b) institutional reforms to strengthen the lending institutions and the Central Bank; (c) making subsidies explicit; and (d) changing the methods of monetary management.

3.68 Providing Incentives. First, the lending institutions must be given an incentive to lend efficiently and to mobilize deposits. Currently, the book profitability of banks and the bonuses provided to staff are determined solely on the basis of accrued interest; given that almost no systematic provisions are made for bad debts, this is equivalent to rewarding disbursement levels. A much tougher performance based policy is required. Similarly, the current interest rate structure encourages rediscounting loans rather than raising domestic resources. Greater flexibility in setting interest rates is required to allow sufficient spreads to encourage more aggressive deposit mobilization.

3.69 Building Institutions. The following complementary actions are recommended. First, appropriate management information systems are required in the NCBs and the DFIs to allow effective provisions policies and to monitor branch performance. Second, responsibility for classifying loans should be transferred to the lending institutions; Bangladesh Bank should audit and adjust classifications rather than initiate them. Third, NCBs must be recapitalized and given increased autonomy; longer appointments of Managing Directors are also required. Fourth, the partial privatization of the NCBs envisaged by the Government ^{2/} should not be seen as a source of budgetary revenue but as a means of strengthening the financial base and efficiency of the banks. Fifth, the analytical, monitoring and supervision capacity of Bangladesh Bank needs to be built up; this will require changes in recruitment and remuneration of staff and intensive training. Finally, longer-term programs to improve the quality and motivation of staff and the internal organization of banks and their branches; a start is being made for the DFIs under a UNDP-funded project.

3.70 Clarifying Subsidies. In some instances--where externalities or equity concerns warrant--interest subsidies are appropriate. However, the range of interest rates could be reduced by merging programs. Exclusive

^{1/} In addition, an IDA financial sector team visited Dhaka in November 1986 with the purpose of assisting the Government in formulating both short-term remedial efforts to restore financial discipline and longer-term reform efforts. A preliminary draft report was discussed with the Government in mid-1987. This section draws upon their preliminary findings.

^{2/} A sale of 49% of the stock of Rupali Bank is being considered.

reliance on low interest rediscount facilities to finance subsidies not only tends to hide their magnitude, but also discourage deposit mobilization and makes priority programs subservient to monetary policy. Other forms of direct subsidies to the banks, preferably through the budget, could be considered and should be made transparent in the banks' accounting procedures.

3.71 Controlling Monetary Aggregates. Associated with the transfer of autonomy and accountability for lending decisions to the banks must be a reduced dependence on statutory credit ceilings. While banks are required to maintain cash and liquidity ratios, the Central Bank has not generally used these for monetary control. Nor have the authorities employed open-market operations for this purpose; an exception occurred in 1984, when a Treasury Bill issue was used to mop up excess liquidity. While banks now hold T-bills (particularly to meet their liquidity requirements), these bills are "on tap" and can be resold at any time at par to the Central Bank; there is therefore no need for a secondary market. Two alternatives might be considered by the authorities in this regard. First, a secondary market in T-bills could be encouraged. Alternatively, the Central Bank could begin to issue its own securities which could then be used for open market operations; this second alternative has been used with success by a number of developing countries.

Chapter 4: MANAGING PUBLIC EXPENDITURE

4.01 Higher and more effective public expenditure will be needed to achieve the Government's growth and equity goals (see Chapter 2). This requires not only raising more public revenues--the theme of Chapter 5--but also improving the efficiency of decision-making and implementing procedures and developing a better trained and motivated public workforce.

4.02 The Government of Bangladesh has been attempting to adapt and strengthen its institutional arrangements to meet the needs of a growing and modernizing economy. This is inevitably a long-term process, particularly since the administrative system which Bangladesh inherited was designed primarily to maintain law and order, collect taxes and perform other regulatory functions rather than to promote development. However, progress has been made and further measures are planned. This chapter documents some of this progress and suggests directions--many of which are under active consideration by the Government--for the coming years. Parts I through IV of the chapter deal with the four broad activities in public expenditure management: development strategy formulation, program and project planning, budgeting, and project implementation are discussed in turn. Finally, Part V takes a broader perspective assessing some of the factors which affect quality and motivation of the public employees who plan and implement public expenditures.

I. DEVELOPMENT STRATEGY - THE ROLE OF THE PLANNING COMMISSION

4.03 The Planning Commission is responsible for formulating the Government's development strategy (through the multi-year development plans) and for translating this into a public investment program (through the Annual Development Program, ADP). It also ensures that public programs and policies are in conformity with that strategy, through its project approval process and through its advisory position on the country's two highest economic decision-making bodies--the National Economic Council (NEC) and its executive committee (ECNEC).^{1/} Since its creation in January 1972, the Planning Commission's powers, functions, organizational structure and staff composition have changed significantly, as the country has moved towards less

^{1/} The NEC is chaired by the President and consists of all Ministers of the Council of Ministers with the Governor of Bangladesh Bank and the Deputy Chairman of the Planning Commission and its members in attendance. The NEC formally approves the Five Year Plans and the ADPs. ECNEC as an executive body makes most of the decisions on development projects, reviews of the plans and important development issues in general. It consists of the Ministers of Finance, Planning, Industries, Commerce, Works and the concerned minister(s) as members. The convenor is currently the Deputy Prime Minister in charge of the Ministry of Industries.

centralized planning. Its original pivotal position in development planning has been downgraded. The Commission Members' status has been reduced from Ministers of State to Ministerial Secretaries and the status of the other senior staff members has been correspondingly lowered. Direct control over foreign aid was transferred to the External Resources Division (ERD) of the Ministry of Finance; the monitoring of development projects was vested on the Implementation, Monitoring and Evaluation Division (IMED) and a Planning Division was created to look after the administrative and executive aspects of planning. Commensurate with this shift, staffing levels and patterns have also changed. Its approved staffing is smaller than at its inception, many of the foreign trained economists initially attracted to the Commission resigned during the 1970s, and since 1981 economists are hired not directly, but through the Public Service Commission.

4.04 With the growth in size and complexity of the public expenditure program and the continuous need to ensure that economic policies are consistent with the expenditure program, a strong and well staffed Planning Commission is much needed. In this regard, it is recommended that attention be given to two areas. First, over the coming years, the Planning Commission should devote less time and attention to detailed project approvals, ensuring instead that projects are in conformity with national priorities. This would enable more time to be given to the formulation and monitoring of development strategy and for broader policy issues. For example, a stronger leadership role could be taken in setting the agenda and providing analyses and recommendations for NEC and ECNEC.^{1/} Second, in view of this upgraded role, the Commission's capacity to undertake economic analysis would need strengthening. While a development planning body requires a variety of analytical perspectives in addition to economics, there is currently a need for more economists at the senior levels of the Planning Commission. One possible short-term approach for correcting this imbalance would be to fill a limited number of senior staff positions with fixed-term contract staff. In the meantime, rotations, promotions and enhanced training opportunities within the public service could be used to develop a stronger management and staff team in the Commission.

II. PROJECT INITIATION AND APPROVAL

4.05 Procedures for processing projects vary according to their size. At present, the required procedures are:

^{1/} Currently the Cabinet Division acts as secretariat for both committees.

<u>Category</u>	<u>Project Size</u>	<u>Recommending Body</u>	<u>Approving Authority</u>
A	Tk 2 crore or less	Departmental Project Evaluation Committee (DPEC)	Responsible Minister
B	Tk 2+ crore to Tk 5 crore	Planning Commission Project Evaluation Committee (PC/PEC)	Minister of Planning
C	Tk 5+ crore	Minister of Planning on recommendation of PC/PEC	Executive Committee of National Economic Council (ECNEC)

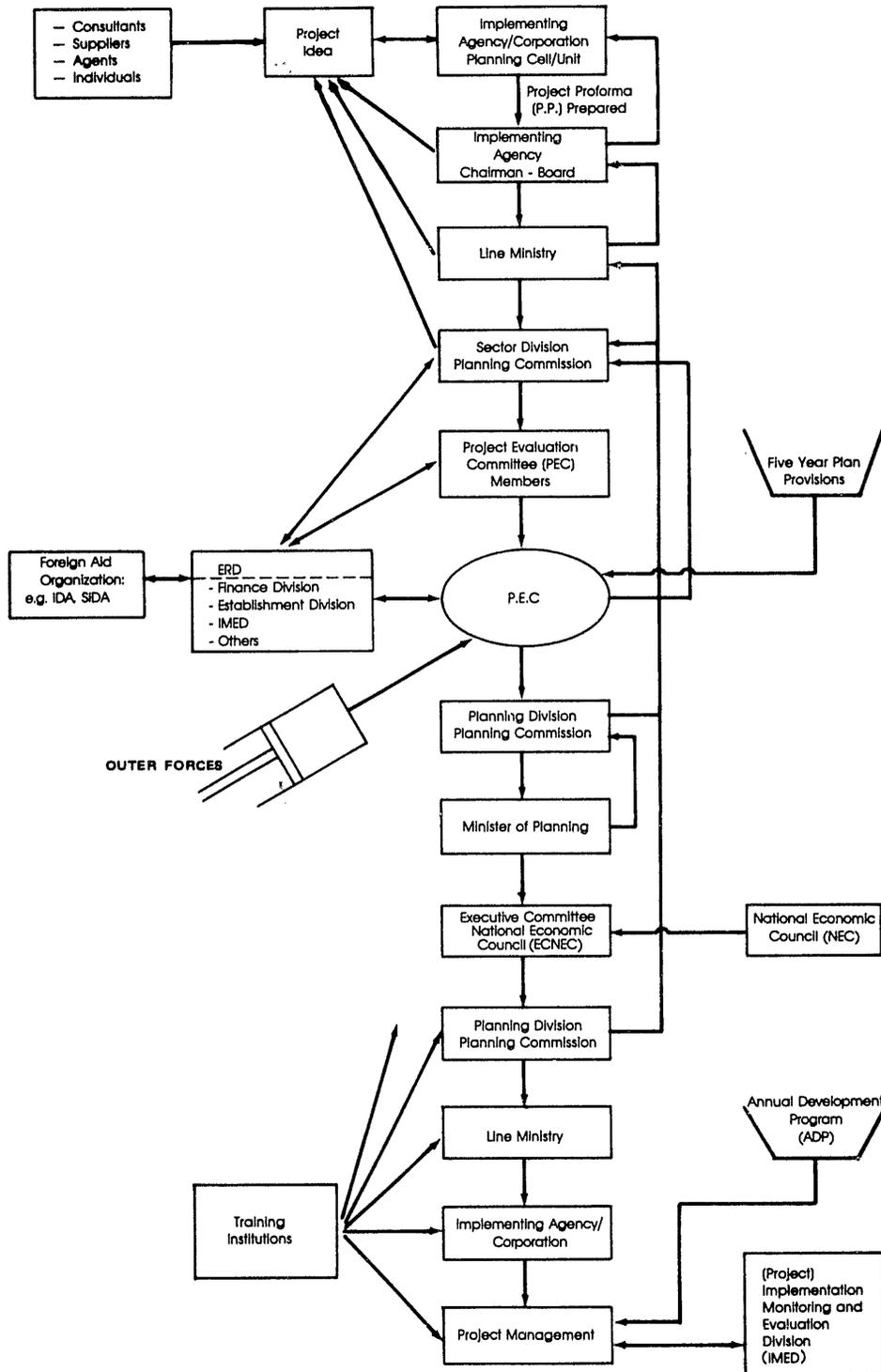
Most projects--accounting for about 70% of the expenditures in the ADP--are processed through the Category C route. The approval process for category C projects is shown in Figure 4.1.

4.06 The Project Evaluation Committees (PECs) are central to the planning and approval process. PECs are chaired by the Planning Commission Member responsible for the relevant sector and include the Chiefs of the Planning Commission's Programming Division and the relevant sectoral division; and the Secretaries or Additional Secretaries from the relevant Ministry, from IMED, and from the ERD, Finance and Establishment Divisions. The key document in the project approval process is the Project Proforma (PP), which includes sections entitled project digest, project description, investment, financing of the project, project implementation, operation of the project and benefit-cost analysis. The requirements for a PP are comprehensive, with many tables and annexes. PPs of 150-200 pages are common.

4.07 Implementing agencies and ministries generally have very little planning capacity; the work done by their planning cells or units is perhaps better defined as programming. Most major projects are donor-funded; for example, in the ADPs for FY86 and FY87, 66% and 71% of the total budgeted funds were allocated for foreign-assisted projects. Donor-funded projects are typically prepared by consultants or the donor's own staff.^{1/} Most donors make decisions to fund projects on the basis of a project document that provides a detailed description of the project, including staffing plans, equipment lists and financial and economical analyses. Typically, rather late in the donor's project approval cycle, the Government begins its own project planning and approval process by preparing a PP.

^{1/} The Canadian-supported Agriculture Sector Team in the Ministry of Agriculture has been a prominent exception.

Figure 4.1
PROJECT PROCESSING PROCEDURES FOR CATEGORY "C"
PROJECTS: PROCESS OF PROJECTS PROFORMA (PP)
(Projects with Costs Exceeding TK 50 Million)



Source: Skylark Chadha: Management of Industrial Projects In Bangladesh - SIDA, Stockholm 1984
Chart Amended by World Bank

4.08 Streamlining Project Approval. There are two major deficiencies with the current PP process which the Government is seeking to address. First, the process takes too long, with most of the delays due to bureaucratic impediments rather than substantive issues. Second, too much attention is paid to relatively minor budgetary and administrative details--personnel, vehicles, equipment and technical assistance--with Planning Commission staff frequently concentrating on such detailed questions, while important issues such as project design and technology choice, economic and financial viability, sectoral context, regional planning and relationships to other projects and programs are sometimes given lower priority.

4.09 Although systematic data on the time required to approve projects are not available, the Government's guidelines for processing Category B and C projects in 6-7 months are almost never adhered to, and processing periods of more than twice that long are normal. A recent review by the Planning Commission found that delays are common at each step in the process; draft PPs flow slowly from the implementing agency to its ministry, to ERD or the Finance Division, to the Planning Commission and then perhaps back to the implementing agency for the first of several cycles of "modifications," a process which may literally take years.^{1/} These delays reflect the staffing constraints in the Planning Commission and in the planning units/cells of the implementing agencies and ministries, and the excessive specificity of the PP, which details every staff position, vehicle and piece of equipment. In addition, the convening of PEC meetings is sometimes delayed because of their diverse, relatively senior composition.

4.10 Strengthening Ministry Planning Units. Some of the problems arise from inadequate review of projects and preparation of project documentation at the ministry level. Many ministries play a relatively passive role in reviewing the details of proposed projects, assuming this will be done by the Planning Commission and PEC. Recognizing this problem, the Government has begun to strengthen ministerial planning cells/units by transferring Planning Commission staff to them. This is a potentially significant initiative which should be continued on a selective basis in the ministries responsible for high-priority development sectors. According to this criterion, it will be particularly important to focus on the planning cells/units in the Ministries of Agriculture, Irrigation, Water Development and Flood Control, Local Government and Rural Development, Education, and Communication. This process will take time. In the meantime consideration might be given to hiring local consultants on a short-term basis to strengthen the planning cells/units and to assist in project identification, preparation and statistical work in the line ministries. This approach could be considered whenever and wherever

^{1/} Revised PPs must be approved if the scope of work or project components are changed during implementation or costs increase above the 10% annual escalation calculated in the PP. The processing of the revised PP is subject to the same constraints or delays as the original PPs.

needed until in the medium term systemwide more qualified staff within the civil service can be either hired, promoted or trained. Care would need to be taken that widespread employment of outside consultants at remuneration conditions more favorable than those of the public service would not further demoralize public service staff.

4.11 Broadening the Planning Commission's Review. The Commission's preoccupation with project details rather than broader issues reflects a wide range of factors. Many staff lack training in project analysis and practical experience in their sectors and are more comfortable focusing on specific details. Staff are not always encouraged to address broader issues during the review process, and PEC meetings are generally attended by too many officials to allow effective discussion of key issues. Typically, projects reviewed by the PC are examined individually rather than as part of investment programs. The relationships among similar projects or among projects in specific geographic areas are thus seldom examined. Similarly, it would be useful to review investment programs of public enterprises in the context of their corporate financial objectives, forecasts, and pricing policies. If periodic agreement could be reached on the enterprises' overall development programs, individual projects could be approved more routinely. This approach would also reinforce the system of performance target setting and monitoring for public enterprises (para. 3.33).

4.12 Reviewing Technical Assistance Projects. Technical assistance (TA) proposals are processed in a similar way as investment projects, with the Technical Assistance Project Proforma (TAPP) taking the place of the PP. When technical assistance is an integral part of an investment project, it is included in the project's PP, a useful feature of the system. However, essentially the same problems are experienced in processing TAPPs as PPs, and the procedures need to be similarly streamlined and reoriented. Clearly in some cases--where the purpose of TA is to identify new development or policy initiatives--the Planning Commission should be directly involved in the process. The National Water Plan Project, the Jamuna Bridge Study or the Trade and Industrial Policy (TIP) Study would be obvious examples of this type of TA. However a good deal of TA takes the form of detailed preparation, design and even supervision of projects which are already in principle approved. In view of the existence of a Technical Assistance Coordinating Cell (TACC) in ERD, it is not clear that the Planning Commission needs to be directly involved in approving this form of TA.

4.13 In contrast to investment projects, the justification for TA can seldom be quantified; there is no rate of return to indicate a project's relative priority. Thus, judgements must necessarily be qualitative, taking into account the importance of the problem under study or the project being prepared, the implementing agency's capacity to do the work with its own staff, and the availability of the required skills in local universities/colleges or consulting firms. Ministries with enhanced planning capacities could take more responsibility for deciding on the priority of tasks and on their own staff capacities, while the TACC could play a greater

role than at present in identifying existing work related to TA proposals and assessing local capacity in the disciplines needed.

4.14 Donors on their part should refrain from suggesting studies automatically whenever difficult problems are encountered and be more selective about proposing foreign rather than local consultants. While the need for foreign specialist consultants will continue in Bangladesh for the foreseeable future, the progress made by Bangladesh's domestic consulting industry in its capacity to conduct a range of activities with only modest foreign support (e.g. design, construction, supervision and benchmark and evaluation studies) needs to be more generally recognized.

4.15 The Government's preference to use grant funds for TA is reasonable and should in principle be maintained. But an inflexible application of this policy is causing substantial delays in the development program, as important investment projects are held up while grant sources are sought for essential, but financially small TA components. Therefore, the availability of grant funds for different kinds of TA needs to be assessed and acted upon earlier than at present. Flexibility is especially important when TA is an essential part of an investment project and would normally be capitalized in its economic costs (e.g. design and supervision for civil works). Proposals for TA should also be scrutinized on their merits, rather than be subject to arbitrary rules such as the ratio of assistance to investment costs. Automatic reduction of the man-months included in each proposal tends to be counter-productive because it encourages inflated estimates. Instead, more emphasis should be given to monitoring and ex-post evaluation of consultant performance, as guides to the needs for future studies and the performance evaluation of particular consultants.

III. BUDGETING PUBLIC EXPENDITURE

4.16 The main parameters for the annual budget exercise are established by the Resources Committee; chaired by the Finance Minister, this committee includes representatives from the Finance, External Resources and Internal Resources Divisions, the Planning Commission, and Bangladesh Bank. It estimates the amount of taka resources likely to be available from revenues and generated by commodity and food aid, decides how much of these are to be allocated to the Revenue Budget, transfers the remainder to the ADP and estimates the foreign exchange likely to be available for the ADP (which is later adjusted on the basis of donors' commitments during the annual Aid Group meeting).

The Revenue Budget

4.17 The Finance Division which is responsible for the Revenue Budget, formulates it primarily on an incremental basis. Three factors are given primary consideration: (i) actual expenditures during the last few years; (ii) estimates of the recurrent requirements of completed projects; and (iii) changes in public service remunerations. The latter account for almost

half of the Revenue Budget expenditures. Projects' recurrent costs during project implementation are funded through the ADP and account for about 20% of ADP expenditures. After project completion, recurrent financing requirements are transferred to the Revenue Budget. However, assessment of these requirements is very difficult since estimates of recurrent cost requirements are included in the PPs but are usually outdated or were already inadequately assessed at the time when the PP was prepared. Completion dates are usually delayed which also complicates recurrent cost estimates, and, sometimes, agencies on purpose delay transferring projects from the ADP to the Revenue Budget because the latter's funding is more stringent.^{1/} Because of these difficulties, the Revenue Budget includes only a block allocation for the recurrent costs of completed projects.

4.18 Operation and Maintenance (O&M). Inadequate resources for the operation and maintenance of infrastructure and for the operation of public services have resulted in a deterioration and low utilization of valuable capital assets. However, the need to provide for adequate resources for O&M has increasingly been recognized at all levels of Government. In the FY87 budget, for the first time, "operation and maintenance" line items were shown in the budget summaries of the major accounts, but the Government still limits its definition of O&M to materials and services; this excludes personnel expenses which are particularly important for projects and programs in education, health, family planning, agricultural extension, and other staff-intensive development activities. Consideration might be given to combining personnel expenditures with the present O&M definition consistently throughout the Revenue Budget and limiting the transferability of these funds to other budget categories. This would ensure that all funds allocated for O&M are used only for that purpose. Such a provision should be applied especially strictly to funds for utility bills to help eliminate public enterprise arrears to the public water, power and telecommunication companies.

4.19 In order to ensure adequate O&M provisions in future budgets, line ministries and public autonomous bodies will need to (i) assess the extent of backlog in O&M requirements; (ii) establish future O&M needs based on sector-specific plans and standards; (iii) formulate medium-term financing plans for O&M, including cost recovery; and (iv) establish procedures for monitoring O&M implementation. Three key sectors--BWDB flood control, drainage and irrigation projects, national highways, and education--have been selected by the Government as priority sectors. A UNDP-financed study is to assess O&M needs in these sectors; drawing on ongoing or completed work on O&M in these sectors, it is to focus primarily on establishing guidelines and frameworks for the adequate assessment of O&M requirements in these sectors.

^{1/} Conversely, agencies try to fund small investments unlikely to be approved in the ADP through the Revenue Budget. About 10% of the Revenue Budget expenditures are presently for capital outlays.

On the basis of this, new arrangements and procedures for O&M management will be introduced during FY88 in the relevant line ministries and agencies. As experience is gained in these sectors, similar arrangements are to be extended to other sectors and agencies.

The Annual Development Program (ADP)

4.20 The Formulation Process. The ADPs are overwhelmingly dominated by ongoing projects. In FY85, 90% of a total of 828 sectoral projects were carry-over projects. They accounted for 97% of the total funds allocated to sectoral projects. In the Revised FY86 ADP and in the FY87 ADP budget, allocations for carry-over projects were 89% and 95%, respectively. There has been a tendency to overestimate in the ADPs both the availability of resources as well as the capacity of line ministries and agencies to prepare and implement projects. As seen in Table 4.1 shortfalls have sometimes exceeded 20% of the original budget estimates, with an average of 10-15%. Overestimating development expenditures is not unusual. It occurs in most developing countries and the shortfalls in Bangladesh are (in percentage terms) not much higher than in many other countries. However, in conjunction with a growing pipeline of undisbursed project aid (para. 2.30)--much of which should already have appeared in the ADP--it raises serious questions about Bangladesh's absorptive capacity for project aid implementation.

Table 4.1: ADP BUDGETS AND ACTUALS, FY84-FY87
(Billions of Taka)

	FY84	FY85	FY86	FY87
Budget				
Total	34.8	39.0	38.3	47.6
Project Aid	15.2	18.5	20.0	23.3
Revised Budget				
Total	32.5	35.1	41.0	45.1
Project Aid	14.4	15.6	21.8	24.9
Actual				
Total	30.1	31.2	36.0 /a	41.7 /b
Project Aid	12.2	13.5	19.2 /a	21.5 /b
Actual as % of Budget				
Total	86	80	95	88
Project Aid	80	73	96	92
Actual as % of Revised Budget				
Total	93	89	88	92
Project Aid	85	86	88	86

/a Preliminary actuals.

/b Staff estimates.

Source: Budget documents and staff estimates.

4.21 The Planning Commission is primarily responsible for preparing the ADP. Decisions about the inclusion of projects in the ADP are made by a Programming Committee chaired by the Commission Member for Programming and including representatives from the Commission, ERD, Finance Division, and IMED. The Committee's most difficult responsibility is to review a very large number of proposed new projects and select the relatively few to be included in the ADP. For example, the Committee selected only about 110 out of some 300 proposed new projects for the FY87 ADP. Aided projects are deferred unless an agreement with the donor has been signed. Reference is also made in the selection process to plan priorities, sectoral targets and PPs. Bargaining among agencies remains a prominent feature of the process, which must also be completed under severe time constraints. The Programming Committee then recommends a draft ADP to the Planning Commission, which reviews it in a meeting among its members. The Commission subsequently presents its proposed draft ADP at an extended meeting chaired by the President, at which ministries can raise objections about their allocations.

Together with the Revenue Budget, the ADP is submitted to Parliament for deliberation and approval.

4.22 Improving the ADP Process. During the past five years, the Government has initiated a number of measures to improve budgetary and financial planning and management of the ADPs. Progress has been made with respect to the delegation of financial authority to line ministries and project agencies, the streamlining of budgetary procedures, and more decentralization of administrative activities. However, ADP planning and implementation have continued to suffer from the conflict between the desire to undertake an ambitious development program with many new projects and the constraints on financial resources and implementation capacity. IMED's annual reviews of project implementation have noted that insufficient taka funds are the primary cause of delays, followed by a list of implementation constraints and difficulties with project approvals and fund release procedures. Recognizing this, the Government has significantly reduced the number of projects funded in the ADP--from 1,726 in FY82 to 1,128 in FY83, 910 in FY84, 828 in FY85, and 761 in FY86. The FY87 ADP included only 638 projects. Even if some of this reduction reflects consolidation of projects, it still represents significant progress.

4.23 A protected Core Program was introduced in FY83 to improve discipline in the ADP process. Core projects were to receive priority in the ADP allocation process and during implementation. Criteria for selection included external donor support, advanced stage of implementation, good employment generation potential, beneficial linkages with other projects, short gestation period and national importance. While the designation of Core projects at first added a useful criterion for establishing priorities during the formulation of the ADP, it is now creating anomalous situations; sometimes different components of the same project are being designated Core and non-Core or high-priority new projects have been classified as non-Core because the Core category is full. The conversion of non-Core projects to Core status has also become more difficult with the responsibility for proposing the classification to ECNEC being diffused between the Planning Ministry and two divisions of the Planning Commission.^{1/} This would therefore be an appropriate time for a review of the Core/non-Core designation to determine whether its application can be modified to achieve its original purposes.

4.24 The ADP is prepared solely on an annual basis without projections of either the future capital costs of the projects included or their recurrent costs after completion. Although PPs include phased capital expenditure schedules as well as estimates of recurrent requirements after completion,

^{1/} In FY86, Core projects accounted for 34% of the projects and 57% of sectoral project funds, while in the FY87 ADP the shares fell to 30% and 53%, respectively.

this information is not used in the budgeting process. In a first attempt to introduce multi-year budgeting, the Planning Commission prepared "shadow ADPs" for FY86-88 in parallel with the FY86 ADP. In order to realize the benefits of this important initiative, however, the exercise should be updated on a rolling basis and its results incorporated in the normal development and budgetary planning cycles. Given the serious underfunding of recurrent costs, it would also be useful to estimate the future implications for the Revenue Budget of the projects included in the ADPs. Although initially the preparation of rolling three-year budgets could further strain scarce staff resources, the annual revision of the first two years and the addition of a third year can be expected to be decreasingly difficult and time-consuming once the system is fully operational.

4.25 The Possibilities for Budget Integration. Although funds are distributed between the Revenue Budget and ADP through one decision-making process, the two budgets are formulated separately. The allocation of resources might be improved if the two budget processes were merged. Although the distinction between recurrent and capital expenditures would be maintained, integrated budgets could be prepared jointly on a sectoral basis facilitating a comprehensive assessment of each sector's requirements. Trade-offs among, for example, investment in new facilities, rehabilitation or improvement of existing facilities, and O&M requirements could be addressed more directly than at present. Multi-year budgeting could probably also be incorporated more easily in an integrated budget format, since the relationships between capital and recurrent expenditures would become clearer. The creation of a new unit or modification of an existing division/unit to function essentially as a budget bureau could be part of a general reassessment of the functions of the Planning Commission since it would clearly transfer the location of the detailed budget scrutiny function elsewhere. The Planning Commission should, however, retain responsibility for indicative multi-year ADP budgeting and for ensuring that annual ADPs were compatible with the objectives of the nation's medium and long-term development plans.

IV. PROJECT IMPLEMENTATION

4.26 Approval of a PP or inclusion of a project in the ADP doesn't ensure timely, successful implementation. Indeed, delays are experienced in the implementation of almost every development project in Bangladesh. However, some improvements have been made over the last two years, as is indicated in the project aid disbursement ratios shown in Table 4.2. Improved customs and budgetary release procedures and, in the case of IDA funds, the introduction of the SAFE Accounts ^{1/} have contributed to improved project implementation.

^{1/} Special Accounts in Foreign Exchange (see para. 4.29).

However, serious problems remain and a good part of the gains in disbursements have been due to exchange rate fluctuations rather than real improvement in implementation.^{1/}

Table 4.2: PROJECT AID DISBURSEMENT PERFORMANCE

	FY82	FY83	FY84	FY85	FY86
	----- US\$ Million -----				
<u>Disbursements</u>					
Total Project Aid	590	470	553	591	710
IDA Project Aid	105	104	129	155	223
<u>Disbursement Rates /a</u>					
	----- Percentages -----				
Total Project Aid	22.2	19.5	15.2	16.2	17.4
IDA Project Aid	14.7	12.3	14.4	16.4	20.2
IDA Project Aid (adjusted for exchange rate changes) /c	14.9	12.4	14.7	17.1	18.1
					(14.1) /b

/a Annual disbursements as a percentage of opening pipeline.

/b Excluding flows of IDA funds into SAFE Account.

/c Disbursements and pipeline expressed in SDRs instead of dollars.

Source: Planning Commission and staff estimates.

4.27 Some of the reasons for slow project implementation have already been discussed; delays in the approval or revision of PPs and TA proposals and the under-budgeting of Taka funds for approved projects are probably the most serious. The remainder of this section discusses some of the other principal causes of implementation delays in Bangladesh.

^{1/} In FY86 the value of the dollar depreciated during the year, artificially inflating the ratio of disbursements (expressed at current exchange rates) to the beginning pipeline (valued at the exchange rate at the beginning of the year). Adjusting for these effects requires a detailed knowledge of the currency composition of disbursements and the pipeline; this was available for the IDA portion of project aid only. Calculations show that the FY86 disbursement ratio falls by about 2 percentage points when correcting for the exchange rate effect. If the currency composition of total project aid disbursements were the same as IDA's, this would imply that the disbursement ratio actually fell in FY86.

Fund Release Procedures

4.28 In FY85, the Government undertook to streamline funding release procedures. Under the new system, government departments directly responsible for project implementation are authorized to spend up to their full annual budgetary allocations without seeking the Finance Division's prior approval. In the case of autonomous government agencies and implementing agencies, budgetary allocations (both GOB counterpart taka and reimbursable project aid) are released quarterly by ministries for the first three quarters of the fiscal year; fourth quarter releases require prior approval from the Finance Division, which can adjust allocations if there is a shortfall in the overall budget. However, these gains have been partially offset by the current requirement that before an agency can receive more funds under reimbursable project aid (RPA), it must use and seek reimbursement for 75% of the funds released to it during the preceding year. This was to reduce the backlog in claiming reimbursements from donors for expenditures already incurred. But because of delays in the release of the funds for the last quarter, it is often impossible for implementing agencies to spend the funds and claim reimbursement in time to qualify for the release of funds from the following year's ADP. Recognizing this, the Finance Division relaxed this condition in FY86 and allowed unconditional release of first quarter RPA. Releases for subsequent quarters are still contingent on the use of at least 75% of previously released funds and claims for their reimbursement. An alternative would be to link each quarter's fund release to expenditures incurred or reimbursement applications submitted during a quarter earlier than the immediately preceding one (e.g., allocations for the first quarter of a year could be limited to expenditure and reimbursement claims for the third quarter of the preceding year). The strengthening of the Disbursement Monitoring Unit established recently in the Ministry of Finance should also help reduce the gaps between expenditures and reimbursements.

4.29 Fund release constraints for IDA-financed projects have after some start-up problems been facilitated considerably by the establishment of Special Accounts in Foreign Exchange (SAFE) against all IDA projects. Under the SAFE procedures, project implementation agencies, including both autonomous bodies and government departments can operate through commercial banks. As an initial deposit into SAFE, IDA provides an advance so that a project entity can meet its requirements for four months. Funds are being replenished on the basis of reimbursement requested by the executing agencies.

Physical Implementation

4.30 Land Acquisition. Lengthy procedures to acquire land and the need to wait until the PP is approved before starting the process continue to delay project start-up. A number of suggestions have been made to expedite the process. First, the Government could consider establishing a revolving fund to finance preconstruction activities. Second, given the complicated

laws and confusing procedural guidelines for land acquisition, a manual bringing together all relevant documentation and presenting clearly the current interpretations on land acquisition regulations could be issued, preferably in Bengali, for the benefit of land acquisition officers. Third, short-term in-service training of personnel involved in land acquisition would be beneficial. Fourth, in view of the complexity of land pricing, studies are required in both project and non-project areas to gain a better understanding of factors underlying private and public land transactions. Finally, and very important, the public and their local leaders need to be consulted earlier, at the time of the formulation of the project, on how it is likely to affect them and on what they can do to promote its effective implementation. This could help minimize potential political and social frictions which land acquisition issues often provoke.

4.31 Delays in the Appointment of Key Project Staff. These delays are widespread and have various causes. One suggestion would be for the Government to include authorization of the creation of positions and recruitment to fill them as part of the PEC's approval of a PP. The Ministry of Establishment could submit its recommendations on proposed staffing as part of its comments on the PP. At the same time, it would be preferable to emphasize the reduction of over-staffing in agencies such as BADC and some public industrial enterprises rather than to exercise such close control over new hiring.

4.32 Procurement. The principle of competitive bidding is well established in Bangladesh. However, delays are still common, especially for larger contracts, due to imprecise drafting of documents, layering of decision-making, lobbying by bidders and occasional misunderstanding of donor procurement requirements. The approval limits set for sectors and implementation agencies were recently raised but could be increased even further. In the case of externally financed projects, the Government's regulations could be revised to allow major procurement to be initiated (but not finalized) before credit signing.

4.33 Consultant Recruitment. Implementing agencies are only authorized to approve contracts up to Tk 10 million (about US\$330,000), and ministries up to Tk 50 million (about US\$1.6 million). Larger contracts must be approved by the Council Committee of the Cabinet. Since each layer adds delay to the already lengthy TAPP approval process as well as provides for lobbying opportunities for short-listed consultants, Government could consider increasing the limits for approvals by implementing agencies and ministries and take measures to educate agencies about the general procedures for recruiting consultants as well as specific donors' requirements.

4.34 Project Management Constraints. Many of the factors which constrain implementation are at least theoretically under project managers' control; these include work assignments, staff motivation and evaluation, the establishment of useful monitoring and reporting systems, effective use of consultants and supervision of contractors, and maintenance of appropriate

relations with project beneficiaries and other agencies. However, many project managers are not effective in all of these areas, and ad hoc solutions are often adopted to deal with the resulting problems; these include establishing separate project units, reorganizing departments, hiring consultants to design MIS systems and establishing coordinating committees. Such solutions are usually project specific and may have negative effects on the implementing agency as a whole. It is therefore preferable to deal with such issues on an agency-wide basis and to design project management arrangements and, if necessary, technical assistance components which contribute to the agency's overall effectiveness. This approach would reinforce the recommendation made earlier that projects should be reviewed in the context of the agencies' overall development programs rather than in isolation.

V. THE QUALITY AND MOTIVATION OF PUBLIC EMPLOYEES

4.35 Reforms of planning and implementation procedures of the type discussed above will only be as effective as the people who implement them. Above all, the efficiency of the public expenditure program depends on the quality, motivation and sense of common purpose of public employees. This part first briefly describes the scale and organization of public employment in Bangladesh and then discusses some of the issues which the Government will have to address in its efforts to enhance the quality and motivation of public employees, especially the Class I officers at the apex of the system.

The Size and Composition of Public Employment

4.36 More than a million people now work for the Government of Bangladesh up from about 650,000 at the time of Independence. Class I officers, accounting for 6% of total employees, are the managerial officials, Class II officers, accounting for another 3%, are primarily technical staff who have not completed a university degree. Class III employees, about 55% of the total, are secretarial and clerical personnel; and the remaining 36%, Class IV personnel are essentially non-skilled workers.^{1/}

^{1/} The term "Civil Service" is used to refer solely to the formal structure of the Bangladesh Civil Service (BCS) which includes only encadred Class I officers; since these account for less than half of all Class I officers, the BCS accounts for only 3% of government employees. The BCS was formed in 1980 and consists of 32 administrative cadres and sub-cadres which are organized along functional lines.

Table 4.3: GOVERNMENT SERVICE AS OF MAY 31, 1985

Category of Class	Ministries/Divisions (Secretariat)			Department/Subordinate Office			Autonomous/Semi- Autonomous Bodies			Total		
	Posted Strength		% of Sanctioned	Posted Strength		% of Sanctioned	Posted Strength		% of Sanctioned	Posted Strength		% of Sanctioned
	Number	%		Number	%		Number	%		Number	%	
Class I	1,562	21	88	26,097	4	74	38,668	8	84	75,825	6	79
Class II	35	1	73	9,758	2	79	25,778	6	86	38,199	3	84
Class III	3,575	49	94	481,622	75	91	125,174	27	87	660,363	55	90
Class IV	2,120	29	96	125,099	19	90	278,921	59	93	419,743	35	92
Total	<u>7,292</u>	<u>100</u>	<u>93</u>	<u>642,576</u>	<u>100</u>	<u>90</u>	<u>468,541</u>	<u>100</u>	<u>90</u>	<u>1,194,130</u>	<u>100</u>	<u>90</u>

Source: Ministry of Establishment.

4.37 The Bangladesh Government's terms and conditions of employment vary considerably. For the vast majority of the one million civic employees, the Government is the best and perhaps the only employer available to them because of the limited opportunities in the private sector and the benefits which public sector employment provides in terms of pay and job security. The key group of government officers who serve in management positions are the Class I officers. Among them, there are cadred as well as non-cadred officers. For Class I officers with university degrees, however, there are competing job opportunities outside government service in the private sector and abroad, and even within government service, in the military. Among Class I officers, those who are employed in autonomous bodies--about 50% of the total--are generally rewarded better than those employed in the Civil Service. Although the Central Government has the authority to set national standards, recruitment, training and promotion of non-cadred officers are basically the responsibility of the autonomous bodies which are therefore sometimes able to attract better qualified staff.

4.38 In 1985, the Government raised salary scales dramatically; senior officers' salaries were doubled and lower level salaries were more than doubled. However, these increases only corrected the earlier erosion of real salaries. While it is hoped that real wages will at least be maintained by providing annual cost of living adjustments, it is unlikely that substantial across-the-board real increases will be possible in the near future. It is, therefore, especially important that non-financial instruments of personnel management--recruitment and promotion policy, opportunities for professional growth and training--be utilized effectively for raising staff quality and motivation.

Raising the Efficiency and Motivation of Class I Officers

4.39 Inadequate compensation compared to the private sector, and an apparent decline in the prestige of the BCS seems to be leading to a decline in the quality of recruitment and an increase in resignations. The Government is concerned about it and has indicated its intention of reforming its administrative structure.^{1/} Emphasis would be given to: (a) developing an administrative system with clear responsibility and accountability; (b) removing the colonial structure from administration and make it compatible with the requirements of development; (c) making quality of performance the key criterion for promotion; and (d) relieving the secretariats of executive responsibilities which belong in other central or local government departments, or in public enterprises.

^{1/} See for example President Ershad's October 1986 public speech on public administration (THE NEW NATION, October 31, 1986). The main points of that speech were reaffirmed by the President in another public statement on November 8, 1986.

4.40 Technical vs. Administrative Cadres. Under the present organization the secretariats in each line ministry are dominant over the attached departments. There has been a tendency, therefore, for the BCS administrative cadres to have superior positions in the civil service hierarchy compared to technical officers. The unification of the services into the BCS was the result of pressures to abolish the elite administrative system, equalize opportunities for advancement and give recognition to the technical services. But the problems remain. The technical services still complain of the lack of participation in decision-making and relations between the administrative and technical cadres have been further aggravated by the establishment of the upazila system, which has created new opportunities for promotion in the administrative cadres and given the administration cadre new authority over the technical cadres in the Upazilas. Tensions among the cadres have contributed to an environment which hinders cooperation and coordination within and among ministries, and clearly affects the efficiency of decision-making.

4.41 The problem of technical vs. administrative cadres is not unique to Bangladesh. It has been addressed in the UK civil service as well as in other developing countries which inherited a similar colonial structure as Bangladesh. Various solutions have been adopted. In Pakistan, for example, the cadre system itself was abolished. Other approaches have included appointing technical personnel to head technical ministries or opening up the management levels to both technical and administrative personnel. There is no ideal solution to the problem in Bangladesh, but it is essential that the Government moves expeditiously to resolve the issue.

4.42 Decision-Making. The centralized system of decision-making through the secretariats supported by a vast, intricate web of formal procedures has created serious bottlenecks. The procedure required for a department to obtain a decision from its Ministry's Secretary or Minister provides a telling example. A decision in the form of a file is referred by the Director of a department through the entire line of authority within a secretariat. The file is reviewed first by the lowest ranking administrative officer and then ascends each rung of the ladder until it reaches the top. Once a decision is made, the file descends again until the lowest ranking officers sign off on it. Estimates of the time it takes for a file to go from a Department Director to a Secretary/Minister and return through the secretariat ranges from a minimum of three months to over a year.

4.43 An associated problem is the excessive reliance on the committee system which reflects the more general lack of accountability and responsibility in the organizational structure. Almost all important decisions in Government, whether at the highest levels of administration or within the workings of a department, are made by a committee. Not only is a committee decision-making process inherently lengthy, but even more time may be required to record and agree upon the decisions which are made, since without a written record of a committee's decision, the decision may not be carried out.

4.44 Rotation. Relations between the technical and administrative cadres are also affected by the practice of frequent rotation among the Class I administrative cadres, especially within the Senior Service Pool (SSP).^{1/} At the top levels of management, rotation can occur with relatively high frequency. Transfers are not only frequent, but also often occur to positions requiring quite different knowledge or skills. Administrative officers serving in technical ministries may be rotated among totally unrelated functions, and administrative officers often do not have time to develop strong working relationships with the technical departments or autonomous bodies or to acquire the specialized knowledge which may be required to improve the quality and efficiency of decision-making. Frequent rotation of administrative officers have also created serious dislocations within the local administrative units under the upazila system. The need for a rational government rotation policy for the administrative cadres should also be addressed. If administrative officers are to continue to hold key management positions in technical ministries, autonomous bodies and in Upazila Administrations, Government should consider a rotation policy which would allow for functional specialization, so that administrative officers could rotate among agencies in the same or related sectors.

4.45 Promotion Policy. Promotion criteria include length of service, training, examination scores, and at the higher levels, merit. The promotion system for Class I officers can be simplified as follows:

<u>Rank</u>	<u>Authorizing Body</u>	<u>Criteria for Promotion</u>
Joint Secretary and above	Council Committee on Promotion. Superior Selection Board	Merit cum seniority
Deputy Secretary	Superior Selection Board	Merit cum seniority
Senior Scale Section Officer	Special Promotion Committee	Seniority cum merit
Entry to Class I (Section Officer)	Public Service Commission	Seniority cum merit

In addition, each service of the Government, as well as specialized institutions, have additional promotion requirements written into their recruitment rules. These rules specify what percentage of the posts can be filled by promotion or recruitment.

^{1/} The SSP begins with the rank of Deputy Secretary (although not all Deputy Secretaries are in the SSP) and comprises the top levels of the administrative hierarchy in the secretariat and the autonomous bodies.

4.46 Seniority still plays the major role in promotion decisions, although efforts have been made in recent years to give more emphasis to merit. The Government has recently reiterated this emphasis, with the intention of attracting more qualified people into the Civil Service and to retain qualified officers. Offers of promotion to reward good performance, however, would be an additional realistic alternative.

4.47 Training Policy. A network of about 80 training institutes for Class I officers provide general administration management and sector-specific technical training. The principal administrative and management training institute--the Public Administration Training Center (PATC)--is under the Ministry of Establishment, while the sectoral training institutions are operated by the respective line ministries.

4.48 While the Government has emphasized the need for better planning and coordination, the training of Class I officers remains highly fragmented and decentralized. It is often donor driven and may not reflect the institutional or individual needs of a particular ministry or agency. In addition, some of the institutions are probably unnecessary and many training institutions operate in isolation from the functioning of Government and public policy-making as well as from the universities, colleges, and technical institutes. The increase in personnel under the upazila system has substantially raised the demand for administrative training, and PATC's present institutional capacity is being stretched to the limit to meet this demand. A more serious effort to develop a comprehensive training policy is needed, along with additional resources. Above all, this would also require a fundamental change of attitude. In Bangladesh training is still sometimes viewed almost as a form of punishment rather than as an integral component of professional growth and job enrichment. A recent government publication described training institutions as a "dumping ground" for both trainers and trainees.

Chapter 5: FINANCING PUBLIC EXPENDITURE

5.01 Higher economic growth and accelerated human development will require an expanded public expenditure program, both to invest in new infrastructure and services, and to operate and maintain those already in existence. Chapter 2 suggested that even with more generous foreign assistance, substantial increases will be required in domestic revenues. It is estimated that the ratio of central government revenue to GDP will have to rise by about 1.6 percentage points by FY90 and by about 3.0 percentage points by FY95. Table 5.1 illustrates how tax and non-tax revenues could rise to fill this need.

Table 5.1: CENTRAL GOVERNMENT REVENUES, FY81-FY95
(as % of GDP)

	FY81	FY86	FY90	FY95
General Revenues	9.3	9.2	10.5	12.1
Taxes	7.6	7.2	8.6	9.9
Non-Tax	1.7	2.0	1.9	2.2

Source: Staff estimates; see Table 2.5.

5.02 This actually understates the total effort required. In addition to funds needed in the central government treasury, substantial increases in revenues will be required from sales of public enterprise products and services in order to restore their financial health, and enhanced charges will be essential for a number of publicly provided services in order to cover their recurrent costs. Approximately another 1% of GDP will be required for these purposes.

5.03 The need for this major effort to mobilize public resources is clearly recognized in the TFYP, and already in FY86 and FY87 important steps have been taken. This chapter documents this progress and suggests directions for the future. The chapter begins (Section I), with a brief discussion of the key principles involved in public revenue decisions and then discusses taxation and public pricing in turn (Sections II and III).

I. PRINCIPLES OF PUBLIC RESOURCE MOBILIZATION

5.04 Raising revenue to finance public expenditure is only one of the Government's goals. Others include ensuring that the incentive system favors efficient, undistorted private sector growth, and ensuring that the poor are not taxed and charged beyond their ability to pay. In any tax or public

pricing decision, the possibility of a trade-off between revenue raising and economic efficiency on the one hand, and between revenue and equity on the other, must always be at the forefront of policymakers' minds.

Public Revenue Versus Efficiency - Is There a Trade-off?

5.05 In addition to transferring resources from the private sector to the public sector, taxation and public pricing decisions also alter the structure of incentives. For example, duties on imports are the most important and administratively cheapest source of tax revenue in Bangladesh, but they can also encourage the development of inefficient, import substituting industries and can inhibit the development of exports. This kind of tax-induced effect on output and growth--of which there are examples in all types of tax regimes--are referred to as the "economic costs" of taxation and are distinguished from the administrative costs of collections.

5.06 In some circumstances, because of the way in which governments choose to raise revenues, efforts to mobilize public resources, which are designed to permit higher investment and growth, paradoxically lead to slower and more distorted growth. In Sub-Saharan Africa, for example, where the tax-GDP ratio rose from less than 12% in 1966 to more than 16% in 1982, it is estimated that on average, every one percentage point increase in this ratio reduced the GDP growth rate by one quarter of a percentage point.^{1/} This was because governments usually chose easy and politically popular but distortionary trade-based taxes for raising revenue.

5.07 The Government of Bangladesh is aware of this potentially destructive trade-off. Avoiding the negative impact of public resource mobilization can be assisted by reference to two propositions:

- Most taxes tend to distort incentives and reduce efficiency, but consumption-based taxes are much less distortionary than trade-based taxes. By gradually restructuring the tax system in this direction, it may be possible to substantially increase revenues and reduce the overall distortionary effects of the system. A number of developing countries have embarked on this process, and preliminary results are encouraging.
- Unlike taxation, public pricing adjustments usually allow revenue to be increased while improving the incentive framework. Since the prices of most publicly provided goods and services are below their economic costs (and few are taxed), raising prices will

^{1/} See Z. Shalizi and L. Squire; Tax Policy for Sub-Saharan Africa, World Bank, Country Policy Department, draft December 1986.

generally lead to a more efficient allocation of resources.^{1/} At the margin therefore raising revenue from improved cost recovery is more efficient than from taxation.

Public Revenue Versus Equity - Is There a Trade-off?

5.08 In some instances raising public revenues will hurt the poor; it may reduce their real purchasing power for essential commodities or it may squeeze them out of the market for important goods and services. Some subsidies are potentially very beneficial to the poor and should not be eliminated. The challenge for the authorities is to assess which subsidies are particularly well targeted and beneficial to the poor and to protect and if appropriate expand these, while reducing or eliminating less directed subsidies, which generally don't benefit the poor as much as middle and upper income consumers. In the judgement of the team preparing this report, almost two thirds of subsidies could be abolished with little effect on the poor. The remaining one third--on primary education, on special food programs (VGF and FWP) directed at the most vulnerable and on primary health care (especially MCH services)--should be expanded.

II. TAX POLICY

5.09 The Third Five Year Plan stipulates a series of targets for government revenue. These include: (i) raising the tax-to-GDP ratio by 2.3 percentage points during the five-year period to over 10%; (ii) shifting away from heavy reliance on trade-based taxes towards domestic sources of indirect taxation; the share of the latter in total indirect taxation is targeted to rise from 29% in FY85 to 34% in FY90; (iii) raising the share of direct taxes in total tax revenue; and (iv) raising the share of non-tax revenue to GDP from 1.7% to 2.3%.

5.10 There has been no noticeable trend in the behavior of the tax-to-GDP ratio since the late 1980s, although (as noted in Chapter 1) some increase is expected this year. Moreover, while the share of direct tax revenue to total tax revenue increased from 18% to 21% between FY81 and FY86, FY81, the behavior of the share of domestic indirect taxes to total indirect tax revenue exhibits no secular rise over the period. Achieving the TFYP targets will therefore require a very substantial effort.^{2/} A comparative perspec-

^{1/} In some cases economic costs are unnecessarily high due to inefficiencies in production. In these cases, of course, price increases must be accompanied by efforts to reduce costs.

^{2/} In support of this effort, in FY87 IDA and the IMF are undertaking a review of the longer term options for public resource mobilization. An IDA tax mission visited Dhaka in December 1986 and preliminary recommendations will be discussed with the Government in the spring of 1987.

tive on these figures is provided by Table 5.2, which presents these ratios for a number of other countries.

Table 5.2: TAX STRUCTURE IN SELECTED COUNTRIES
(Percentage)

	\$ GNP Per Capita (1984)	Tax/GDP Ratio	Direct Tax Revenue to Total Tax Revenue	Domestically Based Tax Revenue to Indirect Tax Revenue
<u>Individual Countries (1980-85 data)</u>				
Bangladesh	130	8.1	20.1	29.3
Malawi	180	14.8	38.0	n.a.
India	260	16.2	30.1	44.6
Ghana	350	4.9	33.1	n.a.
Pakistan	380	10.7	23.0	40.0
Indonesia	540	20.1	80.2/a	66.9
Thailand	860	13.1	22.1	66.8
Philippines	660	10.8	24.8	60.7
Malaysia	1980	22.8	44.9	38.3
Korea	2110	16.1	26.2	75.5
<u>Group Averages (1979-81 data)</u>				
<u>Developing Countries (82 countries)</u>		17.5	29.3	
- Sub-Saharan Africa		17.6	30.3	
- Asia		14.9	30.3	
- South Asia		12.4	13.0	
- East Asia		16.8	43.3	
- Europe & Middle East		19.7	30.2	
- Latin America		17.9	26.1	
<u>Industrialized Countries</u>		29.7	34.2	

/a Including oil revenues; if these are excluded, the share of direct taxes in total tax revenue falls to 37.3%.

Sources: Bangladesh Fiscal Statistics, and IMF and World Bank data.
V. Tanzi: "Quantitative Characteristics of the Tax Systems of Developing Countries," IMF DM/83/79, and World Development Report, 1986. Ahmad and Stern: "Tax Reform for Pakistan."

Table 5.3: CENTRAL GOVERNMENT REVENUE, FY83-FY87

	FY83	FY84	FY85	FY86 Prov.	FY87 Est.	FY83-86 Averages as Percent of:	
						Total Revenue	Revenue Category
-----billion taka-----							
Total Revenue	25.40	28.60	35.93	42.28	48.16	100.0	
Tax Revenue	21.08	23.70	28.87	32.98	37.98	80.7	100.0
Customs Duties	8.70	9.34	11.83	13.39	15.50	32.7	40.6
Sales Taxes	2.98	3.50	4.46	4.60	5.35	11.7	14.6
Income and Profit Taxes	3.26	3.39	3.86	4.62	5.50	11.4	14.2
Excise Taxes	4.98	5.98	6.92	7.72	8.80	19.4	24.0
Land Taxes	0.22	0.30	0.42	0.55	0.56	1.1	1.4
Stamp Taxes	0.79	1.01	1.10	1.39	1.40	3.2	4.0
Other /a	0.16	0.18	0.28	0.69	0.87	1.0	1.2
Non-Tax Revenue	4.32	4.91	7.06	9.30	10.18	19.4	100.0
NPEs Profit Transfers /b	0.26	0.28	0.67	0.78	0.92	1.5	7.8
PFIs Profit Transfers /b	0.94	0.94	2.13	2.70	2.57	5.1	26.2
Interest Receipts	1.00	1.17	1.24	2.31	2.00	4.3	22.4
Registration Fees	0.29	0.32	0.40	0.43	0.65	1.1	5.6
Forest Fees	0.28	0.34	0.46	0.61	0.60	1.3	6.6
Other	1.56	1.85	2.15	2.47	3.44	6.1	31.4
-----annual percentage change-----							
Total Revenue	9.5	12.6	25.6	17.7	13.9		
Tax Revenue	8.6	12.4	21.9	14.2	15.2		
Non-Tax Revenue	14.6	13.5	43.8	31.8	9.4		
-----percent of GDP-----							
Total Revenue	8.8	8.2	8.6	9.2	9.4		
Tax Revenue	7.3	6.8	6.9	7.2	7.4		
Non-Tax Revenue	1.5	1.4	1.7	2.0	2.0		

/a Other tax revenue in FY86 and FY87 excludes the Jamuna Bridge.

/b NPE and PFI denote non-financial and financial public enterprises respectively.

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

Indirect Taxation - Status and Issues

5.11 Trade Taxation. Taxes on imports account for 56% of tax revenue in Bangladesh. These comprise: customs duties, ranging from 2.5% to 400% of c&f value; sales taxes which are assessed on duty-paid value, development surcharge at a rate of 2%, and regulatory duty, which ranges from 2.5% to 50%. Table 5.4 shows that as in most countries, effective customs duties and sales taxes (CDST) are highest on consumer goods (40%) and lowest on capital goods (27%). Neither the spread nor the average level (35%) are particularly high or out of line with other countries. However, the variation within these groupings is large and there are a number of commodities where high statutory rates have encouraged smuggling and other irregular practices so that the collections-to-import value ratio understates the distortionary effect of the CDST rates. In some of these cases the Government is cutting CDST rates in order to reduce smuggling and to raise revenues; for example CDST rates were reduced from 180% to 100% on some textile products in the FY87 budget.

Table 5.4: COLLECTIONS OF TRADE-BASED TAXES BY CATEGORY, FY85
(Tk billion)

	Import Value	Customs Duty	Sales Tax	CDST	Effective Rate of CDST (%)
Consumer Goods	8.5	2.8	0.6	3.5	40.4
Raw Materials	24.3	6.3	2.6	8.9	36.8
Capital Goods	11.7	2.7	0.6	3.2	27.4
Total	44.5	11.8	3.8	15.6	35.0

Source: Ministry of Finance.

5.12 Domestic Indirect Taxation. The bulk of domestic indirect taxation comes from excise taxes which are levied ex-factory on domestic production. Excise taxes account for 24% of tax revenue. Most domestic production is excisable, with the exception of cottage industries defined as those units that have invested less than 0.1 million taka in machinery and do not employ more than 15 people. However, the base of domestic indirect taxation is constrained by the narrowness of the formal sector industrial base. Almost 70% of excise tax revenue is therefore accounted for by three categories of goods--tobacco, gas and petroleum products--and an additional 10% comes from five more categories of products--sugar, cement, jute manufactures, narcotics and liquor, and paper. Excise taxes are assessed on different items on either a specific or ad valorem basis; the latter range from 5% to 200%, with a maximum of 25% on many items. However, the average rate of excise

taxation, defined as the ratio of collections to the gross value of excisable production is only 5%. Comparing this with the effective rate of CDST suggests a high degree of protection to domestic industry, and indicates that, since the rate of excise taxation is modest, there is scope for raising revenue by increasing excises on certain commodities.

5.13 Raising Revenues While Lowering Protection. The Government's twin goals of raising revenue and rationalizing its trade policy may appear to conflict in the short run, but will complement each other over the medium term. In the near term, efforts to reform trade tariffs to promote efficiency in key sectors are constrained by their impact on public revenue; for example, suggested reductions in tariffs on textiles, steel and engineering goods (see Chapter 3) would cause tax revenues to fall by 1.5-2%. Similarly, efforts to encourage exports through improving the duty drawback scheme will result in revenue loss of about 1.5%. Raising revenues will in turn be hampered by concerns for efficiency; a trade-based tax system tends to be inelastic so that raising the tax-GDP ratio will require discretionary increases in tax rates, but this in turn could worsen protection. This dilemma can be fully resolved only gradually as domestic taxation substitutes for trade-based taxation. However, opportunities exist even in the immediate future for raising tax revenues while reducing distortions. These include raising selected excise rates, eliminating exemptions on income tax and, above all, replacing quantitative restrictions on imports by non-prohibitive tariffs.^{1/}

5.14 Improving Export Competitiveness. In recent years, the Government has undertaken policies designed to offset the potentially deleterious consequences of the existing tax structure. Prominent among these are a variety of "duty drawback" and related schemes which have the effect of allowing exporters CDST-free access to imported inputs. While their success has been mixed, their importance for ensuring competitiveness will increase, as exports are diversified and the role of imported inputs at different stages in the production process grows. But preserving competitiveness of exports will also require that domestically produced inputs used in export production enjoy relief from excise duty. Furthermore, failure to do so for tradable inputs in the face of duty drawback schemes discriminates against domestic producers of such items. Although current legislation allows for some relief from excise duties on certain categories of inputs going into export production, these provisions have not been widely taken up. As the Government relies increasingly on domestic sources of revenue, it is important that the administration of such schemes be strengthened accordingly.

5.15 The Need for Non-cascading Taxes. Imposing indirect taxes on inputs for production can lead to multiple or "cascading" taxation which dis-

^{1/} Quantitative restrictions exist on 321 of 1,192 four digit SITC categories.

criminate against those products going through several stages in the production process and against companies that are not vertically integrated. As already noted, CDST rates apply differentially on raw materials and capital goods, which in many instances are inputs for the production of items which are in turn subject to excise taxation. Existing legislation already provides partial or full relief from CDSTs for a limited number of specified raw materials or components used in particular industries for domestic production. It is important that this facility be extended to all inputs used in domestic production. The experience of other low income countries--such as Indonesia, India and Malawi--which have introduced tax reforms to overcome the distortions caused by cascading, may be helpful. It must be noted, however, that reducing the "cascade" effect, like expanding the duty drawback schemes, may result in a reduction in revenue, so must be accompanied by other revenue-raising measures.

Direct Taxation - Status and Issues

5.16 Less than one-fifth of tax revenue comes from direct taxation. The taxation of personal and company income, accounting for 15% of total tax revenue, or about 1.2% of GDP is by far the most important component. Company taxation, mainly of public sector firms, is the major single direct tax source. The very low contribution to revenues from the agricultural sector means that the entire burden falls on the non-agricultural half of the economy. Furthermore, exemption limits and concessions ensure that less than 0.5% of the population is liable for personal income tax. Comparative data (see Table 5.5) suggests that the share of income tax in total revenue is lower than in other Asian countries, although part of this can be explained by the level of per capita income and limited degree of urbanization.

5.17 Personal Income Tax. The principal features of the personal income tax rules are as follows. First, the basic exemption limit is Tk 30,000, which is roughly 20% above average family income; this excludes the vast majority of the population, whose tax returns would possibly be lower than the cost of collection. Second, the marginal rate of personal income tax rises with income, but with overall tax liability being restricted to one-third of total income. Third, the system provides generous incentives to savings and investment by allowing deductions of up to one-third of income for approved investments, and an exemption limit of Tk 25,000 on capital income (interest and dividends). Finally, the income tax rules provide for tax exemptions of many forms of capital gains arising from tax deductible investments.

Table 5.5: COMPARATIVE CHARACTERISTICS OF INCOME TAXATION
IN SELECTED ASIAN COUNTRIES /a

	Share of Income Tax in Tax Revenue (Percent)	Income Tax- GDP Ratio (Percent)	Per Capita GNP (1981)	Degree of Urbanization (1981)/b
Bangladesh	14.6	1.2	140	12
India	18.4	2.6	260	24
Pakistan	15.6	2.3	350	29
Thailand	19.8	2.6	770	13
Philippines	24.0	2.9	790	30

/a The figures for Bangladesh refer to the FY82-86 period, while for other countries data refers to 10-year averages for 1971 to 1981.

/b The percentage of urban to total population.

Source: Government Finance Statistics, IFS and World Development Report.

5.18 Company Income Taxation. The basic rate of company tax is 60%, excluding inter-company dividends which are subject to a 15% tax. Industrial companies in general pay a lower tax of 50%, which is reduced to 45% if their shares are publicly traded. The system of company taxation offers generous incentives for investment. Tax concessions take the form of:

- 1) eligibility either for extended tax holidays which are granted to all firms filing an application within six months of starting commercial operations, with a longer duration of up to 12 years for companies locating in least developed areas; or for highly accelerated depreciation allowances on new projects and acquisition of capital assets from abroad; and
- 2) indirect promotion of public limited companies through deductions of stock purchases and dividend income exemptions under the personal income tax.

5.19 Income Tax Reform. In its effort to promote higher investment and savings, the Government have provided an array of fiscal incentives for individuals and companies that is among the most generous in the world. The basic issue in reforming the system to help contribute to resource mobilization is the cost-effectiveness of the very significant incentives given to saving and investment. First, increasing reliance on direct taxation requires (a) the identification and removal of the incentive measures with the lowest net social benefit, and (b) the concomitant exploration of non-tax approaches to the promotion of saving and investment; these might include

improving services to investors and upgrading infrastructure. Second, attention needs to be directed towards the inequitable incidence of investment subsidies, as captured by the system of "double allowances" with respect to the taxation of capital income.

Property Taxation

5.20 The principal property taxes in Bangladesh are the land development tax (LD tax), which is assessed on both agricultural and non-agricultural land, and the holdings tax, assessed on both land and property. While collection of the LD tax is essentially a central government responsibility, the holdings tax is basically a local level tax.

5.21 The LD tax amounted to the equivalent of only 0.2% of agricultural value added in FY85, but even this figure overestimates the total tax burden on the agricultural sector, since much of the LD tax is raised in urban areas (where it has been very successful). It is estimated that the LD tax burden on agricultural land ranges on average from 0.1% of income from land for a farmer owning two acres up to 1.9% of land income from a farmer with 20 acres. The importance of the agricultural LD tax has declined significantly in the ten years since its implementation, especially for small plots. The agricultural sector therefore remains undertaxed. In addition, unlike many other countries, sound pricing and regulatory policies have meant that farmers do not suffer from implicit taxation in the form of government induced distortions of input and output prices vis-a-vis their international levels.

5.22 A progressive land development tax with augmented rates could, over the medium term, enhance revenue and improve equity in tax treatment between agricultural and non-agricultural households. However, this could only be effectively implemented if accompanied by a substantial commitment of resources towards strengthening ongoing efforts to update the existing Record of Rights.

Tax Administration

5.23 In addition to the need to change tax rates and structure, substantial net gains in revenue could be realized by improving tax administration. Arrears, for example, have remained at roughly one quarter of average annual collections over the last few years. The National Board of Revenue (NBR) is responsible for the administration of (a) customs duty on imports and exports, sales tax, regulatory duty, and development surcharge on imports; (b) excise duties on goods manufactured in Bangladesh and on narcotics and liquor, regulatory duty of excise and the turnover tax on specified goods and services and (c) direct taxes including income and corporation taxes. The overwhelming importance of those taxes in public revenue, together with widespread concerns, explicitly acknowledged in the FY87 budget speech, about smuggling and other irregular practices, emphasizes the critical role of strengthening administrative procedures in the NBR.

5.24 Consideration therefore needs to be given to expanding the upper echelons of the NBR, improving its capability for data base management, computerizing Collectors' offices, evolving reliable valuation procedures, improving investigation and prevention of fraud, and addressing the training needs of its staff. While part of the manpower required for these purposes can be realized by effecting suitable economies and by redeploying personnel in various cadres, the rest can only come about from expenditure of extra resources. However, it is essential that financing constraints should not be allowed to delay the proposed strengthening of tax administration. Comparative experience suggests that the additional revenue collected by an upgraded NBR would be far in excess of the extra costs of reorganization.

III. PUBLIC PRICING POLICIES

5.25 Good progress has been achieved over the past five years in improving public pricing policies, primarily by the reduction of large subsidies on foodgrain and fertilizer sales, and by the taxation of petroleum products. However, in other areas--power, natural gas, education, irrigation, for example--public expenditures have risen much faster than revenues. The TFYP calls for further progress in cost recovery, but a detailed strategy is still being defined. This section seeks to assist the Government in this effort, by identifying the main issues in public pricing reforms, the priority areas where reforms are necessary, and their potential for resource mobilization by FY90.

The Potential for Revenue Enhancement

5.26 Despite recent disinvestment and privatization, the public sector continues to account for a large part of the organized sector in Bangladesh. Sales of goods and services provided by the public sector, including those by public sector enterprises, amount to about Tk 75 billion (\$2.5 billion) in FY86, equivalent to 16% of GDP.^{1/} These sales figures actually understate the true value since many public goods and services are provided at nominal or zero cost (e.g., education and health) while others are significantly subsidized.

5.27 Adjusting Prices While Removing Distortions. In view of the large size of the public sector and the relatively inelastic demand for its goods and services, raising public prices provides great potential for raising revenues. For example, a 15% across-the-board real increase in all public prices would generate roughly 2% of GDP in additional resources. However, it would clearly be preferable to adjust prices only in those cases where existing prices are subsidized thus encouraging resource misallocation and where

^{1/} This is the ratio of gross sales to GDP. Value added of the public sector of course accounts for a much smaller proportion of GDP.

there is no clear equity reason for the subsidy. Public prices should reflect, at a minimum, the economic opportunity costs (efficiency prices) to the economy of providing these goods and services, unless there are strong equity or social concerns. A comparison of such estimated efficiency prices with current prices across sectors provides a convenient starting point for an analysis of priorities in public pricing reforms.

5.28 Defining appropriate efficiency prices for internationally traded goods and services--foodgrains, fertilizers, minor irrigation equipment, petroleum products--is a relatively straightforward exercise. World market prices,^{1/} converted to local currency and suitably adjusted for quality differentials and international price fluctuations plus domestic distribution costs, provides a good measure. For non-traded goods and services there are greater technical difficulties. In sectors such as power and natural gas, with lumpy investment requirements or significant depletion costs, long-run marginal cost pricing is appropriate and estimates have to be made. In others, such as transport infrastructure, irrigation services, education and health, where externalities may occur (social gains exceed private costs), short-run marginal cost pricing may be more appropriate; in these cases operation and maintenance costs can be used as a proxy. In some sub-sectors, such as railways, postal, and communications services, a proper evaluation of marginal cost tariff structures may be time-consuming and costly, and may not be immediately justified; here the simplest solution may be to measure average costs as a proxy for economic cost. Using these principles and available data and information, Table 5.6 provides indicative estimates of efficiency prices in key sectors. These are compared to current (October 1986) prices in order to estimate the percentage and absolute levels of subsidy or tax across sectors.

^{1/} cif in the case of import substitutes, fob in the case of actual or potentially exportable products.

Table 5.6: PUBLIC PRICING - UNIT SUBSIDIES AND TAXES, FY87

	Current Price (Tk/unit)	Efficiency Price (Tk/unit)	Unit Subsidy Tax Rate (%)	Amount of Subsidy/Tax (Tk million)
<u>Foodgrain Distribution (tons)</u>				<u>4,332</u>
- Rice (ration)	7,772	8,473 /a	8.3	210
- Wheat (ration)	5,145	6,300	18.3	1,155
- Rice, priority groups	4,000	8,473	50.0	447
- FFW, VGF, Wheat	--	6,300	100.0	2,520
<u>Fertilizer to Farmers (tons)</u>				<u>-21</u>
- Urea	4,800	4,412 /b	-8.8	-349
- TSP	5,000	5,776	13.4	310
- MP	4,000	4,261	6.1	18
<u>Fertilizer to Factories (tons)</u>				<u>593</u>
- Urea (tons)	3,600	3,787 /c	-4.9	-168
- Gas to factories (mcf)	19.09	34.94	54.6	761
<u>Irrigation, BWDB</u>				<u>1,100</u>
- Water charges (acre)	200	1,200 /d	83.3	500
- Land betterment taxes	--	400 /d1	100.0	600
<u>Minor Irrigation, BADC (units)</u>				<u>492</u>
- DTW, sales	174,000	220,000 /e	20.9	92
- DTW, rentals	10,000	35,000	71.11	250
- STW, sales	30,000	35,000	14.3	100
- LLP, sales	10,000	20,000	50.0	50
<u>Natural Gas (mcf)</u>				<u>1,770</u>
- Fertilizer	19.09	34.94 /f	45.4	761
- Power	19.09	37.05	48.5	719
- Large Industry	52.14	53.90	3.2	149
- Small Industry	52.15	68.50	23.9	
- Commercial	65.39	54.48	-20.2	-33
- Resident	44.88	67.32	33.4	174
<u>Power (kwh)</u>				
- 132 Kv Bulk	1.75	2.1 /g	16.7	96
PBS	0.95	2.8	66.1	435
- 11 Kv	2.0	2.2	9.1	330
- LV	1.9	3.6	47.2	3,006
Average	<u>1.71</u>	<u>2.66</u>	<u>35.7</u>	<u>3,867</u>

- /a Efficiency price of rice and wheat derived as three-year moving average (1985, 1986, 1987) as fob price in world market, discounted by 10% quality difference, plus international freight and domestic distribution costs (26%). Food for Work and VGF expenditures shown here as entirely subsidies, whereas a large part of FFW expenditures is investment expenditures.
- /b Using 3 year moving average world prices (fob for Urea, \$125 per ton, cif for TSP and MP, \$170 and \$120 per ton, respectively), plus domestic distribution cost (Tk 625) for BADC.
- /c Using the farmgate economic price and deducting internal distribution costs of Tk 625.
- /d Estimated per acre operation and maintenance costs of BWDB irrigation projects.
- /d1 Estimated at 1/3 of O&M costs on BWDB irrigation, in half of all drainage and flood control (DFC).
- /e Using shallow tubewell equivalence pricing for DTWs and full replacement costs of STWs and LLPs.
- /f Energy Pricing and Resource Mobilization in Bangladesh, draft IDA study, August 1986.
- /g Bangladesh Power Sector Tariff Studies, 1986 - Coopers and Lybrand Associates.

Table 5.6: PUBLIC PRICING - UNIT SUBSIDIES AND TAXES, FY87 (CONTINUED)

	Current Price (Tk/Unit)	Efficiency Price (Tk/Unit)	Unit Subsidy Tax Rate (%)	Amount of Subsidy/Tax (Tk million)
<u>Petroleum</u>				<u>-(2782-1958)</u>
- LPG (12.5 kg)	113.5	102.47 /h	-10.8	-6
- Gasoline (litre)	12.88	4.8 + 2.6	-74.1	-414 + 197
- Kerosene (litre)	6.71	4.6	-45.7	-985
- Diesel (litre)	6.71	3.9 + 3.1	4.1	-539 + 1791
- Fuel oil (litre)	4.70	2.68	-75.4	-838
<u>Transport</u>				
- Railway				<u>643</u>
Passenger (pass km)	8.96	20.0 /i	55.2	513
Freight (ton)	95.8	112.0	14.3	130
- Roads (Implied user charge on oil)				<u>329</u>
Passenger cars (litre)	8.08	2.6 /i	-53.3	-121
Diesel buses & trucks (litre)	2.8	3.1	28.2	450
<u>Education (per year)</u>				<u>5,022</u>
- Primary Schools	30	268 /k	88.8	2,106
- Secondary Schools	60	1,128	94.7	160
- Colleges	120	1,528	92.1	493
- University	120	12,558	99.0	497
- Private Schools	360	1,128	68.1	1,766
<u>Health</u>				<u>600</u>
- Immunization	...	...	...	n.a. /1
- Medicines	...	...	...	300
- Hospitals	...	...	...	300
<u>Post Offices</u>				<u>300</u>
- Inland letters	1.0	2.0 /m	50.0	225
- Foreign letters	5.75	12.0	44.0	75
TOTAL GROSS SUBSIDY				18,113
TOTAL NET SUBSIDY (net of gas inputs to power and fertilizer)				16,723

(-) Denotes tax.

/h See /f above. Efficiency price includes border price, plus road user charges to cover costs (see j below).

/i Roughly equivalent to private road transport charges.

/j Road user charges necessary to cover highway O&M costs plus some investment cost.

/k Cost per student.

/l Revenue budget deficit in health sector.

/m Price needed to break even.

Source: Staff estimates, see footnotes.

5.29 It is evident from Table 5.6 that most major public goods and services are heavily subsidized in Bangladesh. Total net subsidies, excluding double-counting of input subsidies in natural gas sales, are estimated at Tk 17 billion, or 3% of GDP in FY87. However by no means should all subsidies be removed. Some subsidies are especially beneficial to the poor and some have benefits to the community as a whole (externalities) as well as to the individual consumer. Three areas of subsidization shown in Table 5.6 are especially beneficial--poverty oriented food programs (VGF and FWP), primary education and primary health care--which combined account for 30% of total net subsidies. Table 5.7 omits these three subsidies.

5.30 The other subsidies are not necessarily targeted towards the poor, nor obviously socially desirable. For example, benefits from foodgrain sales (except VGF and FWP) mainly accrue to urban and better-off consumers, irrigation subsidies to better-off farmers, power subsidies to industrial and commercial users, non-primary education and hospital subsidies to relatively better-off groups in urban areas. And within these categories, large subsidies apparently go to the more privileged groups, such as rice sales to priority groups, water to larger farmers, power sales to low-voltage (mainly urban) consumers, and college and university education to middle and upper income urban dwellers. For the most part, therefore, these subsidies are not achieving their stated goals.

5.31 The relative subsidization of different sectors has also undergone a significant change over the past five years, as shown below in Table 5.7. The major economic subsidies are now in the power, natural gas, education, railways and other sectors (irrigation, health), which have grown rapidly as tariff increases have failed to keep pace with growing costs. In contrast, the Government has successfully eliminated previously large subsidies on fertilizer sales (although cross-subsidies between products exist), restricted very large subsidies on foodgrain sales (other than for FWP and VGF), and imposed significant taxes on the consumption of petroleum products. In all three cases--fertilizer, food and petroleum products--the recent decline in international prices has helped to reduce subsidies and raise resources. The change in the composition of subsidization across sectors reveals to some extent a relative shift from the subsidization of agricultural inputs and outputs (fertilizers and foodgrains) to the subsidization of industrial and commercial sectors (power, natural gas, transportation).

Table 5.7: DISTRIBUTION OF ECONOMIC SUBSIDIES BY MAIN SECTORS, FY82-FY87
(percentages)

	FY82	FY87
Foodgrain Sales (excluding FFW & VGF)	41.3	23.8
Fertilizer Sales to Farmers	14.1	0.0
Natural Gas	7.6	22.5
Power	20.7	48.8
Petroleum	-5.4	-35.0
Railways	1.1	7.5
Non-primary Education	20.7	32.5
Total of Above	<u>100.0</u>	<u>100.0</u>

Note: (-) denotes taxation.

Source: Mission estimates.

5.32 Improving Collection Rates. Apart from the subsidization provided through lower than economic prices, many public sector agencies and organizations currently face serious problems in collecting dues from users of public services, implying further subsidization. The problem is most serious in the power sector, where in FY86, out of expected revenues of about Tk 7.8 billion (excluding technical losses), actual billings were about Tk 6 billion, and collections about Tk 4 billion. Serious problems are also faced in the irrigation sector, where very little is collected out of expected revenues of Tk 200 million (water charges, deep tubewell rentals), as well as railways, and natural gas. Overall losses in public revenues due to weakness in collections performance may have amounted to as much as 1% of GDP in FY86.

5.33 Pricing Policies for Public Sector Enterprises. Public enterprises account for about 70% of overall sales of goods and services by the public sector. In addition to providing energy (power, natural gas, petroleum) and fertilizer, which have been discussed earlier, public enterprises are also involved in a large number of other industrial and commercial activities-- jute textiles, cotton textiles, steel and engineering, chemicals and paper, refined sugar, airlines, ports, and road and water transport. Aggregate sales of such items amounted to about Tk 20 billion (\$0.7 billion) in FY86. Jute textiles are sold largely for export at prices determined by the market, but for most of the other products, prices are determined by government policies and domestic market conditions.

5.34 Although in theory the public enterprises have flexibility to alter prices and operate commercially, the Government employs extensive price

controls and many pricing decisions are subject to the approval of both the concerned technical ministry and the Finance Ministry, and in some cases the cabinet. The simple average increase in prices of such products in the past two years (FY85-87) was about 5% per annum, compared to domestic inflation rate of double that figure--implying extensive price controls and subsidization. In some cases--refined sugar, newsprint and paper sales--large subsidies are explicit, but in most instances the detrimental effects of price controls are visible only in the poor financial performance of state enterprises.

5.35 Table 5.8 summarizes the recent financial performance of public sector enterprises. The overall rate of return on the book value of assets was only 0.4% in FY86 and negative for enterprises other than in energy and fertilizer. The energy-related enterprises appear to perform better than average but this is due almost entirely to income generated by higher than border prices of petroleum and to subsidized gas input prices. The trend in financial performance is also alarming since the rate of return on assets has deteriorated sharply since FY84, when it was about 3.3%. In addition, many enterprises have been financially weakened as the Government has taken more in taxes and dividend contributions from these enterprises than their surpluses warranted. The result has been increasing dependence on Government and the banking system to finance both current and capital expenditures. This helps explain why at least half of increased revenues from price adjustments must be retained by the enterprises to restore their financial viability.

Table 5.8: FINANCIAL PERFORMANCE OF PUBLIC ENTERPRISES, FY86
(Tk billion)

	All PSEs	Energy PSEs	Jute PSEs	BCIC (fertilizer)	Other PSEs
Sales	49.73	21.8	6.3	7.5	14.1
Income (before Taxes)	0.5	2.6	-1.6	0.2	-0.7
Total Assets	119.3	61.4	6.7	26.1	25.1
Return on Asset (%)	0.4%	4.2%	-23.8%	0.8%	-2.8%
Retained Income	-1.1	1.3	-1.6	0.06	-0.9

Source: Bangladesh Authorities and Autonomous Bodies Budgets 1986-87, using SABRE formats, Monitoring Cell, Autonomous Bodies Wing, Finance Division.

Implementing Reforms in Public Pricing, FY88-90

5.36 The overall trend of public resource mobilization through reforms in public pricing is not encouraging. Table 5.9 shows the nominal and real adjustments in prices of public sector goods and services during the FY81-87 period. Almost all public sector prices have declined in real terms; the exceptions have been rice (ration) prices, natural gas prices, and postal service fees. Declining prices or user charges have been especially notable for railways, university fees, sugar (ration), newsprint, and cement. Public pricing has clearly not been viewed as a means of mobilizing revenue. In particular, there has been a noticeable tendency for nominal prices to be left unchanged for several years, requiring subsequent large adjustments just to keep pace with past increases in costs; railways, university fees, postal rates, sugar, paper, newsprint, cement are notable examples here.

Table 5.9: PUBLIC PRICING ADJUSTMENTS (NOMINAL AND REAL), FY81-FY87

Goods and Services	Percentage Annual Change FY81-87	
	Nominal Prices	Real Prices /a
Rice (ration)	+ 11.5	+ 0.4
Wheat (ration)	+ 9.4	- 1.7
Fertilizer (urea) to Farmers	+ 8.9	- 2.0
Natural Gas	+ 18.5	+ 7.4
Power	+ 9.8	- 1.3
Petroleum	+ 8.6	- 2.5
Railway Passenger	+ 7.0	- 3.8
Railway Freight	+ 7.6	- 3.2
University Fees	+ 0.0	- 9.8
Postal Rates	+ 12.2	+ 0.8
Sugar (ration)	+ 4.8	- 6.5
Paper	+ 8.4	- 2.5
Newsprint	+ 1.7	- 8.5
Cement	+ 4.8	- 5.7
Cotton yarn	+ 7.9	- 2.9
Average	+ 8.0	- 2.8
Consumer Price Index	+ 11.1	

/a Nominal price changes deflated by C.P.I.

Source: Planning Commission, Ministries, staff estimates.

5.37 There are several possible reasons for the reluctance to set prices closer to their economic levels. These include: (a) technical gaps in information regarding the extent of divergence of existing prices from efficiency prices; (b) political difficulties in adjusting prices for relatively privileged mainly urban consumers; (c) a concern to offset inflationary trends; (d) uncertainty regarding effects on incomes of consumers and their ability to pay; (e) a belief that some of the subsidies, such as foodgrain subsidies, are appropriate forms of compensation in kind to public employees; (f) a reluctance to charge consumers for the inefficiency of public sector agencies; (g) resistance within and outside public sector agencies to undercut unofficial rents that accrue from the difference between market and officially controlled prices; and (h) a lack of perceived need to raise domestic public revenues in the face of resource flows from foreign donors.

5.38 These are common factors in most developing countries. In addition, like Bangladesh, the great majority of developing countries are now having to reduce non-essential subsidies in the face of increased financial stringency. Bangladesh is now in a good position to undertake such reforms both because real incomes of consumers appear to have risen in the last two years, especially for public sector employees, and because the expansion of well-directed supplementary food programs has enabled the Government to compensate for any minor declines in real incomes of the very poor.

5.39 The available information (presented in Tables 5.5 and 5.6 earlier) suggests that the priorities of the Government should be to undertake relatively large pricing adjustments (and collection efforts) in sectors where subsidies are large and growing--power, natural gas, irrigation, railways, postal services--in an effort to approach economic pricing of such basic public goods and services by FY90. It should also be possible to eliminate remaining subsidies in foodgrain sales through the rationing system and other channels (other than FWP and VGF). The education sector presents special problems. Subsidization at the secondary and higher levels has been growing at a rapid pace as a result of escalating costs and unchanged nominal fees; current fees are extremely low in relation to the (presumed) benefits to individuals, their ability to pay, and costs. However, education services in Bangladesh have deteriorated, and social and political considerations may preclude large increases in fees; a gradual approach to enhancing fees and services may represent the most appropriate solution. A similar approach to health charges would also be appropriate, at least to cover medicine and hospital costs.^{1/ 2/}

5.40 Efforts to improve collections in the power, irrigation and railways sectors must be of high priority, and can lessen the need for large price adjustments. However, the problems are deep-rooted and solutions may involve consideration of fairly radical institutional steps in the longer-term, such as setting up independent distribution and collection agencies (possibly with private sector support) in the power sector, and devolving responsibility for collecting irrigation water charges to Local Government. In the interim, enhanced incentive systems for staff responsible for collections, and performance targets (with sanctions against failure to collect) are probably necessary along with the suspension of services to consumers who do not pay.

5.41 Price controls on state enterprises should be liberalized. It should not be necessary for public corporations operating commercially to have to

1/ IDA sector studies are planned or underway in Bangladesh on health sector finances, and the education sector.

2/ See: Financing Health Services in Developing Countries--An Agenda for Reform, World Bank, December 1986, for a discussion of principles and practical experience of health care pricing.

approach line ministries or other agencies for approval of pricing decisions. The economic justification for price controls (or subsidies) on sugar, paper, newsprint, cement, road transport, ferry charges, airlines, and shipping is not strong. Moreover, it leads to serious difficulties for private sector competitors--as in road and water transport--because it lowers their prices, profitability, and therefore investment. As improved systems for target setting and performance monitoring are introduced to all enterprises (see Chapter 3), principles for price adjustments can be determined during the annual review. In the interim, it is important that steps be taken to allow greater flexibility in public enterprise pricing and to demand better profit performance. Liberalization of prices across the spectrum of such relatively minor (non-basic) public goods and services would enable improved profitability performance of public sector agencies, and enable the private sector to operate more profitably, possibly resulting in higher private investment and quality of service. If such decontrols on pricing could improve the rate of return on the book value of assets of public enterprises from the current level of less than 1% to 5%, additional resources equivalent to about Tk 5.5 billion, or 1.0% of GDP could be generated.

5.42 Table 5.10 provides an illustration of price adjustments that could be made in agriculture, energy, transport, communications and the social services in order to approach economic pricing in these sectors. In some of these sectors, more detailed analysis would need to be undertaken before specific price adjustments are implemented; the table is merely intended to suggest the orders of magnitude involved. It is estimated that these measures would generate revenues equivalent to an additional 2% of GDP by FY90, after taking into account the possibility of lower demand by consumers on account of higher prices.

Table 5.10: ILLUSTRATIVE PUBLIC SECTOR PRICE ADJUSTMENTS AND RESOURCE MOBILIZATION, FY88-FY90

Product	Unit	Efficiency Price	Current Price FY87	Possible FY90 Prices	% Annual Increase	Assumed Price Elasticity of Demand /a	Estimated Volume of Sales		Additional Resource, (Tk Million) Mobilization, FY90		TOTAL
				(In real Terms, FY87 Prices)			(million units) Before Price Increase	After Price Increase	Additional Revenues from Sales	Lower Costs from Reduced Sales /c	
-taka-											
1. Rice (ration)	ton	8473	7772	8473	+3.0	-0.5	0.3	0.28	40	169	209
2. Wheat (ration)	ton	6300	5145	6300	+8.0	-0.5	1.1	1.0	640	630	1270
3. Rice Priority Groups	ton	8473	4000	8473	+28.4	-0.5	0.1	0.06	108	339	447
4. Fertilizers											
TSP	ton	5776	5000	5776	+5.8	-0.5	0.45	0.42	175	173	348
MP	ton	4261	4000	4261	+2.8	-0.5	0.08	0.08	21	-	21
5. Fertilizer (urea) to Factories	ton	3787	3600	3787	+1.7	0.0	1.0	1.0	187	-	187
6. Water Charges	acre	1200	200	600	+44.0	-0.2	0.7	0.5	160	240	400
7. Land Betterment Taxes	acre	400	-	200		-0.2	1.8	1.3	260	200	460
8. DTW Rentals	no.	35000	10000	30000	+44.0	-0.2	16000 /b	11500/b	185	135	320
9. Natural Gas	mcf	54	36	54	+14.0	-0.2	128	116	1656	648	2304
10. Power	kwh	2.66	1.71	2.66	+15.83	-0.2	5000	4500	3420	1330	4750
11. Railway											
Passenger	km	20.0	8.96	20.0	+30.7	-0.3	9.0	6.6	51	48	99
Freight	km	112.0	95.8	112.0	+5.3	-0.3	10.0	9.5	106	56	162
12. University Fees	year										
-secondary		1128	60	200	+49.3	-0.1	0.16	0.13	16	34	50
-colleges		1528	120	400	+49.3	-0.1	0.40	0.33	84	107	191
-university		12558	120	1000	+102.7	-0.1	0.04	0.03	25	126	151
13. Post Services (envelope)		2.0	1.0	2.0	+26.0	-0.1	-	-	180	120	300
14. Sugar (ration)	ton	-	16508	17152	+1.3	-0.5	0.1	0.1	64	-	64
15. Paper	ton	-	26317	32000	+6.7	-0.3	0.04	0.04	240	-	240
16. Newsprint	ton	-	11000	16500	+14.5	-0.3	0.05	0.05	275	-	275
17. Cement	ton	-	1736	2800	+17.3	-0.3	0.4	0.33	230	196	426/d
18. Medical Fees (hospitals, medicines)	..	-	-	-	-	-	-	-	-	-	300
TOTAL (net of natural gas sales to fertilizer and power)									6795	4033	10828

/a Although most items are rationed, and in scarce supply, implying low price-elasticities, some shifts to private sector supplies are anticipated implying higher price-elasticities.

/b Number of units.

/c Assumed equal to reduction in volume of sales this efficiency price for most items.

/d A reduction on half of current medical cost subsidies.

/e Revenues from sales to power and fertilizer estimated at 80% of total revenues.

Source: Staff estimates.

5.43 Impact on Household Incomes. Assessing the impact of these measures on real incomes is a complex business. A simple comparison of how much consumption could be afforded with and without subsidies gives a very partial picture. If public prices were not raised, the Government would either have to raise revenues in some other manner (which would also lower real consumption) or would have to lower its expenditure plans (the effect of which would depend upon how cuts were made). A partial "static" analysis can nonetheless provide clues as to the direct income distributional impact of the measures. Using the FY82 Household Expenditure Survey,^{1/} it was found that the bulk of the price increases would be experienced by urban dwellers, who are on average much better off than their rural counterparts; they account for about 15% of households in Bangladesh but about one third of total household expenditures. Table 5.11 which is based upon an analysis of urban expenditure patterns suggests that the measures proposed would reduce real household incomes by about 5% on average over the four-year phased program (1.25% per year) in comparison with what they would otherwise have been. This would still allow real consumption to rise each year. Better-off consumers and beneficiaries of the ration system and electricity and natural gas supplies would be affected the most. Rural dwellers would be affected primarily through fertilizer and irrigation charges. Raising these prices is estimated to lower real incomes of families on small unirrigated farms by no more than 0.2% and on larger irrigated farms by 1.5% over the four-year period.

5.44 These public pricing and taxation measures represent an important component of the High Policy Case. They therefore cannot be considered in isolation. Without them, the Government will be unable to fulfill its goal of improving the quality and coverage of human development and targeted poverty alleviation programs, which in turn can protect the poor from some of the adverse effects of subsidy removal. In the judgement of the team preparing this report, the overall impact of these measures on real household incomes would be positive, especially for the poor. As noted in Chapter 2, the High Policy Case--which includes these measures--is estimated to permit real per capita private consumption to grow on average by 1.8-2% per year for the remainder of the TFYP period and beyond.

^{1/} See Chapter 6 for a detailed discussion.

Table 5.11: ESTIMATED IMPACT OF PUBLIC PRICING ADJUSTMENTS ON DIFFERENT INCOME GROUPS IN URBAN AREAS, FY90

INCOME GROUP (Tk/month household income)	PROPORTION OF HOUSEHOLDS	ABSOLUTE DECLINE IN MONTHLY INCOMES ASSOCIATED WITH:								% DECLINE IN MONTHLY INCOME
		RICE	WHEAT	ELECT.	GAS	EDUCATION	MED. CARE	ALL OTHER ITEMS	TOTAL	
Low (0-1799)	10.31	4.8	12.4	4.3	1.8	0.8	2.5	31.2	57.8	4.5
Lower Middle (1800-2599)	0.22	7.6	17.2	14.8	5.7	3.9	4.8	58.7	112.7	4.9
Upper Middle (2600-4199)	0.24	9.7	21.1	31.2	14.2	12.7	8.7	98.8	196.4	5.4
High (Above 4200)	0.23	12.7	24.8	81.2	34.3	45.7	21.0	242.8	462.5	5.4
Total	1.00	8.4	18.4	30.8	13.1	14.6	8.7	102.2	196.3	5.3

Note: Detailed assumptions and calculations are available.

Source: Staff estimates based upon 1981/82 Household Expenditure Survey and pricing adjustments suggested in Table 5.10.

PART III: PROMOTING HUMAN DEVELOPMENT

Higher economic growth is, as noted in previous chapters, essential if further progress is to be made in alleviating poverty in Bangladesh. But it is not sufficient. It must be supplemented by specific directed efforts to aid those who tend to be by-passed by the development process. This section of the report discusses the human dimensions of economic development in Bangladesh. It begins with an assessment of recent trends and prospects for poverty alleviation and then discusses some of the specific interventions designed to improve the quality of life in rural and urban areas.

Chapter 6 describes recent trends in poverty, nutrition and real wages. The picture is rather confused, but a number of conclusions clearly emerge. Some of these are encouraging; many are cause for serious concern.

Chapters 7 and 8 explore the needs of two especially vulnerable groups--the landless and low income women. The chapters describe some of the lessons that have been learnt in recent years in attempting to assist these groups and some of the innovative approaches that are now being initiated. An important theme is that these groups must not only be regarded as vulnerable and needy; they are also a potentially powerful force for development and progress. These groups are often superior to better-off groups in demonstrating initiative, enterprise and thrift whenever they are given access to basic resources.

Finally Chapter 9 focuses on public and private interventions in the human services--health, family planning, nutrition and education. The analysis is not intended to be comprehensive; rather an attempt is made to briefly document recent progress and to highlight key issues for the coming years.

In Part II of this report a High Policy Case was recommended as necessary if higher economic growth was to be achieved for the remainder of the 1980s and the first half of the 1990s. The employment and human development programs described in this part of the report should be seen as an integral component of that High Case. Their influence tends however to be longer-term in nature. If Bangladesh is to sustain its accelerated "momentum of development" not only through its Third and Fourth Plan periods but also thereafter, it really has no choice but to give the development of its human resources the highest possible priority.

Chapter 6: TRENDS IN POVERTY, NUTRITION AND REAL WAGES

6.01 Bangladesh has received so much attention from researchers and donors basically because it is one of the poorest countries in the world. However, the data available on recent trends in poverty alleviation, income distribution, landlessness, source of rural non-farm incomes, and nutritional status are surprisingly scarce. Over the last year the results of the 1981/82 Household Expenditure Survey (HES) became available.^{1/} This is the only systematic and country-wide source of information on detailed expenditure patterns by income group. It provides an important supplement to the earlier 1973/74 survey, although it is of course already rather out-of-date.^{2/} The most recent reliable broadly based nutrition survey is also for 1981/82.^{3/} These are supplemented by a good number of micro-level surveys associated with individual projects or research efforts; but it is generally very difficult to assess the comparability of these more narrowly focussed smaller studies. In addition, precisely because some of these micro surveys are associated with special project areas, it is risky to generalize to the country as a whole. In this regard, consideration might be given by donors, Government and researchers to provide technical assistance to improve the quality and timeliness of existing ongoing surveys rather than initiating new ones.^{4/}

6.02 The methodology that has been employed in deriving the results in this chapter is as follows. First, the developments between FY74 and FY82 were examined using the two expenditure surveys. The trends suggested by these sources were compared with those suggested by the nutrition surveys and, more importantly, with other economic indicators--wage rates, food availability and relative prices. There is a good deal of agreement among the various sources for the 1974-82 period; this permits us to accept both the 1981/82 HES as a reasonably reliable benchmark against which to judge

^{1/} Household Expenditure Survey for Bangladesh, BBS, July 1986. Preliminary results from the Nutrition Module of the Household Expenditure Survey, 1985-86, conducted by BBS became available in February 1987 and they will be published in April 1987.

^{2/} The next HES (1983/84) is currently being processed; preliminary results are expected to be available in mid-1987.

^{3/} Nutrition Survey of Rural Bangladesh, 1981/82, Institute of Nutrition and Food Sciences, University of Dhaka. Previous nutrition surveys had been for 1962-66 (East Pakistan) and for 1975-76.

^{4/} DANIDA and BIDS will be assisting the Government in surveying recent studies on poverty related issues and assessing the extent to which broad conclusions emerge. This is a very worthwhile exercise.

more recent developments, and also the ability of other economic indicators (food availability, relative price trends and sectoral wage rates) to act as proxies for progress in poverty alleviation. Second, these indicators have been used to give a rough picture of what has happened between 1982 and 1986.

6.03 Overview of Results. The following broad conclusions would appear to be warranted from the analysis.

- Between 1974 and 1982, although the overall incidence of poverty declined from 82% to 73%, that of extreme poverty increased from 43% to 50%. Despite an increase of 16% in real per capita GDP during this period, real wages of agricultural workers in 1982 were only 88% of those in 1974, and there were 4 million more poor, and 13 million more "hard core poor" in 1982 than in 1974. With the unequal sharing of the benefits of growth, the nutritional standards of the poor declined. Because of rapid increases in foodgrain supplies, calorie intensive foods became relatively cheaper, the poor households maintained their calorie intake at the expense of higher quality protein and micro-nutrient intensive foods.
- Since 1982, the poverty situation does not seem to have deteriorated further. Though real per capita income increased only at the rate of 1.3% per annum during 1982-86 compared with 1.9% during 1974-82, the impact on poverty was more positive. First, with the substantial increase in Food-for-Work and the Vulnerable Group Feeding Programs, more food became available to the poor. Second, there was a considerable increase in rural credit and inflow of other resources to the rural areas during this period, and real agricultural wages increased substantially; these were 20% higher in 1986 than in 1974, and for the first time regained their 1970 level. However, the current wage rate remains quite inadequate to support a family. And food availability and relative price data suggest that the nutrition problem continues to be as serious in 1986 as it was in 1982.
- Assuming no change in income distribution during 1982-86, the incidence of poverty would seem to have declined slightly--although the absolute number of poor has certainly risen (from about 67 million in 1982 to about 73 million in 1986, equivalent to about 60% of the increase in population during the period).
- Whether or not the recent improvements in real wages can be expected to continue is an open question. It is clear, however, that the increase in wages experienced during 1982-86 was not entirely due to increase in demand for labor. To a large extent, the upward movement in real wages would depend upon the magnitude of additional resources and the efficiency with which they can be channeled for productive purposes directly to the poor.

The 1974-82 Period

6.04 The vast majority of Bangladeshis are poor. However, some are desperately poor, unable even to provide for the most rudimentary of human needs. In assessing development progress, it is therefore important to analyze changes in welfare of both the population as a whole and of these especially vulnerable groups. For this purpose a poverty line is constructed.

6.05 The Poverty Line. Selecting a poverty line is inevitably arbitrary, but if used carefully can nonetheless provide a useful benchmark. In a very poor country such as Bangladesh, food consumption, as the most basic of human needs, is generally accepted as the most appropriate proxy for poverty; it continues to account for over 72% of all expenditures of the poorer half of the population. Two poverty lines have been constructed using the household expenditure surveys. They are expressed as the per capita expenditure levels at which certain threshold food intakes can be purchased.1/

6.06 The first (Poverty Line I) is defined by the minimum energy requirements as recommended by a joint WHO/FAO expert group for South Asia for each age group. Adjusting for the age and occupational profile of Bangladesh, the weighted average per capita daily intake is estimated at 2122 calories and 48 grams of protein.2/ The second (Poverty Line II) is defined as 85% of this intake.3/ It is therefore a useful approximation of the "hard-core" poor. The poverty lines are calculated on the basis of the bundle of food that was actually consumed by the poor. This is usually a low quality diet, so the estimated expenditure levels underestimate (by about a third) what would be required to obtain a truly balanced and nutritious diet.4/ Figure 6.1 shows

1/ The poverty line is defined in per capita terms rather than on a household basis as calorie requirements of households would vary, depending upon the size and the age structure of its members.

2/ The minimum calorie requirement of 2,122 is based on the population structure extrapolated from the 1981 census. It is 5% higher than the standard used by the Planning Commission (2,020 calories).

3/ Consumption below 90% of the WHO/FAO recommended energy levels results in an inability to lead an active working life. Consumption below 80% results in stunted growth and serious health risks. See e.g., Poverty and Hunger - Issues and Options for Food Security in Developing Countries; a World Bank Policy Study, 1986.

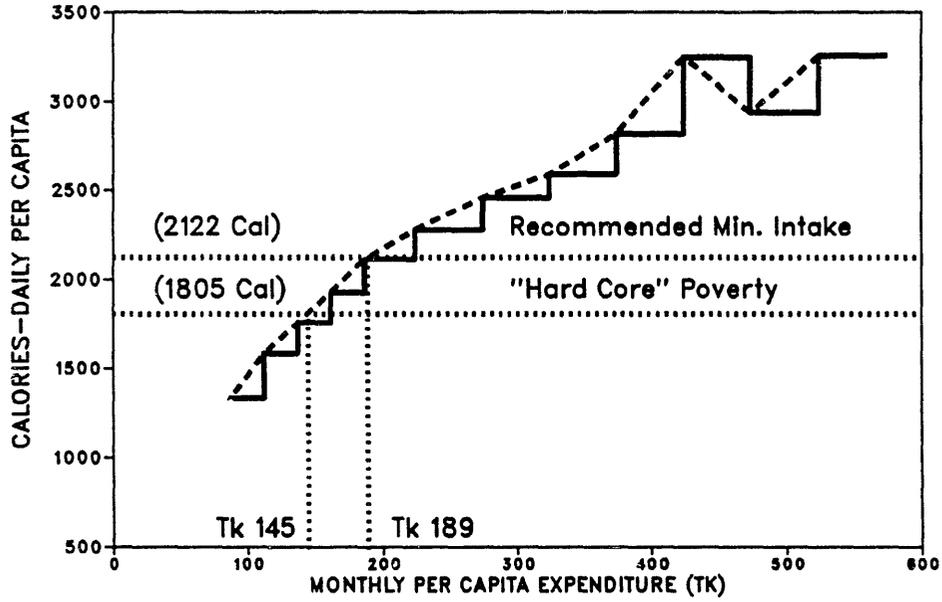
4/ For example, according to the 1981/82 HES, the average cost of 2,122 calories actually consumed by the poor cost about Tk 5.5, while the same amount of calories from a balanced diet recommended by nutrition experts would cost about Tk 8.3.

how nutritional intake rises with income, and Figure 6.2 shows the size of poverty groups in rural and urban areas.

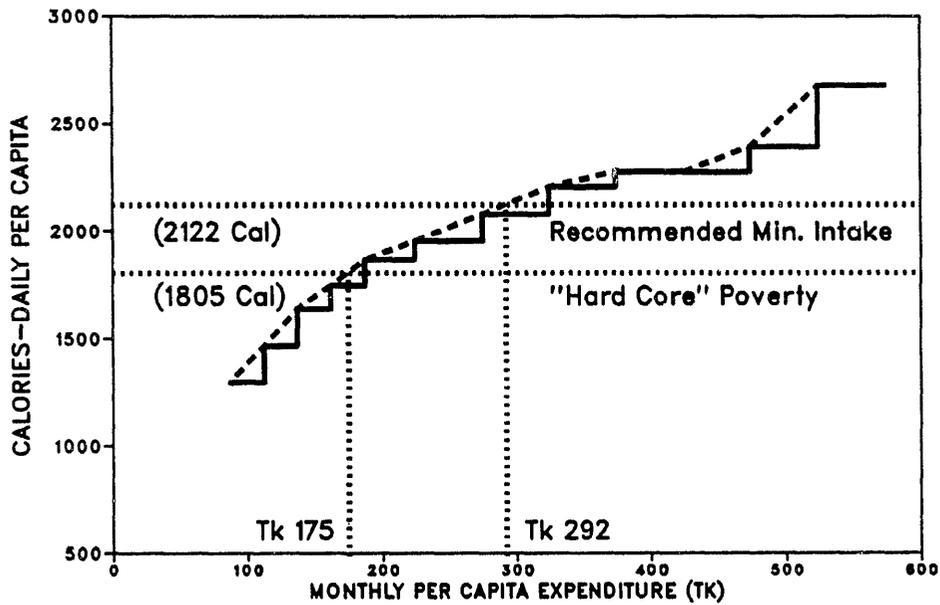
6.07 Nutritional Intake. Based on this analysis, Table 6.1 shows the number and the proportion of the population below Poverty Lines I and II. In FY74 over four-fifths of the population in both urban and rural areas consumed less than the recommended minimum calorie intake. The very poor accounted for 44% of the population in rural areas and about 29% in urban areas. The picture for FY82 is less clear, due to the changing composition of food basket over the period. If consumers had obtained the same quality of calories in FY82 as they did in FY74, poverty would have appeared to dramatically increase (see footnotes to the table); during the period the price of higher quality protein-rich foods rose at a rate 50% higher than foodgrains and potatoes. Consumers, both middle income and poor therefore, switched to a poorer diet; they were able to adjust their food basket to cheaper foodgrains and potatoes to maintain their calorie intake. Based on actual calorie intake in FY82, the proportion of the population consuming less than the recommended intake of 2,122 calories per day fell, although in absolute numbers there was an increase. Among the very poor, however, the situation became unambiguously worse. Even if the deterioration of the diet is ignored, the proportion of "hard core" poor rose from 44% to 52% in rural areas and from 29% to 31% in urban areas. Between 1974 and 1982 the number of "hard core" poor rose by over 12 million to 46 million. Over 90% of these lived in rural areas.

FIGURE 6.1 DAILY PER CAPITA CALORIC INTAKE BY EXPENDITURE GROUP IN FY82

A: RURAL AREAS

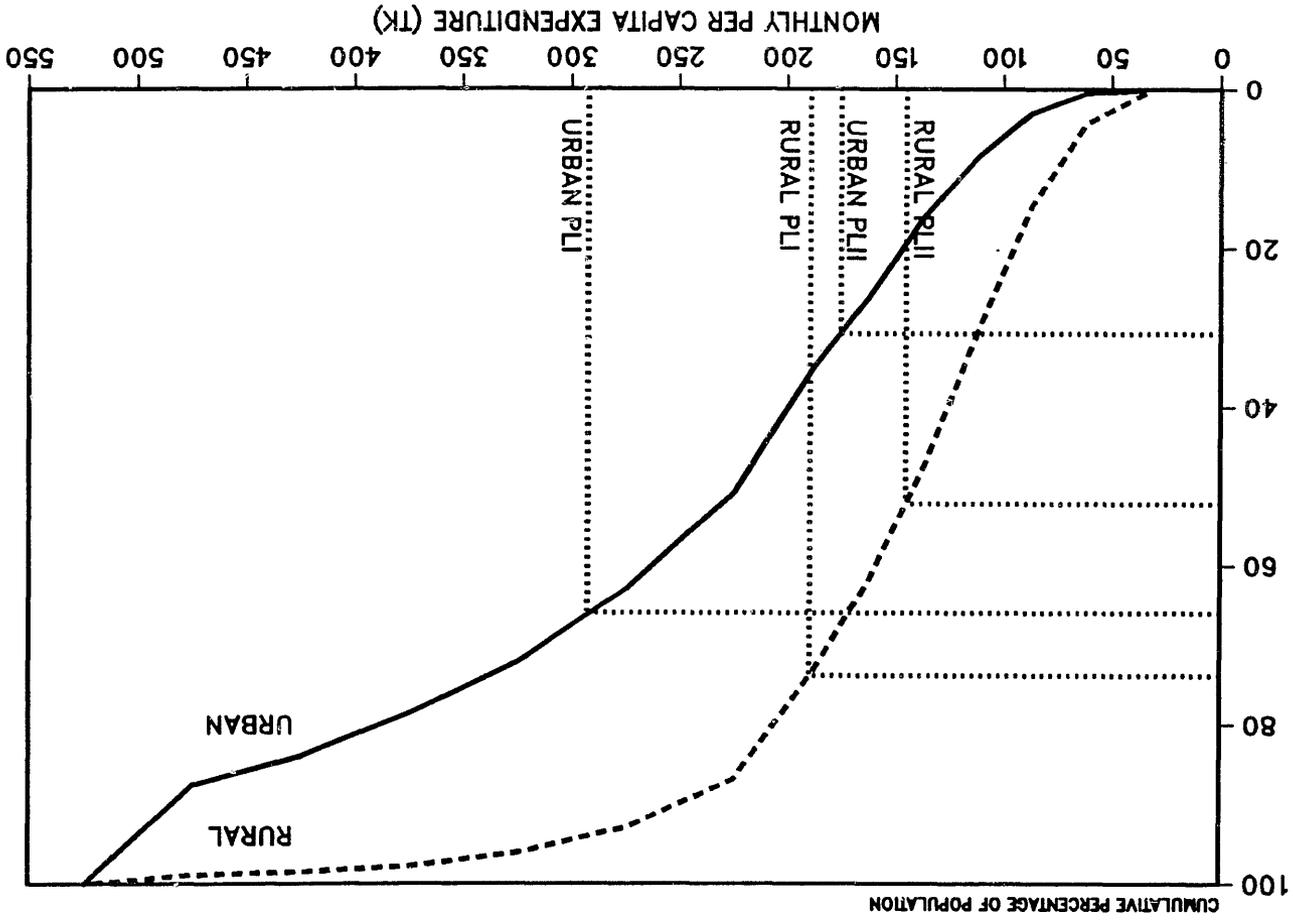


B: URBAN AREAS



Source: 1981-82 Household Expenditure Survey, BBS, August 1986.

FIGURE 6.2 INCIDENCE OF POVERTY - 1981/82



SOURCE: 1981-82 HOUSEHOLD EXPENDITURE SURVEY, BBS, AUGUST 1986

Table 6.1: DIMENSIONS OF POVERTY, FY74-FY82
Number and Proportion of Population Below Recommended
Calorie Intake and "Hard Core" Poverty Lines

	Poverty Line I Recommended Intake (2122 cal/day/person)		Poverty Line II "Hard Core" Poverty (1805 cal/day/person)	
	Rural	Urban	Rural	Urban
	- - - Absolute Number of Poor (millions) - - -			
FY74	57.4	5.6	30.7	2.0
FY82/ <u>a</u>	70.9	8.8	52.0	3.9
FY82/ <u>b</u>	60.9	6.4	43.1	3.0
	- - - Poor as Percentage of Total Population - - -			
FY74	82.9	81.4	44.3	28.6
FY82/ <u>a</u>	90.0	69.0	66.0	30.7
FY82/ <u>b</u>	73.8	66.0	52.2	30.7

/a Based on the pattern of consumption of the FY74 HES.

/b Based on the pattern of consumption of the FY82 HES.

Source: 1973/74 and 1981/82 Household Expenditure Surveys, BBS.

6.08 The deterioration in diet is illustrated by Table 6.2, showing changes in the per capita consumption of selected foods. The population on average was able to increase its consumption of carbohydrates--rice, wheat and potatoes--to compensate for declining consumption of protein pulses, milk, meat, fruit, etc. The poor were less able to make this adjustment. This was partly because they were already consuming a poor and cheap diet, and partly because their real incomes fell more rapidly than for the population as a whole. This is illustrated by the deteriorating income distribution shown in Table 6.3.

Table 6.2: CHANGES IN THE FOOD BASKET, SELECTED ITEMS, FOR THE TOTAL POPULATION AND THE POOR

	Per Capita Consumption FY82 (grams)				Percentage Change 1974-82			
	Total Population		The Poor/ ^a		Total Population		The Poor/ ^a	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Rice and Wheat	458.2	447.7	417.1	431.0	+ 5	+ 2	- 1	- 3
Potatoes	22.1	33.8	16.9	24.4	+138	+ 90	+162	+ 62
Pulses	12.0	18.6	9.2	14.1	- 40	- 2	- 47	- 19
Vegetables	129.8	149.1			+ 32	+ 31		
Milk	16.2	25.5	6.8	10.1	- 41	- 14	- 62	- 55
Fats	5.1	18.6			+ 3	+135		
Meat	1.9	9.1	0.8	3.6	- 41	+ 36	- 45	- 15
Chicken	2.0	3.9	0.5	0.9	+ 14	+ 91	- 79	- 56
Fish	26.9	35.0	19.9	23.6	- 5	+ 32	- 8	+ 4
Sugar/Gur	8.9	14.6	5.7	4.9	- 19	- 9	- 14	+ 46
Fruits	9.9	13.7			- 35	- 30		
Misc./ ^b	46.1	53.0			+109	+ 51		

^a Defined as those households consuming on average less than 2,122 calories per person per day (i.e., below Poverty Line I, accounting for 67 million people, or 74% of the rural population and 66% of the urban population in FY82).

^b Includes a large variety of cheap foods such as root crops, sweet potatoes, spices and prepared foods.

Source: 1973/74 and 1981/82 Household Expenditure Surveys.

Table 6.3: INCOME DISTRIBUTION, FY64, FY74 and FY82
(Proportion of Income Accruing to Each Income Group)

	Rural			Urban		
	FY64	FY74	FY82	FY64	FY74	FY82
Bottom 40%	19.6	19.1	18.8	16.7	17.8	16.1
Lower Middle 40%	38.4	38.4	38.8	33.8	38.0	36.6
Upper Middle 15%	24.8	26.5	25.6	28.4	26.6	27.0
Top 5%	17.2	16.0	16.8	21.1	18.6	20.9
	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Source: Household Expenditure Survey, 1981/82.

6.09 This deteriorating picture is supported by evidence from the nutrition surveys. During FY76 and FY82, average daily per capita calorie intake declined by over 7%, and the nutrition status of the poor deteriorated.^{1/} The FY82 survey indicated that the average consumption of the poorest one third of the population was only 1,500 calories per day; this is less than the critical minimum needed just to maintain body weight, implying that a substantial proportion of the population was unable to function normally. This occurred despite the fact that per capita food availability was rising (from 14.4 ounces per person/per day in FY77 to 15.9 ounces in FY82).

6.10 Nutrition surveys also showed a deteriorating food balance. Between FY77 and FY82 average per capita consumption of protein fell from 58.6 grams to 48 grams. By FY82, 77% of all households were deficient in protein consumption. Furthermore, most of the protein was derived from cereals and was not complemented with adequate quantities of higher quality protein from legumes and animal sources in order to ensure efficient metabolic consumption; less than 50% of the wheat and rice protein is metabolized when consumed alone. The poor consumed less than 25% of the estimated needs for higher quality protein. Average per capita consumption of fat declined by 38% since 1966, and its consumption among the poor is just 10% of the requirements (fats are essential for the absorption of vitamins). The calorie deficiency is further exacerbated by lack of micro-nutrients; nutritional anemia still affects an estimated 73% of children below 5 years of age, 74% of those aged 5-14 years, 60% of men and 74% of non-pregnant and

^{1/} Nutrition Surveys of 1975/76 and 1981/82; see also UNICEF Study of 1981.

non-nursing women.^{1/} Within families, children and women receive a less adequate diet than men, with serious effects on the health of children at birth and during the most critical period of their development. By the age of 4 years, almost half of the surviving children are physically stunted. Approximately 250,000 children die each year from malnutrition and dehydration linked to diarrheal infections, and about 20,000 become blind. Only 20% of the children born in a particular year become healthy, physically fit and fully productive citizens.^{2/}

The 1982-86 Period

6.11 Since 1982, there has been a slight improvement in at least some of the poverty indicators. In particular, wage laborers in rural areas, who constitute the large majority of the very poor, appear to be benefiting from some of the more positive trends.

^{1/} For a more detailed discussion of the 1982 Nutrition Survey, see Bangladesh: Food and Nutrition Sector Review, World Bank, January 1985, Report No. BD-4974.

^{2/} Chapter 9 discusses health and nutrition in more detail.

Table 6.4: TRENDS IN REAL WAGES BY SECTOR, 1969/70-1985/86
(Indices of Real Wage Rates; 1973/74=100)

	1969/70	1973/74	1981/82	1984/85	1985/86	1985/86 (Tk/day)
A. Rural						
Agriculture (unskilled without food)	113	100	88	104	120	29.5
Fishery (unskilled)	166	100	157	122	132	25.4
B. Urban /a						
Cotton Textile	186	100	107	106	116	28.7
Jute Textile	113	100	77	67	83	28.3
Engineering	194	100	97	102	130	36.4
Vegetable Oil	179	100	92	81	84	20.9
Small-Scale Industry	131	100	103	141	139	31.5
Construction	123	100	101	91	104	33.3

/a Average wage rates for Dhaka, Chittagong, Rajshahi and Khulna.

Note: Nominal wages deflated by rural and urban cost of living indices.

Source: Bangladesh Bureau of Statistics.

6.12 Real Wage Developments. The decline in real wages for unskilled laborers, which occurred steadily between 1970 and 1982 has halted, and appears to have been reversed. Table 6.4 shows that improvements have occurred in both rural and urban areas and broadly across sectors, although in some urban sectors (e.g., vegetable oil, jute, and textiles) real wages appear to have fallen. Gains in agricultural activities are especially impressive; for the first time real agricultural wages have regained their pre-Independence levels. If sustainable this is an important achievement, especially in view of the continued rapid (about 2.4% per year) growth of the rural labor force. Real agricultural wage levels and their rates of growth vary considerably by region in Bangladesh (see map at the end of the report). Differences in levels are generally related to the structure of agricultural production and the density of the working population. There is also some evidence that changes are related to the introduction of high yielding seed varieties (HYVs), increased fertilizer use and irrigation.

6.13 Food Availability and Prices. Progress in real wages has apparently not been matched by gains in nutrition. While, the availability of foodgrains has continued to rise and the calorie intake among the poor has probably not declined in the 1982-86 period, the deterioration in the quality of diet appears to have continued. While the average (weighted by

consumption) price of rice, wheat and potatoes rose by 8% per year during the period, protein-rich foods and vegetables each rose by 14% per year. Per capita availability of pulses, fish, chicken and eggs also appears to have declined.

Issues for the Future

6.14 Rising real incomes since 1982 have probably slightly reduced the incidence of poverty; but the absolute number of those consuming less than the recommended minimum calorie intake has almost certainly risen, probably by about 6 million, to 74 million.^{1/} In addition, even at its higher level, the unskilled daily wage rate of about Tk 30 (\$1) in 1986 could barely support a family of three for a day at the poverty-threshold consumption expenditure.^{2/} The average rural family size is over 5.7, and on an average a rural landless laborer can only obtain wage employment for about 185 days per year--115 days in crop production and 70 days in other allied activities; for the rest of the time he either remains unemployed or is engaged in other marginal and less remunerative activities.

6.15 It is access to income earning opportunities and purchasing power--even more than food availability or access to health and nutrition facilities--that will determine whether or not the "hard core" poor are to improve their lot in the coming years.^{3/} In this regard, the recent upward trends in real wages are, despite all the caveats noted above, most encouraging. But whether they are due to underlying developments in the economy that can be expected to continue, or whether to special considerations peculiar to the last few years, remains an open question.

6.16 The Causes of Higher Real Wages. Labor demand in agriculture has grown moderately over recent years but cannot explain rising real wages. The

^{1/} Based on the assumption of unchanged income distribution, and 2.4% per year population growth.

^{2/} Based on the expenditure pattern of the 1981/82 HES, the minimum recommended daily calorie intake requires daily total expenditure of Tk 9 per capita in rural areas and Tk 14 in urban areas in mid-1986. It should also be noted that the documented wages are generally higher than average wages in agriculture. Most labor is still undertaken within the "patron-client" relationship, whereby a landless or near-landless laborer enjoys priority access to paid labor by his patron with whom he has other relationships--credit, sharecropping, or contiguous land. The price of this preferential access is a lower wage.

^{3/} See Poverty and Hunger - Issues and Options for Food Security in Developing Countries; a World Bank Policy Study, 1986, for an elaboration of this theme.

introduction of HYVs, fertilizer and irrigation has, as was seen in Chapter 3 (Table 3.1), significantly added to labor demand. Switching from traditional to modern (HYV) farming of rice raises the average per hectare labor requirement (mandays) from 125 to 163 for the aman crop, from 143 to 298 for the aus crop and from 207 to 242 for the boro crop.^{1/} Studies indicate that on average the demand for labor in crop production rises at a rate about half that of the growth in production. Over the 1982-86 period, therefore, the labor demand in agriculture rose by about 1.5% per year. This is about the same as in the 1974-82 period when the rural labor force was also growing at about the same rate (2.4% per year), but when real wages fell. An additional explanation is therefore required for the later period.

6.17 Special programs which have benefited the poor directly have probably played an important role. For example, allocations of wheat in the Food-for-Work Program increased from 372,000 tons in FY82 to 500,000 tons in FY86, implying an increase of 38 million days of work. And allocations for the Vulnerable Group Feeding Program increased from only 39,000 tons in FY82 to 172,000 tons in FY86, implying an increase in payment to women for nearly 55 million days at Tk 12 per day. Other infrastructure programs have also been important. For example, allocations for construction of upazila headquarters and new development grants to Upazilas amounted to Tk 3.4 billion in FY84, Tk 4.2 billion in FY85, and Tk 4.3 billion in FY86; rough estimates show that these additional expenditures beginning in FY84 had the potential of creating 75 to 85 million days of new employment. In addition, construction of rural infrastructure was intensified in several areas during FY82-85, and rural credit increased substantially and became more widely available.

6.18 Socio-economic developments may also have influenced the rising trend in rural wages. First, migration to urban areas may have increased over the last five years resulting in a reduction in some areas of the supply of able-bodied men. And second, there is evidence that the traditional rural power structure is beginning to change. A large proportion of the Union Parishad leadership has been elected for the first time, and the new leaders are generally young. The younger rural elite are more commercially oriented, and they often tend to disregard the social safety-net concept of traditional patron-client relationships. In addition, a number of programs have been initiated (such as those of the Grameen Bank and many other NGOs) in parts of the country which organize the poor into groups, and offer credit at reasonable rates; these are creating solidarity among the poor, improving their bargaining position, and making possible alternative income earning opportunities. Furthermore, many poor who are able to benefit from increasing activities of the Food-for-Work and Vulnerable Group Feeding Programs, apparently no longer approach the local leadership and the rural elite for

^{1/} See for example Mahabub Hossain: Technological Change and Factor Productivity in Bangladesh Agriculture, International Food Policy Research Institute, September 1986.

relief. Thus, while millions of poor families still remain dependent upon the rural elite, there appear to be forces on both sides of the equation which are gradually weakening the traditional patron-client relationship system. This will allow wages to be increasingly determined by supply and demand factors, which may result in a higher wage for the laborer. On the other hand, it will also weaken an integral source of security in rural areas.^{1/}

6.19 The Outlook for the Future. As discussed in Chapter 3, there is good scope for robust growth in the agricultural sector; regaining its momentum is an urgent challenge. However, agricultural growth will not directly benefit a large majority of the poor--the increasing number of landless and near landless laborers. As is seen in Table 6.5, the fragmentation of agricultural land has accelerated in recent years. According to the Agricultural Censuses, the number of farms of less than 1.0 acre rose from less than 1 million in 1977 to over 4 million in 1984. There are now over 10 million farms in Bangladesh, of which one quarter are less than half an acre in size. The average size of farm has fallen from 3.5 acres in 1977 to below 2.3 acres today.

^{1/} For a detailed analysis of the new phenomenon, see Atiur Rahman, Impact of Grameen Bank Interventions on the Rural Power Structure, BIDS, July 1986.

Table 6.5: DISTRIBUTION OF AGRICULTURAL HOLDINGS, 1960-1984

<u>Size of Farms</u> (acres)	<u>Percent of all Holdings</u>			<u>Percent of all Land Operated</u>			<u>% Change in Total Area</u>
	1960	1977	1984	1960	1977	1984	1977-1984
less than 1.0	24.3	15.9	40.5	3.2	2.6	7.8	+205
1.0 - 2.5	27.3	33.9	29.9	13.0	16.1	21.2	+ 36
2.5 - 5.0	26.3	29.2	17.9	26.4	29.2	27.4	- 3
5.0 - 7.5	11.4	11.6	6.7	19.3	19.7	17.6	- 8
7.5 and above	10.7	9.5	4.9	38.1	32.4	25.9	- 17
All Holdings	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	
<u>Memorandum Items</u>							
<u>Number of Farms</u> (million)	6.139	6.257	10.045				
<u>Cultivated Area</u> (m acres)	21.726	21.95	22.678				
<u>Population (m)</u>	50.0	81.4	97.1				

Source: Bangladesh Census of Agriculture and Livestock, 1983-84, BBS, May 1986, and earlier censuses.

6.20 A reduction in farm size generally results in an increase in labor input per acre, so this might sound like good news to the underemployed. But the smaller the farm the less likely that hired labor will be required. This is illustrated in Table 6.6. While total labor use in farms under 2 acres is 17% higher than in larger farms, the use of hired labor is 33% lower. While farms over 5 acres rely on hired labor for 58% of their entire labor needs, farms below 2 acres use hired labor for only 33% of their needs. Smaller farms below 1 acre generally need almost no hired labor at all.

Table 6.6: THE PATTERN OF LABOR USE BY SIZE OF FARMS, 1982

Size Group (acres)	Labor Days Per Household			Labor Days Per Acre of Cropped Land			Use of Hired Labor (percent)
	Family	Hired	Total	Family	Hired	Total	
	Labor	Labor	Labor	Labor	Labor	Labor	
Small owner (up to 2.0)	68.7	33.7	102.4	37.6	18.5	56.1	32.9
Medium owner (2.01-5.0)	114.0	82.3	196.3	29.5	21.3	50.8	41.9
Large owner (5.01 and above)	159.4	218.3	377.7	20.3	27.8	48.1	57.8
All Farm Households	96.6	76.2	172.8	28.7	22.6	51.3	44.1

Source: IFPRI/BIDS. Study on the Development Impact of Food for Works Program, Bangladesh (Washington, D.C.: 1985), cited in Raisuddin Ahmed, A Structural Perspective of Farm and Non-Farm Households in Bangladesh, draft, August 1986.

6.21 A recent study has projected these developments in the future.^{1/} Based upon demographic and economic trends, the number of farms is projected to grow from 10 million in 1983 to over 15 million in 2006. Eighty-three percent of these would be under 2.5 acres (in comparison with about 70% today) and the average farm size would fall from 2.3 acres to 1.5 acres. Over 23 million additional people would become dependent on rural non-farm activities or would be forced to migrate to the cities. This is potentially a disastrous situation for landless laborers and for very small farmers, whose farms provide only supplementary income to laboring activities and yet prevent their mobility to urban and other rural areas where job opportunities might be more plentiful. The promotion of economic and employment opportunities, and access to resources by these disadvantaged people must therefore have the highest priority. This is the theme of the next chapter.

^{1/} Raisuddin Ahmed; A Structural Perspective of Farm and Non-Farm Households in Bangladesh; International Food Policy Research Institute, draft, August 1986.

Chapter 7: PROMOTING INCOME EARNING OPPORTUNITIES AMONG THE POOR

7.01 Even a high GDP growth rate of over 5% per year will be insufficient to productively employ all new entrants to the labor force in the coming years.^{1/} Probably only about two-thirds of the 1.3 million annual increase in the labor force could be employed at current real wages under the High Case growth under the present production structure; agriculture would probably absorb about 25% of new entrants to the labor force, industry, 7-8%, and infrastructure and services, about 33%. The remainder would involve themselves in marginal activities, swelling the ranks of the very poor, with no access to resources and no hope of improvement. Special targeted efforts to help the assetless and near assetless are therefore an essential complement to sound macroeconomic and incentive policies.

7.02 Experience in many developing countries suggests that without special attention, government programs fail to reach the very poor and can even be detrimental. In attempting to promote rural development, government agencies usually benefit primarily the better-off rural dwellers. The very poor own no land and therefore can benefit only indirectly from the primary rural development effort--crop production. The assetless are generally illiterate and lack skills and financial resources to take advantage of productive opportunities as they might arise. Almost inevitably, therefore, the existing rural power structure manages to usurp the benefits of poverty programs for themselves, sometimes with negative effects on the poor. Bangladesh is no exception to this common occurrence.^{2/}

7.03 The Government has for some time recognized the need for special targeted programs. Poverty-oriented programs have been implemented by a number of agencies including the Bangladesh Rural Development Board (BRDB), the Bangladesh Cottage and Small Industries Corporation (BCSIC), and rural works and Food-for-Work Programs. In some instances good progress has been made. But the efficiency of programs could be improved and the scale of the unmet needs is enormous. Programs have generally not been constrained by

^{1/} Over the coming decade, about 55% of the increased labor force will be in rural areas and 45% in urban areas.

^{2/} For example, the Administrative Reorganization Committee Report of 1982 notes that "Social reorganization of economic development has always been impeded owing to the existence of powerful vested interest groups who, in collusion with or under patronage of some government functionaries and political forces, have usurped for themselves the benefits of whatever resources that might be available." These observations were based on a 1981 study conducted by the National Institute of Public Administration, and extensive interviews with officials and others in the field. See also the Second Five Year Plan, Chapter XII.

a lack of funds, but instead by policy and institutional factors, including weak implementation capacity due primarily to poorly trained and motivated manpower. As a result, their coverage has been narrow in relation to both the need and to the resources already available for such programs.

7.04 These concerns are shared by both Government and donors, and the last year has witnessed important initiatives in this area. For example, following a joint Government-Aid Group Seminar on the North-South Institute Report on Rural Poverty in Bangladesh,^{1/} six sub-groups of the Local Consultative Group (LCG) have been established to identify issues and make recommendations in the fields of: (a) rural credit, (b) non-governmental organizations (NGOs) in rural development, (c) the cooperative system, (d) rural employment, (e) rural infrastructure, and (f) the Food-for-Work Program (FWP). In addition "Poverty Alleviation and Employment" was the theme of a special working level Bangladesh Aid Group meeting held in Bonn in November 1986. While the findings of some of the studies and discussions have not yet been translated into a coherent set of policies and programs, some conclusions are already clear. This chapter draws upon these preliminary conclusions.

7.05 There are essentially three ways in which targeted programs can provide employment opportunities for the assetless and near assetless. First, opportunities for self-employment can be created through group formation and the provision of skills training, credit and technology. Second employment can be directly generated by labor intensive physical infrastructure programs, and especially the Food-for-Work Programs. And third, assistance can be provided to existing informal micro-enterprises, whose expansion is constrained by lack of access to formal support services. Sections I, II and III of this chapter review progress and issues in each of these three areas. Finally, Section IV, discusses some systemic institutional issues common to many programs, and suggests ways in which policy coordination and program implementation might be improved.

^{1/} North-South Institute: Rural Poverty in Bangladesh - A Report to the Like-Minded Group, April 1985. Additional references on the characteristics of poverty in Bangladesh and on poverty programs include the Government's Third Five Year Plan, December 1985; World Bank, Bangladesh: Selected Issues in Rural Employment, March 1983 (Report No. 4292-BD), and Employment Opportunities for the Rural Poor - A Feasibility Report, February 1985 (Report No. 6035-BD); and over a dozen studies published by the Bangladesh Institute of Development Studies (BIDS).

I. PROMOTING SELF-EMPLOYMENT AMONG THE ASSETLESS 1/

7.06 The landless and near landless are traditionally unable to share in opportunities for advancement precisely because they are poor. By definition they are unable to provide collateral for bank loans and they lack the skills, information and market access to take advantage of productive opportunities. Experience suggests that for assisting the poor it is necessary that first, individuals be organized into groups based on socio-economic homogeneity and common interest, and second, credit, skill training and market information be made available. This is a complex endeavor requiring a skilled, motivated and unconstrained intermediary.

7.07 Group Formation and the Cooperative System. The Government has promoted group formation through the cooperative movement. The Comilla model, a two-tier cooperative system, continues to be the dominant institutional mechanism to reach the rural poor, both for agricultural development and non-farm employment generation.^{2/} This approach has undoubtedly made a substantial contribution to rural development. Cooperatives have been particularly successful in distributing large numbers of minor irrigation equipment.^{3/} However, with the expansion of the program, the Comilla model has become an adjunct of the bureaucracy, and cooperatives are frequently imposed involuntarily from above for ease of providing inputs, in many cases at the instance of interested rural elite who then manage to appropriate benefits for themselves. Such cooperatives are thus no longer free private associations or enterprises, reflecting commonality of interest and participation by all members. These two factors--the expropriation of cooperatives by the local elite, and the lack of a sense of "ownership" on the part of members--have in many instances, led to a deterioration of teamwork and discipline. Credit recovery in the cooperative system currently stands at

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- 1/ Though self-employment generally pertains to single owner operations, for the purposes of this chapter it is taken to include small group ownership and group operations where all involved persons are simultaneously part-owners and workers performing management, production and trading functions themselves as in production cooperatives or in small informal groups.
- 2/ The Cooperative Department which performs regulatory functions of registration, audit, inspection, and enquiry, also promotes traditional and professional cooperatives such as weavers, fishermen, rickshaw pullers and sugarcane growers; these have made a positive contribution to employment. However, the Comilla model which requires the federation of village level primary cooperatives into a Central Cooperative Association at the upazila level has become the dominant approach.
- 3/ About 45% of shallow tubewells and 70% of new deep tubewells installed in the country have been purchased and are operated by cooperatives.

about 50%, and while this rate is higher than on loans to individual larger borrowers, the situation has deteriorated to the extent that 25% of the cooperatives are no longer eligible for credit.

7.08 The Bangladesh Rural Development Board (BRDB) is the main government agency to implement the two-tier cooperative structure. In addition to its original objective of facilitating new technology for increasing crop production, BRDB has also been given the responsibility of organizing special cooperatives of assetless men and women, and the complementary services for assisting production in non-crop sectors. It is currently assisting about 2.4 million members of farmers cooperatives (KSS), 350,000 members of cooperatives for resourceless people (BSS) and 280,000 members of women's cooperatives (MSS). This is an enormous responsibility requiring a highly efficient organization. However, its expansion has been so rapid that it has not managed to ensure that the calibre and motivation of staff are commensurate with the complexity of the task. Efforts are underway to redress this situation through management development, staff training, information systems and skills training; but progress has been mixed.

7.09 Furthermore, frequent changes in the leadership of the BRDB have hindered institutional growth and the development of implementation capacity, and field staff often lack orientation and skills appropriate to the needs of the rural poor. As a large public organization, BRDB's orientation inevitably tends to be that of a control and administrative bureaucracy rather than a promotional catalyst. For the same reason, it is very difficult to maintain the flexibility that is required to respond to the complex and changing conditions in rural areas. Furthermore, it lacks an effective monitoring and evaluation mechanism which would permit lessons of experience to be incorporated into policy changes and implementation procedures. Some of these problems seem to stem from its new responsibilities towards rural non-farm programs; these may have over-burdened BRDB to the extent that its original objectives of promoting farming cooperatives and agricultural growth are beginning to suffer.

7.10 In view of these concerns, the working-level meeting of donors and Government in Bonn recommended that a review of the cooperative system be undertaken with the purpose of i) evaluating the cooperative models in place (and more specifically the Comilla model) as a means to effectively reach the assetless; ii) assessing the institutions responsible for implementing and monitoring the cooperative system, particularly the BRDB; and iii) developing alternative solutions to effectively reach the assetless and to better respond to their specific needs and interests.^{1/}

^{1/} A recent survey of the cooperative system found it to be in "disarray", and recommended a program of work for a more detailed review leading to recommendations for reform. See "The Cooperative System in Bangladesh - A Brief Description and a Proposal for a Review", DANIDA, December 1986.

7.11 Providing Credit to the Poor. The question of whether the poor can be made "bankable" without creating more problems for the already troubled banking system is important and difficult. Though evidence is accumulating that in fact the poor can be an excellent credit risk, even in the absence of collateral, the operational costs of providing credit in very small amounts that the poor need are high. The commercial banks cannot afford to meet the needs of the poor at prevailing interest rates of around 18%. Evaluations of both the Grameen Bank (GB) and the Bangladesh Rural Advancement Committee (BRAC) schemes suggest that landless groups are able to undertake profitable activities and repay loans within a short time even at interest rates of 21% (GB) and up to 30% (BRAC).^{1/} Both of these models are based on group guarantees and flexible repayment plans; in both cases, repayment rates are over 95%. Studies show that under both schemes, participants increased their household incomes by over 70% in a two-year period, and net earnings of participants from activities financed were between 75-100% of the borrowed funds. Similar positive results were found under the USAID Rural Finance Experiment Project (RFEP) which charged interest rates of up to 36% p.a. without adverse effects on the demand for credit or to repayment rates.^{2/} The RFEP concluded that interest rates of between 24-30% p.a. were the most appropriate to the rural economy in view of the costs of delivering credit and borrowers' ability and willingness to pay.

7.12 If lending to assetless groups is to be expanded significantly, such lending would need to be made profitable and safe for rural branches of commercial banks. While a number of projects have been able to demonstrate that the poor were a better credit risk than more conventional borrowers, this has not been sufficient to prompt commercial banks to become actively involved themselves. They are reluctant to undertake seemingly costly operations of administering a small loans portfolio involving numerous borrowers. Adequate margins must be provided, and experience suggests that in order to limit the lending costs and risks of the banks, specialized intermediaries will be required to disburse, supervise and collect credit; this was the role of the Grameen Bank in its initial project. The development of efficient intermediaries between the poor and the formal banking system seems necessary for providing credit needs of the poor. The success of such intermediaries would depend upon a cadre of well-trained and committed workers (whether employed by NGOs or public agencies like BRDB) who perform multiple functions

1/ See for example Mahabub Hussain, Credit for Alleviation of Rural Poverty: The Experience of Grameen Bank in Bangladesh; Bangladesh Institute for Development Studies, Dhaka, and International Food Policy Research Institute; Washington, D.C., September 1986.

2/ Even interest rates of this level are attractive to the poor since often their only alternative is to borrow from traditional money lenders at 10% per month or more.

of assisting the poor in their productive activities, and in monitoring and supervising credit repayments. Experience shows that the poor have the capacity and willingness to pay for such services.

7.13 Market Demand and Appropriate Technology. Opportunities for profitable enterprise through provision of credit and improved productivity on the part of groups of poor and only semi-literate rural dwellers are plentiful. Limited effective demand, however, is as much a constraint on employment creation as are supply conditions, and care must be taken in assessing the viability of any project, however small.^{1/} In many instances, the poor themselves will be the most competent to make an assessment of demand potential in their own locality, especially for traditional products. But extension workers should be able to give advice on what has proven successful elsewhere and on quality improvements that would be required in order to make products attractive outside the immediate vicinity and even for export.^{2/}

7.14 Simple and appropriate technology development must also be coordinated and disseminated. Bangladesh has built up a network of research centers and agencies (both Government and non-Government), but so far the emphasis has been either on crop production or on larger-scale urban industrial production. A number of NGOs have achieved some success in improving technologies for existing artisan enterprises as well as adapting technologies in the production of new products such as jute reinforced roofing sheets, treadle pumps, neem soap, sunflower oil and handmade paper, based on locally available resources. However, NGOs do not have enough technological expertise or resources to carry out such work intensively. The Grameen Bank and BRAC are now developing their own technology units. While these units will play an important role in identifying and disseminating appropriate technologies for their clients, there is currently no agency that coordinates the research and dissemination effort. It would be useful to identify or establish a national institute which has the technical interests of poverty oriented self-employment programs specifically included in its work program.

7.15 The Institute of Appropriate Technology (IAT) would be a good candidate. It has a stated interest in working on applied technology in rural areas, and it is relatively new, with no vested interest in any par-

^{1/} There is, however, a danger of overemphasizing the demand constraint even in extremely low income areas such as rural Bangladesh. Rapid price increases over recent years of such products as fish, meat, pulses, hide, skins and milk, even when production has not fallen markedly, suggest that demand may be more buoyant than often believed.

^{2/} Potential export goods could include leather, handloom products, silk, rabbits, frog legs, duck feathers, etc.

ticular area of technology nor staff who may prove to be inappropriate to the task. It has already proved its ability to come to grips with technology problems of the rural landless by working, for example, on the problem of improving gur technology for BCSIC. In addition, it is well placed in the Bangladesh University of Engineering and Technology (BUET) to influence students and technologists towards the needs of the rural landless. However, IAT would need to start in a modest way, working initially with a few selected projects, and making appropriate links with similar institutes in other countries, so as to build both experience and creditability. Over time it could begin to coordinate the work being done in other Bangladeshi research institutes.^{1/}

7.16 Skills Training. Two forms of training have been found essential to the successful development of rural income-earning opportunities. First, guidance is required on simple technologies and especially on the scope for activities complementary to traditional agriculture-based goods--for example, those based on fish, milk and meat preservation, leather manufacture, animal feed preparation, and the production of simple capital goods such as fish smoking ovens, bamboo fish cages and fish nets. Second, simple functional skills such as rudimentary literacy and numeracy are essential both to enable sound decision-making and to prevent exploitation by more powerful groups.

7.17 Very little of this type of functional training is currently being provided to the non-schooled and assetless poor. However, some important initiatives have recently been taken, especially by NGOs. BRAC, for example, has developed a promising system combining group formation, and training in practical skills and in functional literacy and numeracy and other NGOs such as PROSHIKA and Nijra Kori have adopted a similar methodology. Success is mixed, but encouraging. Those providing services to the landless groups also require training. Facilitators, extension workers and even elected local officials need to be given an in-depth knowledge of the problems of the poor, and trainers need to acquire communication skills and to develop flexibility to base the level of instruction according to the learner's knowledge and capacity. While there are a large number of training institutes in Bangladesh, they are not yet oriented towards this type of need. Much can be learned from the ongoing NGO programs. The BRAC approach in particular could be reviewed to assess the extent to which it can be replicated. At the same time capacity for appropriate training in the rural development institutes needs to be reassessed and links between the various government training institutes and the rural poor programs established.

^{1/} Suggestions on how IAT might be helped to start operating were outlined in Annex III of Employment Opportunities for the Rural Poor - A Feasibility Report, World Bank (Report No. 6035-BD), February 11, 1985.

II. INFRASTRUCTURE PROGRAMS FOR EMPLOYMENT CREATION

7.18 Investment in simple rural infrastructure has a high rate of return in Bangladesh.^{1/} A number of innovative and important programs are now seeking to provide employment opportunities for the poor in the construction stage, while creating economically justified infrastructure in rural areas. Included here are the Rural Employment Sector Project (SIDA), the Road Maintenance Program (USAID, CIDA, CARE, WFP and DANIDA), and the Food for Work Program (FWP).

7.19 By far the largest of these is the Food for Work Program. The allocation of food to FWP has increased almost 12 fold over the last decade, reaching 500,000 tons ^{2/} in FY86, equivalent to about \$114 million.^{3/} As the single most important resource for rural infrastructure development, the FWP now generates annually nearly 100 million workdays of employment for workers who would otherwise be unemployed. Recent evaluation studies suggest that if FWP projects are well selected, designed, implemented and maintained, the program can have a far reaching impact both through its direct employment effects, but also indirectly through the provision of infrastructure and in demand creation in rural areas.^{4/} Continued but cautious expansion is warranted in the coming years.

7.20 Notwithstanding its success there are causes for concern and new directions that must be taken especially if the programs are to continue to grow. A recent review by the World Food Program noted a number of related factors currently preventing the program from achieving its full benefits. First, food aid tends to be considered less valuable than cash aid; less concern is therefore shown in the efficiency of its allocation, and appropriate technical and managerial capacity for project implementation has often not been established. Second, perhaps for the same reason, the programs have not been integrated within local development efforts. FWP projects are not considered as an integral part of the local investment program. As a result, counterpart cash inputs required to make assets fully usable--such as for bridges and culverts--are inadequately provided, and cash

^{1/} For an analysis of direct and indirect benefits of rural infrastructure see Raisuddin Ahmed, The Role of Infrastructure in Rural Development: The Case of Bangladesh; International Food Policy Research Institute, Washington, September 1986.

^{2/} This includes about 100,000 tons allocated for "Relief."

^{3/} Valued at average retail price for wheat.

^{4/} See for example, Development Impact of Food for Work Program in Bangladesh, Bangladesh Institute of Development Studies (BIDS) and the International Food Policy Research Institute (IFPRI), December 1985.

allocations for maintenance are grossly inadequate. And third, the lack of effective monitoring mechanisms has led to frequent over-estimation of work done and under-payment of food to workers. The employment potential has therefore not been fully realized and assets created have not been as productive as they might have been.

7.21 Government and food aid donors are agreed that some diversification away from the traditional rural road programs will be required if the programs are to be productively expanded. In some parts of the country, the rural road network is already sufficient (at least in density if not in quality), and efforts are being made to explore new directions.^{1/} Two new initiatives are worthy of note. First, the focus of the Vulnerable Group Feeding (VGF) Program is moving away from that of providing only food towards providing skills training with the hope that beneficiaries over time will become less dependent. This program is still new--a WFP survey in 1985 indicated that only 7% of the VGF beneficiaries received any training--but is being intensified. Second, FWP projects are being coordinated with other aid programs. For example some IDA and CIDA assisted projects provide funds for construction of appurtenant structures on FWP schemes sponsored by the Bangladesh Water Development Board (BWDB). And West German and USAID/Care programs allocate a part of their food aid to finance structures on FWP schemes assisted by them.

7.22 As the FWP continues to diversify into new activities such as irrigation works, social forestry, fisheries and the construction of schools and markets, it is more important than ever that these programs be coordinated with other local activities such as those financed by the Upazila Development Grant and other ADP-financed projects at the local level. This will require a higher priority to developing planning, technical and implementation capacity at the upazila level and a monitoring mechanism at the district and the national levels.

7.23 Finally, as the weak bargaining position of the beneficiaries of these programs contributes to a large extent to over-estimation of work done and under-payment of benefits, it is desirable that new forms of organization of the beneficiaries, such as cooperative and/or NGO assisted informal groups be encouraged; such groups can become instrumental in local level monitoring, thus reducing misappropriation of resources.

^{1/} This is not to imply that investment in rural roads is not economically attractive. Returns, especially in road rehabilitation have been very high. A recent analysis found the internal rate of return (IRR) in rural feeder roads to average 46%--a rate 3 to 4 times as high as IRRs generally recorded for projects in Bangladesh. See: Omar Chowdhury and Mahabub Hossain, Roads and Development - A Case Study of Return on Investment in Rural Roads in Bangladesh; Bangladesh Unnayan Parishad, Dhaka, 1985.

III. ASSISTING THE URBAN INFORMAL SECTOR

7.24 Providing support to existing micro-enterprises is the third strand in the strategy to promote employment opportunities among the poor. Although strictly speaking the owners of these tiny enterprises are not "assetless," since they usually possess a small amount of rudimentary capital equipment, they exhibit similar characteristics, operating in a subsistence manner and unable to generate surpluses sufficient for capital expansion or growth.

7.25 They are part of the "informal" sector in the sense that they generally operate without any dealing with or support from formal institutions or programs. The vast majority have no access to formal credit or government assistance programs and operate without any form of license. Their prospects for improving productivity and income for self-sustaining growth are limited by unassured supply of quality raw materials, inadequate infrastructural facilities, and by their continued use of simple, but obsolete technologies; these constraints restrict the quality and markets of their products.

7.26 However, even without support, the urban informal sector remains the fastest growing part of the economy. Regardless of policies followed, micro-enterprises continue to multiply, spurred by continued migration to urban areas coupled with the necessary resourcefulness of the new arrivals. In 1985 there were about 28,000 small scale enterprises, employing about 380,000 persons, and about 370,000 cottage industries, employing about one million. In addition, there were 320,000 handlooms, producing nearly 60% of the cloth requirements of the country and giving direct employment to over 1.2 million people. Nearly one-half of total industrial production in Bangladesh comes from these units and they account for two-thirds of total urban employment.

7.27 However, while these enterprises proliferate, they are generally unable to grow and prosper. Potentially, they are among the most powerful forces for development in the economy but lack of access to resources and knowledge has so far prevented the realization of this potential. The modernization of informal sector micro-enterprises require both financial and non-financial assistance; they need credit both for working capital and for financing replacement of old and obsolete equipment, and they need training in planning, accountancy, procurement and marketing. They also need access to quality raw materials and to improved technology.

7.28 Assisting these enterprises is not easy. They are numerous, have diverse needs, and are widely dispersed in urban and semi-urban areas. The Government has sought to provide inputs and advice through three institutions--the Bangladesh Small and Cottage Industries Corporation (BSCIC), the Bangladesh Handloom Board (BHB) and the Bangladesh Sericulture Board (BSB). However, the capacity of these institutions to reach their numerous potential clients is limited, and their performance has been below expectation. The vast majority of enterprises have remained outside these

programs. There is a need to review the objectives, operations, staffing and resources of these institutions, in order to make them effective in their special areas of interest.

7.29 In addition, it is desirable to identify other target groups which are profitable, yet in need of support for expansion. Roadside metal fabrication and engineering workshops are possible candidates. As in the case of the landless groups, it will probably be necessary for an intermediary--preferably non-governmental--to coordinate and guarantee credit while providing training and advice. Above all, it is necessary that the Government seek to foster a change of attitude on the part of city administrators and bureaucrats towards the informal sector in order to create a more sympathetic environment. Towards this end, a review of licensing and registration policy is desirable.^{1/} Easy access to licenses could relieve small entrepreneurs from their major worry of eviction.

IV. STRENGTHENING INSTITUTIONS FOR EMPLOYMENT PROMOTION

7.30 The task of promoting economic opportunities among the poor is a complex one. Required are not only technical and logistical skills, but also a level of commitment and an understanding of local conditions that would be rare in any central government bureaucracy. The task is much too large for any one agency and the implementation problems presently confronting BRDB indicate that this institution may have been overburdened. Small rural poor programs are implemented by other government agencies such as the Ministries of Social Welfare and Women's Affairs, Labor and Manpower, Youth and Sports, and Health and Population, but these programs comprise a small part of the ministries' activities and sometimes suffer from neglect. Lack of technical and administrative capacity prevents their significant expansion.

7.31 The recent decentralization initiative offers an important opportunity to focus additional resources at the local level and can potentially overcome many of the difficulties that have traditionally plagued rural development efforts--including a lack of coordination of field activities, lack of popular participation in the development process and a lack of response to local needs. The Upazila Parishads have been given a wide range of development responsibilities and financial resources. They are expected to plan and implement schemes of local importance, including rural works and food for work programs, and to implement "divisible" components of selected ADP projects such as agricultural extension, fisheries, livestock, population and health, water supply and rural roads and markets. In view of these responsibilities and the limited capacity of management and staff at the

^{1/} In this regard, the progressive restrictions being placed on rickshaws, while easing traffic congestion for those able to afford motorized transport, is likely to have deleterious effects on employment and could be reconsidered.

local level,^{1/} it will not be possible for local Governments to play an active role in implementing innovative programs for promoting self-employment among the assetless. They must coordinate support and facilitate such efforts, but must for the most part rely on other agencies for the day-to-day implementation. In this regard, their working relationships with the NGOs must be strengthened.

7.32 The mechanism by which the Upazila Government can support these initiatives is not yet clear. One suggestion is the establishment of Upazila Employment Resource Centers (UERC).^{2/} These would be autonomous bodies largely independent from the Government yet supported by it. Their task would be to facilitate group formation and to provide training in functional literacy and numeracy, and in simple technical skills and market information, and to act as an intermediary between groups and the banking system. It has been suggested that they begin in a few Upazilas, and that the experience and resourcefulness of NGOs be employed in their day-to-day operation.

7.33 Partnership with NGOs. Despite their limited administrative and managerial capacity, many studies have identified NGOs as an important instrument for reaching the poor in rural areas. For example, the models developed by the Grameen Bank and BRAC for group formation, training and credit provisions, appear to achieve better results than the cooperative system. Many other NGOs, though they lack technical resources to assist the poor in income generating activities, have done a commendable job of social mobilization. The Government and NGOs have different and potentially complementary strengths in promoting rural employment. For example, the Government is in a good position to arrange for the provision of services, but it has difficulties in organizing credit recipients and in providing high quality supervision and support. NGOs on the other hand, are generally more successful in assisting with group formation, credit follow-up and marketing assistance.

^{1/} Some upgrading of staff has occurred--for example the Upazila Nirbahi Officer (UNO) and the Upazila Engineer--but the stock of well trained administrative and technical staff remains inadequate and in many instances there are insufficient qualified staff to fill positions. A high priority has been given to training local government staff, and a wide range of courses is provided by a number of institutions including the Public Administration Training Center (PATC) and four institutes under the Ministry of Local Government, Rural Development and Cooperatives, the National Institute of Local Government (Dhaka), the Bangladesh Academy for Rural Development (Comilla), the Rural Development Academy (Bogra), and the Rural Development Training Institute (Sylhet).

^{2/} See World Bank, Bangladesh - Employment Opportunities for the Rural Poor - A Feasibility Report, February 1985 for a detailed discussion of this proposal.

7.34 In a few instances, the Government is beginning to utilize the unique strengths of the NGOs in partnership with their own programs. For example, BRAC is responsible for training target groups and extension staff under the Second Rural Development Project. In addition, NGOs are being used to implement part of the population program in urban areas, and CARE is responsible for implementing the USAID-financed Food-for-Work Program. But many more opportunities for partnership exist and there remains no clear policy on the part of the Government on supporting the NGOs, especially in organizing the rural poor for self-employment.

7.35 There are currently over 200 NGOs in Bangladesh, with very mixed capabilities. Before utilizing an NGO, the Government would of course need to consider the organization's experience in mobilizing the poor in employment and income generating activities, its capacity to expand, its recruitment methods and training facilities for staff, its record of innovative approaches and its accounting, auditing, monitoring and evaluation systems. Some might be selected for assistance by donors and others might be utilized as sub-contractors for implementing development programs.

7.36 Aware of the potential in this area and concerned about the lack of progress, the recent working level Aid Group meeting in Bonn encouraged the Government "to develop a policy framework to facilitate and stimulate the participation of the private sector, both non-profit and profit-making organizations as development agents in pursuing poverty alleviation and employment generation... This policy would recognize the vital role of NGOs in the development process complementary to the Government's own efforts. It would help to create the necessary positive environment these agents need to be effective in their attempt to advance the interests of the assetless and other target groups."1/

7.37 Employment Planning and Policy. A number of innovative approaches to the poverty problem have been developed over the last few years, but there is currently nowhere within the government structure where these ideas can be tested and, if found successful, promoted on a large scale. There is therefore a need for a unit in the Central Government for monitoring programs and assessing lessons learnt, and for ensuring that economic policies are supportive of employment generation among the poor.

7.38 In view of this, the Government has recently decided to establish a unit for this purpose in the Planning Commission. It is suggested that its responsibilities should essentially be three-fold. First it would monitor and evaluate ongoing employment programs and ensure that emerging lessons

1/ Closing statement of the Chairman, November 18, 1986.

from experience are disseminated and incorporated in new initiatives.^{1/} Second, it would review the Government's overall expenditure program and assess the extent to which sufficient attention is given to providing opportunities to the most needy. Third, it would explore the overall policy environment with respect to its impact on employment. In this regard, a number of new technologies--for example in rice milling, oil seed extraction, sugar/gur making, and poultry farming--have significant and sometimes negative impacts on traditional employment. In addition, some of the current policies directed towards "modernizing the economy, such as the promotion of motorized rather than pedal rickshaws, may have a negative impact on employment opportunities for the poor. Such issues would fall within the responsibilities of the unit, as would more general policies effecting the mix of capital and labor.

^{1/} This unit for example would provide the focus for discussions on new initiatives such as the UERC proposal and the RMP program.

Chapter 8: PROMOTING ECONOMIC OPPORTUNITIES FOR WOMEN

8.01 Women in Bangladesh, in custom and practice, remain subordinate to men in almost all aspects of their lives; greater autonomy is the privilege of the rich or the necessity of the very poor. Most women's lives remain centered on their traditional roles and they have limited access to markets, productive services, schooling, health care and local government. This lack of opportunities locks women into high fertility patterns which diminish family well-being, damage the nutrition and health of children, and frustrate education and other national development goals.

8.02 About 86% of women live in rural areas. The majority of women, perhaps 70%, are in small cultivator, tenant and landless households; many work as laborers on a part-time or seasonal basis for others, usually in post-harvest activities, and receive payment in kind or meager cash wages. Another 15-20%, mostly in poor landless households, depend on casual labor, gleaning, begging, and other irregular sources of income; typically, their income is essential to household survival. The remaining 10% of women are in households mainly in professional, trading or large-scale landowning categories, and they usually do not work outside the household.

8.03 The economic contribution of women is substantial but largely unacknowledged. Women in rural areas are responsible for most of the post-harvest work which takes place in the homestead and for keeping livestock, poultry and kitchen gardens. Women in cities rely on domestic and traditional jobs, but they are increasingly working in manufacturing jobs, especially in the garment industry. Those with more education work in Government, health care and teaching but their numbers remain very small.

8.04 Data on health, nutrition, education and economic performance indicate that the status of women in Bangladesh remains low and considerably inferior to that of men. Despite overall improvements in human development indicators during the last decade, there are few signs that women's situation has improved or that the differentials between men and women are narrowing. In fact, acute poverty at the margin appears to be hitting hardest at women, physically, socially, and economically, resulting in a high, gender-specific wastage of human resources. As long as women's access to health care, education and training remains low, prospects for improving their productivity and earnings are poor.

8.05 Nonetheless, changes in custom and practice and the encouragement of women's advancement expressed at policy levels provide grounds for hope. This hope is strengthened by the recent experience which demonstrates that targeted development programs can reach women with resources and productive services in ways that improve their well-being, expand their productive capacity and generate a positive return to family and national well-being. Unfortunately, the overall picture is far from encouraging because these programs have reached fewer than 10% of women. What is needed is a strategy

to reach increasing numbers of women and improve their access to education and training and expand their economic opportunities by systematically refining and replicating successful income-generation programs, while developing and phasing in other innovative approaches.

8.06 This paper first presents the trends and status of women in Bangladesh. Section II reviews programs affecting women. Finally, Section III outlines a strategy for improving women's economic opportunities.

I. CURRENT STATUS AND TRENDS

8.07 Table 1 presents key indicators for women in Bangladesh.^{1/} There are fewer women than men, reflecting unusually high female mortality in childhood and during childbirth; maternal mortality rates remain among the highest in the world at around 6 per thousand live births (compared to 4.5 for developing countries), and in 1981 maternal mortality accounted for 27% of female deaths. The adult female literacy rate is around half that of males, at about 19%. Only about half of eligible girls go to primary school and many drop out after a year or two; the percentage of girls attending secondary school is less than 10% and has declined since the early seventies and only a tiny percentage of students above that level are women. Finally, women face a fairly segmented labor market and earn much less than men for similar jobs.^{2/}

8.08 As in other populations, male deaths exceed female deaths among infants but, between the ages of one and two, male and female mortality rates converge and thereafter the cumulative rate of female deaths overtakes that of males, the differential widening between the ages of 2 and 5.^{3/} The 1984 child mortality rate for females was over 30% higher than for males. The reasons for high female mortality are not well established but discriminatory

^{1/} For more details on the situation of women in Bangladesh, see Afruz Mahbub, Gule, Study on Women in Development, Vols. I-III, Dhaka, 1986, and Shaffer, Teresita, Profile of Women in Bangladesh, Dhaka, 1986.

^{2/} For a good discussion of women's employment and earnings, see M. Cain, S. Rokeya Khanam and S. Nahar, "Class, Patriarchy and Women's Work in Bangladesh," in Population and Development Review, pp. 405-38, 1979.

^{3/} Koenig, M. A., S. D'Souza (1986), "Sex Differences in Childhood Mortality in Rural Bangladesh," Social Science Medicine, Vol. 22, No. 1, 15-22, Bhuiya, A. (1983), Levels and Differentials in Child Nutritional Status and Morbidity in a Rural Area of Bangladesh, M.A. thesis, Australian National University. D'Souza, S., L. C. Chen (1980), "Sex Differentials in Mortality in Rural Bangladesh," Population Development Review, 6, 2, June, 257-270.

weaning, feeding practices and health care appear to be important.^{1/} Small scale nutrition surveys record a gradual worsening of female nutritional status relative to male from infancy through childhood. A higher percentage of girls than boys become severely malnourished, the percentage rising as the degree of malnourishment increases.

^{1/} Black, R. E., K. H. Brown, S. Becker (1984), "Malnutrition is a Determining Factor in Diarrheal Duration, But Not Incidence, Among Young Children in a Longitudinal Study in Rural Bangladesh," American Journal of Clinical Nutrition, 37, 87.

Table 8.1: WOMEN IN BANGLADESH - KEY INDICATORS

<u>Population Indicators</u>		
Women are 48% of population, with:	% Rural women widowed/ divorced/separated:	
86% in rural areas	25-49 years	11.4
47% under 15 years	50+ years	54.3
69% married at 19 years	All ages	13.3
95% married at 25 years		
<u>Other Indicators</u>		
	<u>Male</u>	<u>Female</u>
	-----percentages-----	
Weight at 60% or less of standard, percentage for age, 1981-82		
0-1 year	8.33	17.41
at 5 years	13.73	30.19
Labor force participation		
1981 Census Urban	70.1	5.5
Rural	74.9	4.1
1984 Labor Force Survey (all areas)	78.5	8.0
Daily wage rate of agricultural labor (1984-85, Tk per person/day)		
Less than 14 years old	18.9	9.2
15-19	22.5	11.5
19 and above	26.4	13.0
Literacy		
15 years and over	39.7	18.8
5 years and over	31.0	16.0

Sources: Population, labor force participation, and literacy data are from 1981 Population Census, Labor Force Participation 1983-84, from Labor Force Survey 1983-84. Nutrition data and daily wage rates are from Socio Economic Indicators of Bangladesh, BBS, 1986.

8.09 Persistent poverty is changing the family structure, often making women's contribution to household earnings essential. The early age of first marriage, typically to an older man, leads to a high incidence of widowhood. Nuclear families are becoming the dominant household form, and many widows can no longer depend on the protection of extended family networks. Rising dowry demands and higher frequencies of divorce, separation and abandonment

are additional signs of acute pressure on family bonding. Particularly among the poor, traditional support networks are breaking down, and women's earning capacity is becoming a matter of survival for growing numbers of poor families.1/

8.10 Employment and Productivity. Continuing high rates of population growth and declining homestead-based work have meant that more women are looking for employment outside the homestead. Accordingly, the female labor force participation rate doubled since the 1974 Census, reaching close to 8% in 1984.2/ However, this official definition of participation, which excludes productive activities in the homestead, greatly understates the women's participation in the economy. For example, a recent study which measures women's contribution to income-earning activities, places 18-32% of women in the economically active population--about half the rate for men in the areas studied--and evidence from micro-studies suggests that female participation is even higher in areas where there are rural infrastructure or industrial projects.3/

8.11 Because of poor health and nutrition, lack of schooling, limited access to improved technology and to social and economic services, the productivity of female labor tends to be low. Moreover, women tend to be restricted to low-productivity jobs. Consequently, female wage rates are low, typically ranging between two-fifths to two-thirds of male wage rates. Even for comparable work and after accounting for productivity differences, women tend to be paid less than men. The reported recent increase in male agricultural wage rates does not seem to have affected female wage rates equivalently.

1/ See Cain et. al. (op. cit), they argue that the increasing incidence of poverty is linked to a trend of increasing household "nuclearization." If such indeed is the case, then women, who are especially dependent on kinship bonds for their security, stand to suffer the most from this trend.

2/ Labor Force Participation (Refined Activity Rate), Labor Force Survey 1983-84.

3/ See Teresita C. Schaffer, Profile of Women in Bangladesh, (op. cit).

8.12 Rural women work around 14 hours per day on average--as much as four more hours per day than men do.^{1/} Women's tasks typically include managing and decision-making as well as actual labor in homestead agriculture, poultry and livestock husbandry, crop processing, craft work, home and child care, hut construction and repair, cooking, water and fuel gathering. They do work for wage employment but the majority of them work in the homestead or in traditionally female occupations.

8.13 The type of rural women's work and their contribution to household income varies by season and by household income status.^{2/} Women with access to paddy may work up to 19 hours per day during the busiest rice processing season, while the most needy usually work fewer hours because they have fewer resources to manage and less regular employment and food to prepare. Micro studies suggest that the higher the percentage of landowning families in an area, the smaller the contribution of female income to aggregate household income. Conversely, the rising incidence of landlessness is increasing the number and percentage of households in which female income is necessary for household survival.

8.14 Changing Employment Opportunities. Surprisingly little is known about the overall impact of technology changes on women's employment or about what could be done to promote technologies which are more conducive to expanding productive employment for both men and women. However, evidence suggests that technical change in crop production and processing is hurting the poorest women, particularly by displacing gleaned incomes and

^{1/} See Ahsan, R., S.H. Hussain, E. Ahsan, Study of Women in Agriculture, Workshop on Women in Agriculture, BARD, Comilla, March 24-25; Halim, A., M. Hossain (1983), "Time Allocation by Farm Family Members and Its Effect on Farm Income," Bangladesh Journal of Agricultural Science 10 (2), 153-161; Halim, A., F.E. McCarthy (1983), Women Labourers in Rice Producing Villages of Bangladesh, Women in Rice Farming Systems Conference, IRRI, Los Banos, Sept. 26-30; and Mazumder, S., Md, M. Rahman, M. H. Ali (1983), Women Participation in Agricultural and Non-Agricultural Activities in Bangladesh Villages, Graduate Training Institute, BAU, Mymensingh.

^{2/} See Begum, S., (1985), "Women and Technology: rice processing in Bangladesh," in IRRI Women in Rice Farming, Gower, Aldershot, 221-242; Begum, S., M. Greeley (1979), "Rural Women and the Rural Labour Market in Bangladesh: An empirical analysis," Bangladesh Journal of Agricultural Economics, II (2), Dec., 35-54; and Westergaard, K., (1983), Pauperization and Rural Women in Bangladesh, A Case Study, BARD, Comilla. Cain et. al. (op. cit) report that in a sample of women in Char Gopalpur (1977), poor women spend more than twice as much time in income-earning work as richer women.

homestead-based post-harvest employment and income opportunities.^{1/} Capital intensive investments are also threatening women's traditional employment in the handloom sector (spinning, preparing bobbins) which is the second largest source of employment in the country (after the agriculture sector).

8.15 New and promising commercial opportunities for a few women, such as ownership of hammer mills financed through group savings and credit, are not commensurate with the scale of need. Because of the constraints on men reaching women in the homestead, the rate at which services and opportunity can be opened up to poor women depends in part on the ability of relatively more educated women to take on non-traditional roles and work as field workers in development services and junior management. An estimated minimum of 100,000 women have been locally recruited for this type of employment. Both Government and NGOs report that the numbers of qualified applicants to field and management posts considerably exceeds the positions available.

8.16 New opportunities also depend on the growth of development services at union and upazila levels. Local administrative and line department officials are learning how to work with women's groups and to direct services to them, but much more systematic effort is needed to improve their interaction. In turn, some among the most vulnerable women seem to be learning how to protect their interests and mobilize the support of elected parishad members. Recent experience in both cooperative and NGO programs, including VGF, shows that strong, regular monitoring and evaluation procedures can be helpful in checking exploitative behavior, in promoting understanding of women's roles and in providing informal training and management support to program administrators.

8.17 Intensifying Homestead Production. Women are deeply involved in homestead production and post-harvest handling of fruits, spices, vegetables, poultry, livestock, fuelwood, mini-ponds and fish drying. Not much is known about the economics of existing or intensified homestead production either for particular crops or activities,^{2/} but its positive nutritional impact

^{1/} Evidence indicates that technical change in rice milling, from the foot operated hammer-action dheki to the mechanical huller or hammer mill, continues to displace homestead-based employment. Up to 200 women may be displaced for every mechanized milling unit installed. The contracting market for dheki processing probably has affected well over two million women.

^{2/} Some positive examples are the BRDB and the Mennonite Central Committee which have promising early results with soybean products and cost estimates of dried potato production from BARC and the International Potato Research Center which appear to be competitive with farm-gate prices of rice.

seems well established.^{1/} Available information indicates that households typically consume around two-thirds of their production and sell the rest. There is considerable experimentation to identify prospects for intensifying homestead production and the consensus emerging from these efforts is that women are able and willing to increase their output and productivity when production services and information are made accessible to them. In order to accelerate this process, further testing of staffing and extension approaches is needed.

8.18 Many organizations are carrying out adaptive research, usually in collaboration with the universities and government research agencies, but the major effort on the research side is being made by the On-Farm Research and Development Program coordinated by the Bangladesh Agricultural Research Council (BARC). As part of this effort, and to facilitate access to the homestead site, female researchers have been hired and female scientists have been encouraged to conduct field work. But the lack of suitably qualified female research and extension staff coupled with the difficulty of deploying centrally recruited female government staff at the village level are a constraint to rapid program expansion.^{2/} NGO workers report few difficulties in training locally recruited women to provide basic horticulture, agriculture, poultry or livestock assistance to women at the homestead and, on the whole, have had good cooperation from government subject matter specialists, but the scale of their operations in these subject areas is still small and somewhat ad hoc in nature, lacking coherent planning for replication, input provision, marketing or testing of extension approaches.

8.19 Although many of the ongoing initiatives to intensify homestead production appear promising, none of these initiatives at present has any effective link to indigenous commercial enterprise, nor do the supporting organizations have much experience in industrial organization or developing marketing chains. The challenge lies in organizing the production process in ways which would not only increase income and productive opportunities for women but which would also allow women to invest in, manage and retain control over the profits of commercially oriented activities.

8.20 Urban Sector. Very little is known about women's migration to urban areas but some strands are discernible. Individual male migration continues, particularly to Dhaka, and imposes special burdens on families left behind.

^{1/} CARE's kitchen gardening projects in Dhammrai begun in 1982, for example, show a high correlation between participation and nutritional status.

^{2/} The Department of Agricultural Extension has had great difficulty in deploying its centrally recruited female staff. Actual coverage (with 353 extension workers by end of 1986) is much less than anticipated for a number of administrative and procedural reasons.

Small-scale surveys in the squatter and slum areas of Dhaka show that rural families which have lost all means of support are migrating as a unit and rural women who have become destitute are increasingly adding to the urban population.

8.21 Some two-thirds of income-earning activities in Dhaka and Chittagong are in the informal sector. Backyard craft work, assembling and packaging for factories, piece-work, preparing snack foods for street selling, petty trading, domestic service and begging are among the mainstays of poor urban women. The peri-urban areas provide some additional unskilled, low wage work. Industrial activities which employ women include coir works, tanneries, shoe factories, electrical and electronics companies, and pharmaceuticals. All these occupations are characterized by low incomes and poor prospects for upward mobility; the 1983-84 Labor Force Survey indicates that 87% of urban women earn less than Tk 100 per week.

8.22 The industrial sector has provided employment for urban women, traditionally in the jute and cotton textile industries including handloom, and more recently in bakeries, glass, leather, garments, knitting, electronic, pharmaceutical, freezing and canning establishments. The major new source of employment for women is the modern garment sector, offering permanent work to about 80,000 women at relatively high wages of around Tk 800-1,000 per month.^{1/} It appears, however, that many women tend to remain locked into apprentice grades, and rapid mechanization may undermine the potential for expanding employment opportunities; policies are needed to strengthen linkages with the informal sector and increase domestic value added through more efficient and relatively labor-intensive processes.

8.23 Aside from manufacturing, women work in the urban professions, in government, administrative and educational services. There are also growing opportunities for women as teachers, health workers and in NGOs.

II. PROGRAMS FOR WOMEN

8.24 In recent years, the Government and NGOs have initiated a number of programs to provide access to productive resources and services to women and to expand education and health care. Several programs focusing on production have been fairly successful although they have reached only 5-10% of women. Social service programs, particularly family planning, have reached a larger proportion of the population and have started to show improvements, but face serious operational problems. Small-scale innovative approaches in these sectors, often involving NGOs, are also producing promising results and could be expanded, but more evaluation is needed of specific program capacity and

^{1/} Up to 200,000 women apparently find periodic temporary work within the garment industry.

performance.^{1/} Donors have played an important role in supporting or initiating programs involving women; commitments to such programs from FY80 through FY86 are estimated at around US\$125 million. Of this, roughly 25% has been allocated specifically to self-help development activities, 57% to population and health programs (predominantly population), 12% to education and training programs and the remaining to research and miscellaneous activities. Donor commitments to women's group self-help development programs are estimated at around US\$63 million over FY80-86, of which about one-third has been allocated since 1985.

8.25 The Policy Environment. In its Five Year Plans the Government has recognized, on equity and economic grounds, the necessity of improving women's access to human development programs and to productive resources and employment opportunities. The direct allocation to women's programs in the TFYP is modest but higher than in previous years.^{2/} In addition, women benefit from the overall education, health and family programs, as well as from special components under many other programs. Local government staff have in some instances been effective in implementing women's programs.

8.26 But despite this positive lead, the Government lacks a discernible strategy for implementing programs involving women. An increased emphasis on programs for women beyond social welfare is required. The Ministry of Social Welfare and Women's Affairs is strengthening its staff and management capacity to play a stronger advocacy and advisory role at policy levels but has yet to fulfill its mandate as a policy and program coordinating body. At present, a large number of ministries (Agriculture, Rural Development, Local Government, Relief and Rehabilitation, Irrigation, Jute and Textiles, Industries) and agencies are involved with women in development activities but it has not been possible for the MSWWA to coordinate their programs. The structure and mechanisms for coordinating policies, programs and their monitoring have not yet been well established. A priority for the Government should be to clarify the substantive roles of the Planning Commission and the relevant Ministries with respect to implementing and monitoring women's programs and to provide the assistance and staffing required for those roles to be effective. Although considerable literature is available on women in Bangladesh, there is no central data and documentation unit, or any mechanism

^{1/} 900 NGOs are registered with the Directorate of Social Welfare and 712 with the Directorate of Women's Affairs (Dec. 1986).

^{2/} The Third Five Year Plan allocates Tk 500 million to women's programs in the Directorate of Women's Affairs in the Ministry of Social Welfare and Women's Affairs (MSWWA) and another Tk 500 million to women's programs in other ministries. A further Tk 115 million has been allocated to women's programs implemented by NGOs and financed by donors. However, the total accounts for well under 1% of the development program allocation under the TFYP.

for access and dissemination of information. This hinders effective coordination and planning, not only in the Planning Commission but within development ministries and among the Government, NGOs and donors.

8.27 The Government has raised its female employment quota from 10% to 15% and is maintaining pressure to fulfill it but line ministries have not received specific targets or guidelines for integrating services for women into their mainstream budgets. The Government has also taken the important decision to recruit women to the Civil Service.

8.28 Targeted Women's Programs. A number of targeted group approaches have proved particularly successful in reaching women and offer some basis for larger-scale programs. They can be classified in four categories: those for the most vulnerable, those for groups of poor working women, those for women in small-scale enterprises and targeted training programs.

8.29 (a) The Most Vulnerable. Over 600,000 of the most distressed and vulnerable women are being reached each year by the Vulnerable Group Feeding Program (VGF) and two modified Food-for-Work Programs--Post Monsoon Rehabilitation and the Road Maintenance Program (RMP)--which are implemented through union-level committees (see Table 2). The RMP and VGF programs have extended their scope beyond food and work to include development training in areas such as basic health and literacy and have sought to link their clients to the services and support of government and non-government agencies.

8.30 Two recent surveys of clients of the RMP and VGF show that the programs have been successful in reaching the target group; incomes of beneficiary households averaged considerably less than Tk 75 per week in FY85.^{1/} A survey of the RMP showed that 89% of sample beneficiaries are divorced, separated or widowed women, with an average of three children each. In 1984, 82% of beneficiaries estimated that they had insufficient food each month of the preceding year, about 95% had never been to school, more than 70% owned no land, and about 40% had no house. After one year in the program, which provides Tk 12 a day throughout the year, only 4% of beneficiaries claimed that they had insufficient food for the previous six months, and over 80% were able to prepare two meals a day. Expenditure on health care, housing, cereals and protein increased, and children's school attendance doubled to around 23%. Women's participation in the programs enabled families to withdraw other female family members and children from irregular and/or degrading work, while increasing the physical capacity of male members to work.

1/ See CARE International (1986), An Interim Evaluation of the Rural Maintenance Programme, Dhaka, Draft mimeo; and World Food Programme (1986), Report on a 1985 Survey of Vulnerable Group Feeding Programme Beneficiaries, Dhaka.

Table 8.2: THE MOST VULNERABLE - WOMEN'S PARTICIPATION IN FOOD AND WORK PROGRAMS

Scheme /a	Coverage/Year	Beneficiaries (thousands)	Total Days Worked (thousands)	Direct Benefits
Road Maintenance Program	Nationwide FY85-86	60	7,300	12 Tk/day all year
Post Monsoon Rehabilitation	Nationwide Sept. 15 - Nov. 30, 1985	35	1,400	4.65 kg/day 4 days/week
Vulnerable Group Feeding /b	Nationwide FY86-87	450		31.25 kg/month of wheat over two years

/a The schemes included here are all ongoing programs. The information in the table is the most recent available.

/b The VGF reaches another 25,000 women in Government/non-Government training centers and 60,000 women and children through institutional feeding programs.

Source: Annual and Monitoring Reports.

8.31 Both surveys suggest that the regularity of food and income support lifts women out of destitution but that bigger rations and level of services are needed for establishing self-sustaining earning capacity. Program managers at central and union levels stress the humanitarian need to expand these programs and the desirability of promoting enduring productive skills. Consequently, both the type of work performed (RMP) and the composition of the food ration (VGF) are being examined to see how they could be expanded. Despite some procedural problems,^{1/} management capacity at union and upazila levels and monitoring controls are believed to be adequate to support expanding coverage. In order to address more adequately its development aspects, the VGF program requires more effective coordination and linkages at all levels and additional personnel at the upazila level.

^{1/} The VGF beneficiary survey undertaken by WFP revealed that on average women were receiving 66% of the stipulated ration in 1985 but there is no evidence of widespread malpractice. Handling losses and the pressure on union officials to disburse wheat to other distressed applicants are among the reasons for the shortfall.

8.32 (b) The Working Poor. Good progress has been made over the last few years in forming women's groups for economic purposes. A number of programs have opened access to traditional small-scale income-earning activities and have strengthened women's economic capacity through homestead-based skills training, input provision, savings mobilization and credit. Table 3 shows the membership of the major group programs and Table 4 provides a brief description of each program. The number of participants in these programs is not known with any confidence. But, among the working poor, at least half a million women from landless households and possibly as many as three million, or roughly 10% of adult rural women, are involved in regular group meetings and activities. As a result, their asset holdings (other than land and housing) and their basic food and non-food consumption have been increasing, and the school attendance of their children has been encouraged. Family planning is also encouraged; compared to the national contraceptive prevalence rate (CPR) of about 28%, data from BRDB's women's cooperatives for July 1985-Sept. 1986, suggest a CPR of 73% for eligible couples or 42% for all members.

Table 8.3: FEMALE MEMBERSHIP IN SELECTED GROUP PROGRAMS /a

Organization	Date	Members (thousands)			
		Male	Female	Total	% Female
BRDB	Jan. 1987	167	141	308	46
BRAC	June 1986	54	51	105	49
PROSHIKA	Dec. 1985	119	61	180	34
PROSHIKA Comilla	June 1986	26	10	36	28
GRAMEEN BANK	Dec. 1985	59	112	171	65
SWARNIVAR	June 1986	132	274	406	67
SOCIAL WELFARE DIRECTORATE Mothers' Centres	1985	-	89	89	100
WOMEN'S AFFAIRS DIRECTORATE VOCATIONAL TRAINING CENTRES	Dec. 1986	-	7	7	67
<u>Total</u>		<u>557</u>	<u>745</u>	<u>1302</u>	<u>-</u>

/a The total number of clients (including other programs) served by the organizations listed is considerably higher. Program descriptions are given in Table 4.

Source: Annual Reports.

Table 8.4: DESCRIPTION OF MAJOR WOMEN'S GROUP PROGRAMS

BRDB

In 1972 the Government initiated a program of Integrated Rural Development, based on the two-tier cooperative system. The program was to mobilize farmers into cooperatives (KSS). In 1975-76, BRDB initiated a program to develop women's coops (MSS). These coops are affiliated to a central coop association at the upazila level. In 1984, another program was initiated by BRDB where the very poor rural women (destitutes, female heads of households) are mobilized into cooperatives (MBSS). The MBSS program operates in about 108 upazilas.

BRAC

The Bangladesh Rural Advancement Committee was created in February 1972 to strengthen the social and economic position of the landless through group action to develop occupational and managerial skills. BRAC works through village organizations made up of, single sex or mixed, functional groups of about 30 persons each. It restricts its loans to a list of activities and provides financial services along with training, inputs and services. It also launches and manages special campaigns, such as the ORT program which has reached over 7 million households. BRAC offers comprehensive programs in health, education, group support services (including training), rural development (including credit and savings), and integrated development programs in over 1,500 villages.

PROSHIKA

Proshika, formed in the late 1970s, has a comprehensive approach, based on organizing groups and developing analytic and problem-solving skills, supported by income and employment generation, education, and agricultural services. Its women's program emphasizes developing self-awareness. Proshika's activities are in 20 districts.

PROSHIKA, Comilla

The Proshika Comilla Center for Development seeks to develop the socio-economic capacity of small farmers and the landless by functional group organization, income generation activities, and training of group leaders and development workers. It emphasizes practical training to female field workers and group leaders. Groups are encouraged to associate in village organizations, which are supported by 21 area development centers.

GRAMEEN BANK

The Grameen Bank began as an action research program in Chittagong in 1976. It has become a sophisticated individual and collective credit institution with 226 branches which extends basic financial services that are competitive with moneylenders and viable within the commercial banking system. It works through existing bank branches linked to small credit and savings groups of five members. It imposes no restrictions on loan use, assuming that its clients are best placed to spot opportunities for themselves. Most of its loans are concentrated in trading and services. Recently, the Grameen Bank has expanded its services to include housing loans, and has developed linkages to health and education services.

SWARNIVAR

Established by the Government in 1976 in response to flood disasters. In the early 1980s it was reorganized as an NGO. Working through volunteers in 138 upazilas, it aims to build leadership capacity through organized groups of landless, farmers, women, youth and vocational interests. The volunteers act as group mobilizers and liaise between the groups and service/input agencies at union and upazila levels, in the areas of family planning, literacy, cottage industry, agriculture and credit. The credit program operates in 76 upazilas and is financed through the nationalized banks.

MOTHERS' CENTRES

The Mothers' Centres are registered under the Rural Social Services Program of the Department of Social Welfare, Ministry of Women's Affairs and Social Welfare. Their programs focus on skills training and income-generating activities and promoting awareness of opportunities.

VOCATIONAL TRAINING CENTRES

Established under the Directorate of Women's Affairs to provide skills training to vulnerable and destitute women. Each of the 148 centers enrolls 50 women a year. Between 1972-84, 26,000 women have completed the 1 year course.

8.33 Although each program has its own particular strengths, successful ones share common characteristics. These include mobilization, organization, training, input provision and system management.^{1/} Group formation is essential for mobilizing rural savings and promoting efficiency and discipline in credit use. For example, in one program, BRDB has mobilized over 40,000 women in over 1800 cooperatives, who have saved about Tk 4.58 million over two and a half years. And Grameen Bank is reaching over 112,000 women from landless households who deposit over Tk 1.5 million a quarter in savings. With only their savings performance as collateral, women have proven to be an excellent credit risk; their overall repayment rate over one year to the Grameen Bank is 98.4%, compared to 96.8% for men. Savings and credit activities are characterized by regular meetings, training sessions, rapid turnover of funds, tight peer group accountability, locally recruited field staff, and short managerial spans of control. In essence, the group structure allows intermediate organizations to operate as community-based finance houses through which capital is both accumulated and invested locally, with a minimum of procedural requirements and very low customer transaction costs.

8.34 Three categories of female beneficiaries from group programs can be discerned: (i) the poorest, those with few physical assets, whose livelihoods are raised and made more secure; (ii) those with slightly more or better quality assets, who have diversified investments and increased returns; and (iii) those with even larger or better resources, who command capital funds and access to relatively substantial lines of credit and are ready to make higher return investments.^{2/}

8.35 Average savings and loans are somewhat lower for women than for men, the range of investments narrower and the net returns smaller. Livestock and fish, crop processing and manufacturing of locally used articles, trading, and collective enterprises (such as rental of a fish pond) are among the most popular activities for women. An analysis of Comilla Proshika's group projects shows that the average financial cost (i.e. loan from Revolving Fund and contribution from group savings), for women's group projects is higher than for men's and that women contribute less out of savings.^{3/} The average capital cost varies by type of activity, with poultry as a relatively low cost collective investment at around Tk 4500 per project.

^{1/} J. Jiggins (1983), "Poverty-Oriented Rural Development: Participation and Management," Development Policy Review, Vol. I, No. 2, 219-230.

^{2/} As a measure of capacity at the upper end of the range, Comilla Proshika reports that during April-June 1986 305 women contributed Tk 66,310 from savings and took Tk 174,190 in loans to finance 45 income-generating projects.

^{3/} Comilla Proshika, Progress and Financial Report, quarterly, 1985 to June 1986.

8.36 Compared with rural areas, urban areas have seen almost no large-scale governmental development programs focusing on women. The better known NGOs which are entirely or partially directed at urban women include: Bangladesh Mahila Samaj Kalyan Samiti in suburbs of Dhaka, CONCERN in Chittagong, Concerned Women for Family Planning in Dhaka, the Urban Volunteer Program of ICDDR, Manabik Shahaya Sangstha (MSS), both exclusively active in Dhaka, and Terre des Hommes (Netherlands) in Dhaka. In cooperation with NGOs, the Government funded by UNICEF has recently developed a community program which includes a working fund for women along the lines of the Grameen Bank in secondary towns such as Noakhali, Kusthia, Sylhet and Mymensingh. Most organizations are not able to train more than 100 women annually in productive skills either because this is not their major objective, or because they are small and lack resources.

8.37 Contrary to rural development organizations, few urban programs emphasize group formation. Their primary goals vary from health and family planning to a more general employment generation objective. Some have comprehensive programs including savings and loan programs, health, hygiene and nutrition education, skills training and literacy and day care. Because income generating and credit components are rare and recent, their benefits cannot be measured yet.

8.38 (c) Small-Scale Entrepreneurs. A few group investments are reaching the scale of sizable agri-business enterprises. For example, the Grameen Bank by end 1985 had provided 108 landless women's group with about Tk 420,000 in loans for the joint purchase and installation of 17 mechanized rice hullers. A number of government organizations including BARI, BAU (Mymensingh), BARD, Comilla, BRDB and MCC are exploring the commercial inputs and potential of intensified homestead-based livestock, fish, poultry, fruit, vegetable, spice and fuelwood enterprises but their success has been limited. Reasons include a lack of capacity to conduct market research, or to deliver inputs and production services to women in the homestead, an inability to organize wage and self-employment opportunities in mechanized processing, and inadequate development of marketing channels.

8.39 Few programs have been successful in developing new types of non-agricultural productive employment on a significant scale; BRAC's Manikganj sericulture and ericulture projects and the MCC's Mirpur Wheat Straw project remain isolated examples. Neither MIDAS nor BSCIC, established to promote small to medium-scale businesses, have been successful in creating more than a few business opportunities for rural women, either as individuals or as groups. Recent innovations include an attempt to link income-generating groups through BSCIC to the Krishi Bank, market outlets and business services. Handicrafts, which have received considerable support, appear not to be viable exports; a 1985 OXFAM review of returns to handicraft producers indicated that their average net income per month was only Tk 54 and the highest net income per hour a derisory Tk 2.

8.40 (d) Training Programs. Training for female group members, field workers, trainers and managers is expanding. The programs offer diploma and short courses in subjects such as group dynamics and participatory problem diagnosis, as well as technical skills in subjects such as poultry vaccination and management training. In addition to specialized institutes in the field of health and family planning, leading training centers include the two rural academies at Bogra and Comilla, the Village Education Resource Centre, Proshika Development Centres, and the Training and Research Centre of BRAC.

8.41 Women's participation in training remains constrained by home care obligations and social attitudes. Organizers of community-based training and outreach programs report that as the positive impacts of training become apparent, community attitudes become more supportive. Course organizers also report the importance of providing low-cost child care.^{1/} The weakest area at present lies in training for self-employment, business enterprise development and management, sales and marketing. Further experimentation seems necessary, particularly to match training to market demand, provide credit and follow-up support services and develop linkages between employers and training programs.

III. A STRATEGY FOR IMPROVING WOMEN'S ECONOMIC OPPORTUNITIES

8.42 The last decade and a half has witnessed a rapid expansion of small-scale experimentation with bottom-up group and cooperative approaches to develop employment opportunities for the rural poor. A number of these have proved particularly successful in enhancing women's capacity to respond to economic opportunities. Replicating and expanding these approaches, in both rural and urban areas while strengthening management in experienced organizations, merits continued and larger-scale support from Government and donors. Simultaneously, new organizations and innovative approaches, both in the Government and NGO's, should be supported. The most promising strategy for improving women's opportunities is a disaggregated approach expanding and experimenting with various types of targeted programs aiming at different groups of women, such as the most vulnerable, women with some access to land or productive resources, or urban migrants. Some general principles for a strategy follow.

- Improving policy and implementation incentives. Social and economic development policies, particularly those affecting human resources, should be reviewed to broaden the range of services and jobs accessible to women and to ensure that economic and financial policies do not discourage unduly the types of employment now available to women. Mechanisms should be developed

^{1/} Foundation for Research on Educational Planning and Development: Evaluation of Thirty-Eight Union Development Centres for Women in Bangladesh, with NORAD, for Ministry of Social Welfare and Women's Affairs, Dhaka, 1985.

to utilize the comparative advantage of NGOs in developing and testing innovative approaches to expand women's economic opportunities. Line ministries need guidance on including services for women in their mainstream budgets and programs. Central data collection and storage, information and documentation units need to be established. Monitoring and support to upazila and union officials is needed to strengthen their capacity to provide women with development services.

- Expanding education and training. Education of girls deserves not only policy commitment to expand coverage and improve quality but also requires serious attention to influences now discouraging parents from educating their daughters. It is essential to expand both entry of female teachers to the public education system and increase enrollment of girls in all levels of education. In the short term, even modest expansion of education opportunities can change not only the capacity but also the willingness of women to seize development opportunities. Promising innovative approaches include: supporting non-formal primary schooling, adapting school schedules, modifying location and curriculum content to match local circumstances; expanding scholarship programs for secondary and higher education; providing non-formal and formal skills training to women in organized groups, linking content and trainers' skills to existing work patterns and market opportunities; expanding use of female community-based volunteers as basic trainers and resource persons, who can inform other women about institutional services and opportunities; expanding skill training to facilitate employment in small-scale backyard manufacturing; support and expand industry-based training to facilitate the promotion of women employed in manufacturing to supervisory grades; and expanding training for employment in the formal services sector (e.g., banking and sales).

- Expanding fertility choices and improving women's health. Improving women's access to, and the quality and efficiency of health services and family planning programs, will help reduce fertility and raise health standards. Better quality of family planning services will allow women to plan pregnancy and space childbirth with greater confidence and ease, and expanding access to health care services, particularly better nutrition and maternal health care, will be crucial to encourage a fuller response of women to development opportunities.

- Continuing relief programs. The poorest women will probably continue to be helped most effectively by direct assistance through programs such as Food-for-Work and Vulnerable Group Feeding. Efforts to expand development oriented services provided to women through these programs and to enable women to capture a larger proportion of the benefits should be continued.

- Replicating and expanding existing target group programs. The objective is to expand women's productive employment taking into account their spatial and functional specialization. In this regard, the greatest potential in the short term, in terms of coverage and spin-offs lies in intensifying homestead production. This would require increasing women's access to

resources and support services such as credit and savings facilities, water pumps and improved wells, input supplies, extension and marketing services. In order to expand such access, much more effort is needed to: replicate and expand existing credit and savings programs, linking women's groups to formal financial services; develop the capacity of field workers to offer homestead-based services, including systematic linkage with non-government programs and organized groups; and encouraging innovative approaches to extension and outreach through female field staff and community volunteers, in both government and non-government programs, urban and rural areas, and social and economic service sectors.

Chapter 9: EDUCATION, HEALTH, POPULATION AND NUTRITION

9.01 There is no tradeoff between high economic growth and emphasis on human resource development. On the contrary, countries which give a high priority to education, health, population and nutrition programs are generally those that are most successful economically. Recognizing this, the Government of Bangladesh has repeatedly emphasized its commitment to human resource programs in its three Five Year Plans. During the last decade GOB devoted about 13.5% of public expenditures to human development programs, and progress has been made. But expenditures and program accomplishments have been insufficient to improve the situation significantly. Further improvements will be increasingly difficult to bring about while the population continues to grow by over 2.5 million persons per year and the provision of services is hampered by limited funds, poorly trained manpower, substantial inefficiencies in the use of existing resources, and a weak institutional capacity to formulate and implement programs.

9.02 This chapter begins (Section I) with an overview of the current status of human development in Bangladesh. Section II reviews the patterns of public expenditure on human resource programs over the last decade. Sections III and IV discuss key issues facing policymakers and donors in health and population and in education and training, respectively.

I. HUMAN RESOURCE DEVELOPMENT - THE CURRENT STATUS

9.03 Considerable margins of uncertainty surround most data on human resource development in Bangladesh. However, as suggested by the summary indicators presented in Table 9.1, some conclusions appear clear. On the positive side, conditions have improved since the early seventies: birth, death and population growth rates have declined, and access to health and education services (on a per capita basis) has increased. However, despite these improvements, health and education indicators remain unacceptably low, and easily avoidable illnesses still account for a substantial proportion of deaths. Performance in Bangladesh continues to compare unfavorably to that of countries at a similar stage of development. Child and infant mortality rates, for example, are twice the average rates in low-income countries, and literacy rates are among the lowest in the world. Similarly, while the availability of basic services has improved, it remains well below that in comparable countries. For example, while the population per nurse/midwife declined by half during 1980-85, it is still over three times the average in low-income countries in Asia and the Pacific. In addition, the limited data available suggests that the extremely poor--women and the rural landless--have probably benefited less than the average from existing programs.

9.04 Malnutrition remains a pervasive and widespread problem in Bangladesh. Children under five years of age and pregnant and nursing women most seriously affected. Over 60% of all children below the age of 5 were estimated to be moderately or severely malnourished by accepted international standards, according to a 1981-82 national rural nutrition survey. As

Table 9.1: HUMAN DEVELOPMENT INDICATORS

	Bangladesh			Reference Groups /a	
	1973	1980	1985	Low Income Asia and Pacific	Mid-income Asia and Pacific
POPULATION					
Population growth (percent per year)	2.6	2.7	2.4	1.9	2.3
Total Fertility Rate	6.9	6.3	5.7	3.6	3.8
Crude birth rate (per 1000 population)	48.4	43.3	39.0	27.1	29.7
Crude death rate (per 1000 population)	20.6	16.8	15.0	9.7	9.4
Infant mortality (per 1000 live births)	149.2	140.0	125.0	66.3	64.7
Child mortality (per 1000, 1-5 yrs)	22.8	24.0	22.0	7.4	6.9
Life expectancy at birth (years)	45	47	50	62	61
HEALTH					
Population per hospital bed (thousands)		4.8	3.6	1.1	0.6
Population per physician (thousands)		8.6	5.9	3.1	7.9
Population per nurse/midwife (thousands)		37.3	15.5	4.4	1.8
Immunization against					
Tuberculosis (% under 15 years)		50	60		
DPT (% under 2 years)		1	2		
Poliomyelitis (% coverage)		-	2		
Delivery by trained midwife/birth attendant (% deliveries attended)		2	5		
Antenatal care (% pregnant women cared)		10	15		
EDUCATION					
Adult Literacy Rate (15 years)	1974	1981	1985		
Male	25.8	29.2	n.a.	26.0/b	
Female	37.2	39.7			
Female	13.2	18.8			
Enrollment Rate					
Primary (6-10 years) - Total	60.0	58.0	60.0	94.8	109.5
Male	79.0	70.0	73.0	104.2	111.6
Female	41.0	46.0	51.0	78.7	107.3
Secondary (11-17 years) - Total	18.1	13.0	14.0	33.0	47.8
Male	27.6	19.0	18.0	40.5	50.2
Female	7.9	8.0	9.0	24.7	44.7
Higher (18-21 years)/c - Total		6.0	6.0	5.0/b	
Male		9.0	10.0		
Female		3.0	2.5		

/a Most recent estimate from 1986 Social Indicator Data Sheet. Education Enrollment Rates are defined as percentage of school-age students. Differences in country practices in the ages and duration of school are reflected in the ratios given. For some countries with universal education, gross enrollment may exceed 100% since some pupils are younger or older than the country's standard primary school age.

/b Average for South Asia (1976) from World Bank, Comparative Educational Indicators.

/c Enrolled students could be older than standard age group.

Sources: Population and Health. 1973: World Bank Social Indicators Sheet (except Total Fertility Rate - from WDR); 1980, 1985: TFYP, Planning Commission (except Total Fertility Rate - from WDR).
Education. 1974, 1981: Bangladesh Education in Statistics and Population Censuses; 1985: Estimates.

expected, the greatest prevalence of acute malnourishment was 61% among rural children in the weaning age between 1 and 2 years. The greatest prevalence of chronic malnutrition was 75% among children between 4 and 5 years. While per capita food availability in Bangladesh has improved marginally and incomes have risen somewhat for part of the population, there are few specific policies, strategies and programs to address the nutrition problem. There is no reason to believe that the nutrition situation has improved significantly during the eighties. On the contrary, as the evidence in Chapter 6 suggests, the quality of the diet of the poor has probably declined since 1982.

9.05 Progress in education has been slow. Adult literacy rates improved during the seventies and reached 29% in 1981 and there is no evidence that it has improved since then. Primary education enrollment has increased slowly since 1981, but overall enrollment rates have remained stable and, in some instances, may have declined. Wastage in the system at all levels is very high, marked by high drop out rates in primary education, excessively high repetition rates at secondary level and failure rates for terminal examinations at the secondary and higher levels averaging about 50%. Although educational opportunities for females have improved and the gap between male and female literacy rates have declined, substantial inequalities remain. The rural/urban imbalance as well as the male/female differences are displayed dramatically in the adult literacy rates from the 1981 census: literacy in rural areas is 17% versus 35% in urban areas and female literacy is 18.8% compared to a male literacy of 39.7%.

II. PUBLIC EXPENDITURES FOR HUMAN DEVELOPMENT 1/

9.06 Public expenditure outlays for human resource development programs in Bangladesh currently average about Tk 120 (US\$ 4) per person per year (see Table 9.2). As a proportion of GDP, expenditures declined from 2.4% during FY76-FY80 to 2.1% during FY81-FY86.^{2/} For the 1976-86 period as a whole, health and population programs accounted for 0.8% of GDP (0.4% each for development and recurrent expenditures) and education programs for about 1.4% of GDP (0.4% for development and 1.0% for recurrent expenditures).^{3/} Such levels are among the lowest in the world and are well under half the

1/ Public expenditures include outlays funded under the Annual Development Program (ADP) and the Revenue (Recurrent) Budget. During FY76-FY86, public expenditures amounted to about 17% of GDP.

2/ During the Second Five Year Plan period (FY81-FY85), the revised ADP allocation for education, health and family planning programs amounted to Tk crore 1,438 (in current prices), or 9.5% of the overall revised allocation. The allocation to these sectors for the Third Five Year Plan period increased to 10.6% of the overall allocation (Tk 2,640 in FY85 prices).

3/ The share of education in GDP has been increasing and MOE estimates that in FY87 it would reach 2.3%. This is mostly due to increases in salary outlays in the secondary and college sub-sectors.

Table 9.2: PUBLIC EXPENDITURES IN HUMAN RESOURCE DEVELOPMENT /a
(in percentages)

	FY76-FY80 (average)	FY81	FY83	FY85	FY86	FY87
Share of Public Expenditure Category						
1. Health and Population						
Development	5.8	4.6	5.4	6.1	4.4	5.1
Recurrent	4.6	5.2	4.7	5.2	3.3	6.4
Public Expenditure	5.3	4.8	5.1	5.7	3.9	5.9
2. Education and Training						
Development	4.2	4.1	3.9	4.3	3.5	5.3
Recurrent	14.1	13.9	13.7	16.8	17.5	18.6
Public Expenditure	8.4	7.9	8.3	10.2	10.2	11.2
3. Human Resource Development (1+2)						
Development	10.0	8.7	9.3	10.5	8.0	10.4
Recurrent	18.7	19.1	18.4	21.9	20.8	25.0
Public Expenditure	13.7	12.7	13.4	15.9	14.1	14.1
Share of Human Resource Expenditures in GDP						
Development	1.0	0.9	0.9	0.8	0.6	0.9
Recurrent	1.4	1.2	1.4	1.5	1.5	1.8
Public Expenditure	2.4	2.1	2.2	2.3	2.1	2.7

/a Public expenditures are those funded under the ADP Budget (Development) and the Revenue Budget (Recurrent).

FY76-FY80: Both development and recurrent expenditures are revised budget estimates.

FY81-FY86: Development expenditures are actual figures, recurrent expenditures are revised figures for FY81-FY84 and actuals for FY85-FY86.

FY87: Budget figures.

estimated minimum expenditures required to fulfill the most basic of human development needs in low-income countries.1/

9.07 Since FY76 human development programs have absorbed, on average, 13.5% of public expenditure, of which about 40% has been allocated to health and population and the rest to education. The share of education has been increasing, rising above 70% of the total in FY86. Within health and population, the share of the latter within the ADP has been increasing from 25% in FY75 to 59% in the FY87 budget, with recent increases due to the expansion of the MCH activities included in the population program.

9.08 Recurrent expenditures have been increasing more rapidly than development expenditures, and now account for over 70% of total expenditures on human resource development. This is mostly accounted for by the increase in operational outlays in the education sector; by FY86 over 80% of expenditures in education were funded under the recurrent budget. This increase is explained by a larger payroll resulting from the expansion in the system and from the 50% average increase in teacher salaries which took place in 1985, and (since FY85) by the growing government contributions to finance teachers' salaries in the private secondary and degree college system.

III. HEALTH, NUTRITION AND FAMILY PLANNING

9.09 The Ministry of Health and Family Planning (MOHFP) is responsible for developing, coordinating and implementing the national health, maternal-child health care (MCH) and the family planning programs.2/ The Government's policy objective in the health sector has been to provide a minimum level of health services for all, primarily through the construction of health facilities in rural areas and training of health manpower. Infrastructure development has included both rural hospitals and expansion of Union Health and Family Welfare Centers (UHFWCs) and Rural Dispensaries (RDs) to provide out-patient care. Until recently, the program has focused mainly on curative services but the direction is now changing towards a larger role for preventive health care. Given the severe financial manpower and institutional constraints, the priority has to be given to a few simple largely preventive services. Accordingly, the Third Five Year Plan promotes immunization (Expanded Program on Immunization--EPI), vitamin A distribution, treatment of diarrheal diseases and safe deliveries.3/

1/ According to estimates published by the World Bank in 1980, in low-income countries the hypothetical government costs to provide comprehensive (up to 80% of the population) health care, hygiene, family planning and primary education range between 4 and 7% of GNP.

2/ See Annex 1 for a description of the organization of the Health and Family Planning Programs.

3/ Ministry of Health and Population Control (1985), Report of MCH Task Force, National Strategy for a Comprehensive Maternal and Child Health Program.

9.10 In nutrition, the Government has recently upgraded policy-making capacity by creating a National Nutrition Council, but planning and implementation of specific programs remain weak. The MOHFP is responsible for implementing nutrition programs, but to date, has implemented few initiatives and made only minor expenditures for this purpose. Other programs with nutrition implications such as the Food-for-Work and Vulnerable Group Feeding Programs are under the Ministry of Relief and Rehabilitation.

9.11 Family Planning. Progress in bringing down the rate of population growth over the last decade has been mixed. While the Contraceptive Prevalence Rate (CPR) has been raised from 10% in 1975 to about 28% today, the population continues to grow by an estimated 2.4% to 2.6% per year, a small decline from the 2.7% growth rate of the early 1970s. The 1985-86 period saw a number of implementation problems and program performance deteriorated. This was especially poor in FY85-86 for sterilizations and somewhat disappointing for IUDs. But the number of acceptors of both methods has been rising in FY87 and it is hoped that this marks a new impetus to the program. However, problems remain, and it is unlikely that the targets for a CPR of 40% and for a birth rate of 32 per thousand by 1990 will be achieved.

9.12 Reasons for poor performance are varied and complex. They lie, to a large extent, in continued management and operational deficiencies partly derived from the frequent shifts in administrative arrangements for service delivery which have disrupted the program and have discouraged Family Planning Officers (FPOs). Other problems include poor supervision and accountability, lack of mechanisms to make the system more efficient and inadequate supplies and logistics. Improved coordination of multi-sectoral programs and activities to crystalize latent demand for family planning services are also needed. Stronger leadership of the program and community involvement are often mentioned as necessary ingredients for program improvement but they will not come about easily.

9.13 Health. Although Bangladesh now has a basic health infrastructure in place much remains to be done, particularly in rural areas. Only 30% of the population has access to primary health services and overall health care performance remains unacceptably low by all conventional measurements. Life expectancy at birth is 50 years compared with 61 years in comparable low-income countries. Morbidity and mortality rates for women and children are particularly high. Infant mortality rates exceed 150 deaths per 1000 live births in some parts of Bangladesh ^{1/} and even in the urban areas remain above 100 deaths per 1000 births.^{2/} Only 2% of children in the target group have been immunized against the common infectious diseases,^{3/} and potentially

^{1/} Demographic Surveillance System (1986), Teknaf, ICDDR, B. Scientific Report No. 66.

^{2/} Stanton, B. and Clemens (1986), S., Role of Gender on Urban Childhood Mortality Rates, ICDDR, B.

^{3/} GOB/UNICEF/WHO (1985), Expanded Program on Immunization, Peoples' Republic of Bangladesh, Draft 12, December.

avoidable illnesses (e.g., tetanus, pertussis, nutritional deficiency, measles and diarrhea) account for nearly 50% of infant deaths and over one third of childhood deaths.1/

9.14 Short birth intervals deplete mothers nutritionally and result in low birth weight babies. Fever, infections, diarrhea and parasites impede nutrient absorption and poor weaning practices and harmful food beliefs limit the consumption of more concentrated sources of calories, proteins and micro-nutrients. Intra-family food distribution favors adult men against women and children. The national family planning and maternal-child health care (MCH) program addresses health aspects of these constraints but nutrition education to deal with behavioral issues remains weak.

9.15 The high prevalence of infant and child mortality, morbidity and disability reflects poor maternal care, low standards of nutrition and hygiene, overcrowding and poor sanitation. Some of the poor health conditions such as tetanus and severe dehydration from diarrheal disease can be prevented or controlled by simple and direct interventions. Improvements in others such as malnutrition, respiratory infections and the prevention of diarrheal disease require more elaborate and relatively costly measures.

9.16 Maternal mortality and morbidity, while less studied, appear also to be exceptionally high. Data indicate that certain age groups (younger than 18 years, older than 30 years) are at greatest risk of death.2/ Compared to ratios of 5 maternal deaths per 100,000 deliveries in the Scandinavian countries 3/ and even 390 deaths per 100,000 in Indonesia,4/ ratios in

1/ Demographic Surveillance System (1985), Matlab ICDDR, B. Scientific Report No. 63.

2/ Koenig, M. et al (1986), Maternal Mortality in Matlab, Bangladesh, ICDDR, B.

3/ Bochat W., (1981), "Maternal Mortality in the United States of America", World Health Statistical Quarterly 34, No. 1, pp. 2-13.

4/ I-Chi, et al. "Maternal Mortality at Twelve Teaching Hospitals in Indonesia. An Epidemiological Analysis." International Journal of Gynecology and Obstetrics, 19, No. 4, pp. 259-266.

Bangladesh range from 510 to 770 deaths per 100,000.^{1/} ^{2/} Morbidity estimates are generally lacking although up to 70% of pregnant women are anemic and an equally high percentage are malnourished.^{3/}

9.17 Studies examining cause of death and infectious complications of contraceptive devices have found that potentially preventable causes (septic abortion, post-partum sepsis, tetanus) are responsible for nearly half of all deaths.^{4/} The main causes of maternal death could be reduced by expanded prenatal care with risk assessment--as early during pregnancy as possible--and referral facilities and improved birth practices as well as by family planning practices that encourage birth spacing and discourage pregnancies for women under 20 and over 30 years of age.

9.18 The Mother and Child Health (MCH) Program. As in most developing countries, there has been a tendency to neglect MCH services, although the Government is now committed to expanding the program. The current level of services is especially bad in urban areas. Maternity services in municipalities are extremely limited. In Dhaka, for example, the Municipal Health System has one maternal clinic with 8 beds and there is one free maternity hospital. Three additional medical training hospitals and one government hospital offer some obstetric in-patient service but no outreach anti-natal care. Maternal services appear to be even more limited in other municipalities, with the possible exception of Chittagong, but detailed information is not available. NGOs operate two or three clinics, but in terms of the need, their effect is negligible.

9.19 Services for children in the urban areas are not much better than for mothers. In Dhaka, there are only about 180 municipal health workers charged with immunizing the estimated target population of 315,000 children less than 2 years old; their jobs also include providing Vitamin A to the one million children less than six years old and providing oral rehydration treatment for all episodes of diarrhea. It is therefore necessary to rely heavily on the services of the NGOs. Nearly 100 NGOs of varying sizes with different (and at times overlapping) coverage are involved in child health care activities in Dhaka. Service rates inevitably vary tremendously within the city; immunization coverage, for example, ranges from 5 to 60% of targeted age children. Numerous private and government hospitals have facilities for children, but the number of beds in relation to the need remains very small.

^{1/} L.C. Chen et al, (1974), Maternal Mortality in Rural Bangladesh, Studies in Family Planning 5, No. 11, pp. 334-441.

^{2/} L.S. Lindpainter, (1982), Maternity Related Mortality in Matlab Thana, Bangladesh, ICDDR, B.

^{3/} UNICEF, Maternal and Child Health in Bangladesh, 1984.

^{4/} Ministry of Health and Population Control (1985), Report of MCH Task Force, National Strategy for a Comprehensive Maternal and Child Health Program.

9.20 Rural MCH services are provided by MOHFP staff in the Upazila Health Centers (UHCs), Union Health and Family Welfare Centers (UHFWCs) and Rural Dispensaries (RDs) with some input from NGOs (e.g., Bangladesh Rural Advancement Committee). Some of this care is now being provided jointly with family planning, but, again, the coverage is quite inadequate. Some services are largely non-operative due to staffing problems (for example, the satellite clinic at village level) and lack of support services (for example, blood banks, anesthesiologists). While complicated cases are supposed to be referred to a medical officer, the expense and difficulty of bringing the patient to the UHC, coupled with the scarcity of obstetricians/gynecologists and of essential supplies, render the system ineffective for most pregnancy complications.

9.21 Most deliveries, especially in rural areas, are not professionally attended. Maternal care is provided largely through the informal system of Traditional Birth Attendants (TBA). Although theoretically the Family Welfare Assistant (FWA) identifies pregnant women and refers them to the Family Welfare Visitor (FWV) for antenatal care and to the Health Assistant (HA) for tetanus immunization, in practice this rarely occurs. In recognition of these inadequacies several measures have been taken. Training of TBAs (which began in 1978 and was stopped in 1982) was reinstated in 1984; the goal is to have one trained TBA in each of the 64,000 villages. In addition, additional FWAs are being hired and a new cadre of workers, Senior FWVs, has been proposed to aid in the teaching and supervision of FWAs and TBAs in their antenatal activities.

Issues in Health, Nutrition and Family Planning

9.22 Improving the prospects for health, family planning and nutrition in Bangladesh will require that a number of issues be addressed in the coming years. These include low internal efficiency and lack of attention to the cost effectiveness of health care, inadequate program management, relatively weak MCH care, inadequate planning for urban health, the absence of a nutrition program and the need to define the future role of NGOs. These issues are discussed below.

9.23 Internal Efficiency. Although there is little evidence available, it appears that existing facilities are underutilized, particularly in rural areas. Cultural reasons play a role in explaining low utilization rates--especially for women--but the problem also reflects the low quality of services resulting from lack of essential supplies, inadequate facilities, staff absenteeism and poor training of manpower; drug allocation in the UHCs, for example, is equivalent to only Tk 1 per person per year. Service delivery is often poor because of low staff efficiency and absenteeism which reflect poor supervision and accountability.

9.24 Another problem is the mismatch between available skills and the needs of priority activities. Health and family planning programs, for example, correctly place priority on delivering a few simple contraceptive and largely preventive services. But the relatively plentiful physicians trained in secondary and tertiary care in comparison to primary health

workers, as well as the weak capacity for training in family planning, contraceptive and gynecological care, do not provide the mix of manpower that is best suited to deliver simple and preventive health services.

9.25 Cost Effectiveness of Health Care. There is currently no mechanism for assessing the relative health effect of different interventions in order to prepare a program which includes those with the most "effective" contribution to health for a given level of expenditure. The overall "cost-effectiveness" of health interventions in Bangladesh therefore remains unknown. As in most countries, clinical care has often taken precedence over epidemiological, preventive, environmental and other health oriented interventions; such non-clinical interventions, in a country with the level of socio-economic development as Bangladesh, generally would be expected to lead to more beneficial health effects for similar or lower levels of expenditures. The principal efficacy of health care would probably improve substantially if the various alternative medical interventions were compared and only the more cost-effective ones chosen. In the fields of obstetrics and gynecology, for example, these criteria could be used to assess the relative value of major surgery, minor surgery, in-patient care, out-patient care, diagnostic and therapeutic self-care, preventive measures such as high risk screening and family planning practices. At the same time care should be taken not to equate cost effective care with efficient care. It remains entirely possible in Bangladesh to very efficiently perform rather ineffective medical care. Clearly, this is not a tidy nor clear-cut process, but in view of the scarcity of resources some form of comparative analysis will be essential.

9.26 Program Management. Performance in the health and family planning sectors has been significantly constrained by delays in recruitment of personnel, inadequate logistics and weak program supervision. The present administrative arrangements for implementing the population and health programs leave much to be desired but further structural changes would only result in further disruptions. The most appropriate strategy at present, therefore, is to strengthen and improve current arrangements. In this regard, it is hoped that actions for encadrement of FPOs and their inclusion as members in the Upazila Parishads will improve their performance. In addition, prompt recruitment of additional FWAs and improvement in the distribution of ORT and Drug and Dietary Supplement (DDS) kits could significantly enhance the immunization, vitamin A and diarrheal programs, and could lead to a reduction in infant mortality.

9.27 Considerable improvements in the supervision and performance of MOHFP staff will also be needed. Such efforts require expanding efforts to collect sectoral information. For example, there is no system for reporting MCH activities, and this makes the process of monitoring and planning very difficult. MOHFP is improving its reporting system but it will need further restructuring, additional staff and financial support in order to become operationally effective.

9.28 Strengthening MCH Care. Recent efforts to improve MCH care are most encouraging, but considerable more work to strengthen the existing system and develop new approaches will be necessary. Basic antenatal care, for example, remains almost totally absent. Identifying pregnant women should be possible

following the training of the TBAs and the hiring of more FWAs, but mass education regarding the need for attention while pregnant remains an unmet priority. In addition, effective screening and teaching of pregnant women will require more and better trained FWVs and close supervision by SFWVs. In addition, a thorough inventory will be needed in order to replenish and repair UHFVC screening equipment. An effective system to identify and manage complicated pregnancies also needs to be developed; this will require a complex range of actions involving training, development of a referral system and substantial outlays for equipment and infrastructure.

9.29 Planning for Urban Health. Health services in urban areas are inadequate and their coverage may be deteriorating. Many urban areas lack major government health input with the NGOs providing the bulk of urban health services. Programming and priorities of the NGOs are at best loosely coordinated, although in two municipalities the Government has redistributed the activities of NGO's and of the municipal health system in order to avoid overlapping of their services and increase coverage. While currently only an estimated 18% of the population reside in urban areas, by the year 2000 it is anticipated that about 30% of the population will reside in these areas. The health needs and strategies for providing these services are not being formulated and are not reflected in existing budgets.

9.30 The Need for a Nutrition Program. A number of direct interventions could improve nutritional status, particularly of infants, young children and women. But a strategy for dealing with problems of malnutrition and institutional arrangements for implementing programs are currently lacking. Policy linkages remain to be established particularly between food supply and the consumption needs of those in Bangladesh who live in absolute poverty at the edge of starvation. These policy measures might include setting production and consumption objectives for nutritionally important crops other than foodgrains, since the latter can provide only 80% of calorie requirements in a healthy diet. Establishment of a data system to provide seasonal surveillance as the basis of an early warning system on food conditions is also desirable to permit sharper geographic targeting of resources.

9.31 Principal responsibility for policy and strategy formulation at the interface of food and nutrition is not yet clearly defined but should rest with the Food Policy Committee (FPC), chaired by the Minister of Food. Its membership now consists of the Ministers of Agriculture, Local Government and Finance and could be expanded to include the Ministers of Industries and Health and Family Planning. Strengthening the Food Ministry's Food Planning and Monitoring Section would permit it to function as a secretariat to the FPC. An earlier effort to energize the National Nutrition Council (NNC) and build on its efforts to formulate a draft nutrition policy and program appears to have lost momentum but must be renewed if it is to play an essential advocacy and advisory role. The NNC also needs broadening to include NGOs and other private sector representatives, and strengthening to develop and monitor nutrition intervention programs and coordinate the respective roles of concerned agencies and institutions.

9.32 Role of NGOs. The contribution of NGOs in the expansion of health and family planning programs has been substantial; it is estimated that they provide almost 40% of contraception from modern methods and for the majority

of MCH services in urban areas. In order to facilitate their further growth, some organizational issues must be addressed. First, following the examples mentioned in para 9.29, more municipalities should get involved in coordinating activities with those of NGO's to minimize duplication of their efforts. In addition, there is a need to (i) define the role of NGO's more clearly; (ii) create mechanisms to improve coordination among NGO's and with the Government's programs; (iii) develop mechanisms to evaluate, supervise and monitor NGO's performance; and (iv) simplify procedures for NGO operation and expansion in both urban and rural areas.

IV. EDUCATION

9.33 The Ministry of Education (MOE) is responsible for planning, financing and managing education at the primary, vocational/technical and university levels. Secondary and college education is for the most part private, but heavily subsidized by the public budget. In the last two Plan periods the Government has made primary education a priority, seeking to increase enrollments and improve quality. It has also focused on increasing opportunity in vocational and technical education while stabilizing growth in non-technical university education.

9.34 Education faces a number of constraints which combine to reduce its effectiveness. These include the burden of a rapidly growing population, low expenditures and an underdeveloped planning, management and administrative capacity. As a result, access to education has only expanded modestly in relation to the growing needs and the quality of education leaves much to be desired. Presently there is growing discontent and frustration with the poor performance of the education system.

9.35 Social and political constraints also reduce the effectiveness of the education system. Well organized interest groups of both students and teachers demand increased government support, and even greater nationalization of secondary and college level institutions. This environment has also led to widely available student stipends without regard to need or merit and to minimal tuition fees which have not changed in more than a decade. For the same reason, the Government has been increasing its contributions to financing secondary and college level institutions which has seriously raised its recurrent cost obligations without any commensurate improvement in quality. Another issue is the performance of primary school teachers which leaves much to be desired.

9.36 The Government is well aware of the constraints facing education and the issues that need to be addressed. The Third Five Year Plan confirms that the system has only expanded marginally and remains elitist in character and emphasizes the need for reform. It addresses most of the major policy issues, including the need to improve quality throughout the system, restructure higher secondary and college education, increase cost recovery, strengthen management controls and introduce performance evaluations. However, specific programs to address most of the issues are lacking. Nevertheless, some progress is beginning to be made. For example, in primary education the Ministry of Education has established a Directorate and improvements have been started in field supervision, personnel management, teacher training, curriculum development, textbook supplies and in construc-

tion and maintenance of school facilities. Nevertheless, the full impact of these changes is not expected to be felt for several more years. In preparation of further reforms, MOE is conducting studies in teacher training and automatic promotion and is reviewing issues in respect of non-formal education.

9.37 However, the situation remains very serious. Unless the reforms initiated in primary education are expanded and developed, the primary system will not only remain very wasteful, but will absolutely fail in its task of providing basic literacy and numeracy to a broad segment of the population. Secondary and higher education is also in urgent need of attention; examination systems must be modified, and programs and curricula must be made more appropriate to the needs of the country. Increased emphasis on strengthening vocational and technical training is also needed.

Key Issues in Education

9.38 Improving Education System Management. The organization and management of the education system has not grown according to its aspirations or its current responsibilities. But efforts are being made. For example, the Directorate of Primary Education has been restructured and strengthened. As a result, curricula are being modified and teacher personnel management improved. Management, supervision and support of teachers is being provided through Assistant Upazila Officers who are responsible for visiting schools monthly. In-service and pre-service teacher training has been increased, free textbooks and improved facilities have begun to be provided and the numbers of female teachers are rising. Preliminary surveys show a reduction of the drop-out rate where these changes have been implemented. However, fully implementing these reforms in primary education will require continued attention for the next ten years. Similar reforms are essential for the other levels of the system.

9.39 The Directorate of Secondary and Higher Education is unable to provide the quality control necessary to improve the secondary schools and degree colleges. In part this is a structural problem, because the degree colleges are affiliated with general universities who grant the degree, and in theory they are responsible to the universities for the quality of their curricula, texts and teacher deployment. In fact, the universities are not able to provide effective supervision of degree college programs. The Directorate of Secondary and Higher Education has its own inspection system, but it is seriously understaffed. It focuses entirely on regulatory compliance and not on monitoring teaching quality. A high proportion of their staff time is allocated to reimbursing schools and colleges for teachers' salaries. Unless this Directorate is strengthened and given a mandate for both planning and management, it will be difficult to improve the quality of instruction and efficiency of secondary and degree college institutions.

9.40 The universities are self-governing entities with 95% of their total expenditures provided by the Government as block grants. A University Grants Commission (UGC) was created in 1973 to coordinate the activities of the universities and to distribute their government grants. However, because of the strong tradition of autonomy in the universities, the UGC has been unable to provide either effective long range planning or quality control.

Nevertheless, pressure for increasing the accountability of university administrations is rising along with their costs. In the near future, it will be essential to reshape the management system of higher education in order to increase the accountability of university authorities while maintaining reasonable autonomy.

9.41 Inadequate information upon which to base policy and expenditure decisions is a serious problem in education, as in the case of health. For example, Bangladesh is one of the few countries in the world where it is impossible to assess class-by-class dropout and repeater rates in either primary or secondary education, and gross enrollments are generally overestimated. Developing a sound data base is not expensive and should be given a high priority.

9.42 Reducing High Wastage. High dropout and repeater rates currently greatly increase the cost of producing graduates at all levels of education. Hence, measures to reduce wastage, especially by improving quality of services, are essential. Fully 50% of first grade students drop out before second grade, and repeater rates at the primary level are estimated to average about 10% per grade. If the system continues to perform as it has in the first half of the eighties, primary enrollments will not even keep up with population growth by 1990. Given the low enrollment increases of the early 1980s, and the fact that less than one in five students who enter the system emerges literate, it is clear that a system with such wastage cannot be an effective tool to eradicate illiteracy.

9.43 Wastage in the secondary and college systems is most evident in the low pass rates associated with the terminal examinations. The Secondary School Certificate examination (at the end of tenth grade) and the Higher Secondary Certificate examination (at the end of twelfth grade) average a 50% pass rate. It is estimated that a further 20% of those enrolled in these two grades do not take the exams, largely because they have failed the pre-examination qualifying tests. Repetition in the secondary system is high and degree colleges have an even higher failure rate in their examinations; in many examinations only 35% pass. In the university system (Honors Degree) the examination pass rates are much better, averaging about 80%, but serious delays in graduation still occur because of the large number of strikes which often close the universities for months at a time.

9.44 External Efficiency. Student output does not appear to match country needs. Although employment statistics are extremely scarce, and current analyses are based upon limited surveys, most observers agree that there is substantial educated unemployment and underemployment, particularly of liberal arts graduates.^{1/} The education system is completely oriented to preparing students to advance academically. While such training is useful for some students, there is little attempt to provide more practical skills

^{1/} Much of the unemployment of degree holders is due to the embargo on new hiring for government service, which used to absorb as much as 75% of the post secondary output. In 1986, when there was a partial relaxation of the restriction, 26,000 job seekers applied for 5,000 posts.

to those who must drop out of the formal system during their primary or secondary years. The first opportunity for students to obtain a credential which is accepted in the job market is after completing the 12th grade and passing the HSC examination. But even this credential is of little value unless specific marketable skills are added to the academic preparation. The first practical credential is the pass or honors degree from degree colleges which opens opportunities for government and private employment.

9.45 Numerous difficulties must be overcome to improve the alignment of the output of the education system to the social and economic needs of the country. First, a concerted effort must be made to increase the practical relevance of primary and secondary education. Second, GOB must limit the funding of higher education programs which do not provide training appropriate to productive employment. Third, GOB's planning capacity and that of university authorities must be strengthened to facilitate a transition to more relevant curricula.

9.46 The Need for Cost Recovery. Cost recovery in the education system is almost non-existent. Monthly tuition fees average Tk 5.5 in lower secondary (US 18 cents), Tk 8.5 in upper secondary (US 29 cents), Tk 10 at the degree colleges (US 33 cents) and Tk 12 (US 39 cents) at the honors and advanced degree courses of study. Other fees are of comparable low magnitude. As a result, resource mobilization in the sector is minimal, contributing well below 10% of recurrent costs; this places an additional constraint to the prospects for improving quality and expanding educational services. The option of increasing tuition and fees at the higher levels and establishing programs of student aid on the basis of need and merit deserves serious consideration.

9.47 Non-Formal Education Alternatives. Community-based non-formal education approaches are a promising alternative to provide basic numeracy, literacy and skills to youths and adults who have not been able to enter (or advance in) the formal education system. NGOs have achieved considerable success in implementing innovative non-formal basic education programs and in reaching the rural poor with training, but their progress has been on a small scale. For instance, BRAC has been able to achieve low dropout rates (especially for girls) in non-formal primary schooling with fairly low operational costs and minimal capital expenditures (excluding overhead costs). The most promising non-formal adult education system has also been developed by BRAC combining group formation, consciousness raising, literacy and numeracy and skills training and income generating activities into an integrated process. The BRAC model with appropriate amendments is now also being implemented by several other NGOs. Reviewing these non-formal activities with a view to assess the viability of expanding and replicating them by GOB and NGOs is desirable. To facilitate this process, the country must develop the organizational capacity to support a variety of delivery systems, and provide appropriate monitoring and auditing.

Organization of Health and Family Planning Program

MOHFP has the Family Planning Wing (responsible for family planning and MCH programs) and the Health Wing (responsible for all other services). Each wing has its own Director General; a secretariat responsible for planning, budget and monitoring; and functional operational directorates. Health and family planning services are functionally integrated at the upazila level in the Upazila Health Complex (UHC) under the Health and Family Planning Officer (UHFPO) who belongs administratively to the Health Wing. He is assisted in the performance of FP and MCH functions by an Upazila Family Planning Officer (FPO) and a Medical Officer (MO) who provides technical supervision and heads MCH/FP efforts. In addition, the upazila staffing includes 7 MOs who provide primarily curative health care; a Health Inspector (HI) who supervises field operations of health workers, and an Expanded Program of Immunization (EPI) technician. At the union level, the Union Health and Family Welfare Center (UHFWC) provides the lowest tier of health referral; sterilizations and most IUD insertions also take place there. An Assistant Health Inspector and a Family Planning Assistant, both males (who are supervised by the HI and the FPO from the upazila level) supervise teams who work at the ward level. A Medical Assistant (MA), a Family Welfare Visitor (FWV) and occasionally a pharmacist, staff UHFWCs. At the ward level, a team of two workers delivers home outreach services: a male Health Assistant (HA) from the Health Wing and a female Family Welfare Assistant (FWA) from the Family Planning Wing. The HA is responsible for cholera and malaria control, environmental sanitation and general health matters; he also provides condoms. The FWA delivers pills and condoms while also motivating other forms of contraception and provides nutrition education. The FWA is assisted by a female helper who receives fees for referring sterilization and IUD cases. To complement domiciliary services, the FWA and HA conduct satellite clinics in selected villages on fixed days of the week. Each team is theoretically responsible for a ward population of 6,000, but population growth has probably increased the population:worker ratio. Around 90% of Bangladesh's 13,500 wards have FWA-HA teams.

S T A T I S T I C A L A P P E N D I X

General Notes

In most tables, data are presented in metric units. The conversion factors used are:

2.417 acre/hectare
2204.6 pounds/metric ton
26.7909 maund/metric ton
37.326 kg/maund
1.6093 km/mile
4.546 liter/imperial gallons

The long ton, sometimes confused with the metric ton, is 2240 pounds. The seer is 1/40 of a maund.

In some tables multi-year averages are presented. In this context, the following notation is used:

<u>Column Heading</u>	<u>Period Referred to</u>
70/75	July 1, 1970 through June 30, 1975
72/75	July 1, 1972 through June 30, 1975
75/80	July 1, 1975 through June 30, 1980
80/85	July 1, 1980 through June 30, 1986

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Table 1.1
POPULATION, 1960-2010
[millions]

PROJECTION A: Net reproduction rate lowered to unity by 2000									
	1960	1965	1970	1975	1980	1985	1990	2000	2010
Age 0-14					41.1	45.2	48.1	46.2	42.0
15-64					44.4	52.0	62.0	82.6	103.7
65+					3.0	3.4	3.6	4.3	6.0
Total	52.4	60.5	69.3	71.1	88.5	100.6	113.7	133.1	151.7

PROJECTION B: Net reproduction rate lowered to unity by 2025									
	1960	1965	1970	1975	1980	1985	1990	2000	2010
Age 0-14					41.1	45.2	48.1	54.1	58.6
15-64					44.4	52.0	62.0	82.6	105.9
65+					3.0	3.4	3.6	4.3	6.0
Total	52.4	60.5	69.3	71.1	88.5	100.6	113.7	141.1	170.5

PROJECTION C: Net reproduction rate lowered to unity by 2035									
	1960	1965	1970	1975	1980	1985	1990	2000	2010
Age 0-14					41.1	45.2	49.0	61.1	68.0
15-64					44.4	52.0	62.0	82.6	109.7
65+					3.0	3.4	3.6	4.3	6.0
Total	52.4	60.5	69.3	71.1	88.5	100.6	114.6	148.1	183.7

GROWTH RATES
[percent per annum]

PROJECTION A: Net reproduction rate lowered to unity by 2000									
	50-60	60-65	65-70	70-75	75-80	80-85	85-90	90-00	00-10
Age 0-14							1.9	1.3	-0.4
15-64							3.2	3.6	2.9
65+							2.4	0.7	2.0
Total	2.3	2.9	2.8	0.5	4.5	2.6	2.5	1.6	1.3

PROJECTION B: Net reproduction rate lowered to unity by 2025									
	50-60	60-65	65-70	70-75	75-80	80-85	85-90	90-00	00-10
Age 0-14							1.9	1.3	1.2
15-64							3.2	3.6	2.9
65+							2.4	0.7	2.0
Total	2.3	2.9	2.8	0.5	4.5	2.6	2.5	2.2	1.9

PROJECTION C: Net reproduction rate lowered to unity by 2035									
	50-60	60-65	65-70	70-75	75-80	80-85	85-90	90-00	00-10
Age 0-14							1.9	1.7	2.2
15-64							3.2	3.6	2.9
65+							2.4	0.7	2.0
Total	2.3	2.9	2.8	0.5	4.5	2.6	2.6	2.6	2.2

Source: Staff estimates.

Table 1.2
POPULATION BENCHMARKS BY DISTRICT, 1961-1985
(thousands)

Division District	1961 Census	1974 Census	-----1981 Census-----				Average Size	1974-to-1981 Growth Rate	Extrapolation to 1985 /a	
			Total	Male	Female	Households			Total	Per ha
Rajshahi	11850	17332	21087	10789	10298	3716	5.7	2.8	24339	625
Dinajpur	1710	2571	3198	1647	1551	580	5.5	3.2	3738	473
Rangpur	3796	5447	6490	3325	3165	1196	5.4	2.5	7401	677
Bogra	1574	2231	2718	1384	1334	489	5.6	2.9	3139	699
Rajshahi	2811	4268	5263	2677	2586	894	5.9	3.0	6121	556
Pabna	1959	2815	3418	1756	1662	557	6.1	2.8	3940	693
Khulna	10067	14195	17150	8831	8319	2884	6.0	2.7	19715	508
Kushtia	1166	1884	2273	1167	1106	359	6.3	2.7	2611	654
Jessore	2190	3327	4016	2069	1947	633	6.3	2.7	4614	600
Khulna	2449	3557	4353	2264	2089	741	5.9	2.9	5041	361
Barisal	3068	3928	4668	2398	2270	830	5.6	2.5	5315	646
Patuakhali	1194	1499	1840	933	907	321	5.7	3.0	2134	424
Dhaka	15294	21316	26249	13632	12616	4643	5.7	3.0	30542	850
Jamalpur	1449	2059	2445	1241	1204	452	5.4	2.5	2783	718
Mymensingh	4083	5508	6543	3355	3188	1208	5.4	2.5	7449	674
Tangail	1487	2078	2444	1243	1200	420	5.8	2.3	2767	721
Dhaka	5096	7612	10049	5376	4673	1705	5.9	4.0	12151	1347
Faridpur	3179	4060	4768	2417	2351	858	5.6	2.3	5393	690
Chittagong	13630	18636	22565	11597	10968	3892	5.8	2.8	25996	504
Sylhet	3490	4759	5650	2897	2753	966	5.9	2.5	6430	456
Comilla	4389	5819	6880	3481	3399	1203	5.7	2.4	7811	1025
Noakhali	2383	3234	3813	1899	1914	680	5.6	2.4	4322	570
Chittagong	2983	4315	5476	2913	2563	906	6.0	3.5	6474	759
Chittagong H. T.	385	508	746	407	339	137	5.5	5.6	959	57
TOTAL	50840	71479	87052	44850	42202	15135	5.8	2.9	100592	605

Note: Data shown represent actual census results, not adjusted for probable undercounting.
The adjusted 1981 Census estimate of total population is 89,940,000 for the Census date of March 8, 1981.

/a Extrapolated to 1985 at 1974 to 1981 growth rate and adjusted proportionately to estimated 1985 total.

Source: Bangladesh Bureau of Statistics and staff estimates.

Table 1.3
POPULATION BY DISTRICT - INTERPOLATED ESTIMATES, 1969/70-1984/85
(thousands)

Division/District	1969/70	1971/72	1973/74	1975/76	1977/78	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85
Rajshahi	16804	17678	18525	19541	20554	21446	21997	22561	23139	23732	24339
Dinaipur	2461	2606	2748	2917	3088	3242	3336	3432	3531	3633	3738
Rangpur	5344	5589	5822	6105	6383	6620	6770	6923	7079	7238	7401
Bogra	2161	2275	2385	2516	2648	2764	2835	2909	2984	3060	3139
Rajshahi	4106	4336	4562	4831	5101	5342	5490	5642	5797	5957	6121
Pabna	2732	2873	3009	3172	3334	3477	3565	3656	3748	3843	3940
Khulna	13817	14507	15172	15972	16767	17459	17890	18330	18781	19243	19715
Kushtia	1835	1926	2014	2119	2224	2314	2371	2429	2488	2549	2611
Jessore	3240	3401	3556	3743	3928	4089	4189	4292	4397	4504	4614
Khulna	3437	3622	3802	4017	4232	4423	4541	4661	4784	4911	5041
Barisal	3859	4033	4198	4399	4596	4763	4869	4977	5088	5200	5315
Patuakhali	1446	1525	1602	1694	1787	1869	1919	1971	2024	2079	2134
Dhaka	20550	21678	22785	24110	25445	26645	27382	28138	28917	29718	30542
Jamalpur	2024	2115	2201	2305	2408	2495	2550	2607	2664	2723	2783
Mymensingh	5413	5656	5887	6168	6443	6677	6825	6976	7131	7288	7449
Tangail	2054	2140	2221	2320	2417	2498	2549	2602	2656	2711	2767
Dhaka	7043	7584	8136	8785	9458	10102	10483	10877	11287	11711	12151
Faridpur	4016	4183	4340	4531	4718	4874	4974	5076	5179	5285	5393
Chittagong	18130	19039	19918	20977	22034	22962	23539	24130	24736	25358	25996
Sylhet	4678	4888	5087	5328	5565	5766	5894	6024	6156	6292	6430
Comilla	5734	5984	6220	6507	6789	7026	7177	7331	7488	7648	7811
Noakhali	3192	3328	3457	3614	3767	3895	3978	4061	4147	4234	4322
Chittagong	4083	4348	4612	4924	5242	5536	5712	5894	6082	6275	6474
Chittagong H. T.	442	491	543	604	671	739	778	820	864	910	959
TOTAL	69300	72901	76400	80600	84799	88512	90807	93160	95574	98051	100592

Source: Staff estimates.

Table 1.4
HEALTH INDICATORS, 1980-1984

	1980	1981	1982	1983	1984
	----	----	----	----	----
CRUDE DEATH RATE [per thousand]					
National	10.18	11.5	12.17	12.32	11.88
Rural	10.77	12.23	12.78	13.2	13.01
Urban	6.81	7.21	6.92	7.46	8.44
INFANT MORTALITY RATES [per thousand]					
National	101.4	111.5	121.9	117.5	121.1
Rural	103.5	112.5	123.2	120.8	121.5
Urban	80.7	99.4	103.0	98.8	120.2
Male	102.3	113.4	124.1	118.8	135.3
Female	97.4	109.4	119.4	116.0	106.1
LIFE EXPECTANCY AT BIRTH [years]					
National	56.9	54.8	54.5	53.9	54.0
Rural	56.6	53.3	53.9	53.1	54.0
Urban	61.9	60.1	60.6	60.3	60.4
Male	57.0	55.3	54.4	54.2	54.3
Female	57.1	54.4	54.8	53.6	54.1

Source: Bangladesh Bureau of Statistics

Table 1.5
INCIDENCE OF MALNUTRITION, 1984
[millions affected]

	Protein-Calorie Malnutrition		Vitamin A Deficiency			
	-----		Night	Bitot	Goiter	Anemia
	Acute	Chronic	Blindness	Spots	-----	-----
Pre-school children	2.85	8.75	1.00	0.20	NA	12.10
School age children	3.50	20.40	NA	NA	4.75	21.50
Adults	NA	NA	NA	NA	4.25	33.10

NA = not available.

Source: World Bank, "Bangladesh: Food and Nutrition Sector Review," January 1985.

Table 1.6
FAMILY PLANNING STATISTICS, 1980/81-1985/86
[thousands]

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Voluntary Sterilizations						
Tubectomies	232.50	235.08	274.84	336.50	232.39	116.42
Vasectomies	26.30	67.82	88.32	215.67	259.21	151.13
Total	258.79	302.91	363.16	552.17	491.60	267.55
Delivery of Contraceptive Devices						
IUDs	41.60	83.67	117.74	303.34	432.45	367.67
Pills (cycles)	8238	7751	8258	9726	11553	12137
Condoms	87112	93230	116821	131096	151940	135907
EMKO (philes)	60.79	63.55	69.63	64.25	71.98	46.42
Injections	112.01	81.07	72.70	122.46	165.93	216.49
Foam tablets	5011	4126	5404	4385	3222	3125
COUPLE-YEARS OF PROTECTION [thousands]						
By Sterilization /a						
Tubectomies	522	705	909	1155	1272	1261
Vasectomies	319	355	408	583	784	857
Total	841	1060	1317	1738	2055	2118
With Contraceptive Devices /b						
IUDs /c	122	169	236	469	761	900
Pills	543	517	551	648	770	809
Condoms	581	622	779	874	1013	906
EMKO	15	16	17	16	18	12
Injections	28	20	18	31	41	54
Foam tablets	33	28	36	29	21	21
Total	1322	1371	1637	2067	2625	2702
Total	2130	2404	2918	3775	4680	4820
Married Females Aged 15-49 /d	16097	16629	17179	17746	18332	18937
Apparent Contraceptive Rate /e	13.2	14.5	17.0	21.3	25.5	25.5

/a Cumulative, assuming year-to-year carry-over of 90%.

/b Assuming one couple-year of protection per 15 cycles of pills, 150 condoms or foam tablets, or 4 doses of injectables or vials of EMKO.

/c Cumulative, assuming year-to-year carry-over of 70%.

/d Staff estimates based on age-specific marriage rates from 1981 census.

/e Couple-years of protection per married female aged 15-49.

Sources: MIS, Department of Population Control, Bangladesh Bureau of Statistics, and staff estimates.

Table 1.7
EDUCATION STATISTICS, 1980/81 and 1982/83

	1980/81	1982/83
	-----	-----
ADULT LITERACY RATE (age 15 and up)		
National	29.2	
Rural	25.4	
Urban		
Male	39.7	
Female	18.0	
ATTENDANCE RATES		
Primary (ages 5-9)		28.9
Secondary (10-14)		20.9
Higher Education (15-24)		1.9
STUDENT:TEACHER RATIO		
Primary		50.1
Secondary		27.7
College		31.4
University		15.8

Source: Bangladesh Bureau of Statistics.

Table 1.8
EMPLOYMENT STATISTICS, 1980/81 and 1983/84
[millions]

	1980/81 -----	1983/84 -----
Not in civilian labor force	64.0	67.0
Children 0-9 years	29.9	32.3
Household work	22.4	24.6
Other	11.8	10.1
Civilian Labor Force	25.9	
Employed	25.3	28
Agriculture	15.4	
Non-agriculture	9.9	
Male	23.9	25.7
Female	1.4	2.2
Rural	19.6	24.1
Urban	4.1	3.9
Unemployed	0.6	0.7
Male	0.5	0.5
Female	0.1	0.2
Rural		0.1
Urban		0.6
NON-AGRICULTURAL EMPLOYMENT [thousands]		11648
Prof, tech, admin, & managers		1158
Clerical, sales, and services		6302
Production and transport		3587
Not reported		601
Mining & quarrying		48
Manufacturing		2108
Utilities		107
Construction		321
Trade, hotels, and restaurants		3271
Transp, Storage, & communications		1209
Finance & business services		178
Community & personal services		3250
Not reported		1089

Source: Bangladesh Bureau of Statistics.

Table 1.9
NUMBER OF PERSONS GOING ABROAD FOR EMPLOYMENT, 1976/79-1986

By Occupation	MULTIYEAR AVERAGES		CALENDAR YEAR DATA						
	76-79	80-84	1980	1981	1982	1983	1984	1985	1986
Construction workers	2119	2446	2590	3393	2641	3814	3779	5393	6053
Vehicle-drivers	1162	2111	1070	2575	3587	1881	1448	3026	3637
Workers (skilled, semi-skilled & unskilled)	4879	35434	17706	31478	34870	40410	37886	50956	50874
Technicians	3057	5965	4247	10357	7597	6113	4992	9271	9581
Engineers	370	147	194	236	175	67	60	143	115
Doctors, nurses and	284	420	274	273	224	492	2003	1126	909
Professionals	398	1620	385	1905	2805	3371	3836	3620	2974
Catering workers	791	2187	1836	2653	2604	2225	1299	2052	2369
Miscellaneous	3946	1652	2271	2917	3072	827	1450	2107	1925
Total	17277	51982	30573	55787	57575	59220	56753	77694	78432
By Destination									
United Arab Emirates	5094	5937	4847	6418	6501	6616	5302	8329	8784
Qatar	1542	3910	1455	2268	5504	7561	2763	4751	5725
Kuwait	1623	6395	3687	5464	6846	10302	5677	7283	10823
Iraq	1410	7373	1927	13153	12152	4932	4701	5051	7765
Saudi Arabia	2799	14076	8695	13384	14770	12942	20587	37222	27686
Libya	1314	2934	2976	4162	1929	2215	3386	1546	2901
Bahrain	699	1880	1351	1392	1860	2470	2325	2969	3215
Oman	2052	8130	4745	7351	7309	11126	10119	9200	10667
Singapore	28	592	669	1083	304	178	728	20	0
Others	717	757	221	1112	400	878	1174	1323	866

Note: Data are for calendar years.

Source: Bureau of Manpower, Employment and Training.

Table 1.10
RURAL INFRASTRUCTURE, DATA BY DISTRICT, 1980/81

Division/District	Total Villages	Villages with Primary Schools	Villages with Primary Health Care Centers	Villages with Primary Markets	Villages with Electricity	Villages with Post Office
Rajshahi	25859	8499	978	2753	970	1278
Dinajpur	5229	1494	128	604	313	206
Rangpur	5384	2179	239	795	200	318
Bogra	3813	1189	185	358	168	178
Rajshahi	7520	2165	268	576	175	333
Pabna	3913	1472	158	420	114	243
Khulna	13564	6309	781	2623	629	1801
Kushtia	1609	803	148	231	155	163
Jessore	4103	1578	152	608	149	342
Khulna	3680	1609	219	624	226	459
Barisal	2762	1611	203	798	83	622
Patuakhali	1410	708	59	362	16	215
Dhaka	25831	8538	1065	2982	1478	1714
Jamalpur	2239	814	107	262	22	176
Mymensingh	7063	2391	258	978	167	418
Tangail	2340	906	134	287	34	206
Dhaka	8061	2454	354	734	927	498
Faridpur	6128	1973	212	721	328	416
Chittagong	20396	7817	1155	2595	1724	1676
Sylhet	10189	3213	295	851	539	438
Comilla	5853	2304	423	765	614	564
Noakhali	2132	1184	255	525	207	372
Chittagong	1664	883	155	399	344	281
Chittagong Hill Tracts	558	233	27	55	20	21
Total	85650	31163	3979	10953	4801	6469

Source: Bangladesh Bureau of Statistics, Socio-Economic Indicators of Bangladesh, September 1981.

Table 2.1
GDP AT CURRENT PRICES BY SECTOR OF ORIGIN, 1980/81-1985/86
(Tk crore)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Agriculture	10895	12184	13587	16933	20798	21468
- Crops	8363	9492	10447	12984	15467	14790
- Forestry	585	655	850	1188	1193	1826
- Livestock	1245	1271	1477	1671	2673	3159
- Fisheries	702	765	813	1090	1464	1693
Industry	3670	4253	4471	5098	5950	6611
Mining & quarrying	3	6	3	4	0	1
Manufacturing	2286	2570	2807	3094	3463	3734
- Large & medium-scale	1321	1473	1555	1725	1935	2069
- Small-scale & cottage	965	1097	1252	1369	1528	1665
Construction	1309	1586	1503	1810	2252	2606
Electricity, gas & water	74	96	161	194	235	271
Services	8761	10078	10784	12961	14949	17911
Transport & communications	1833	2286	2505	2601	2727	3333
Trade & catering	2081	2208	2315	2851	3528	3917
Banking & insurance	413	419	434	515	689	893
Owner-occupied housing	1733	1957	1952	2487	2800	3177
Other services	1848	2263	2546	3108	3436	4610
Public administration & defense	814	944	1033	1398	1769	1981
Gross Domestic Product at market prices	23326	26514	28842	34992	41696	45991
Net indirect taxes	1346	1382	1547	1885	2179	2552
Gross Domestic Product at factor cost	21980	25132	27295	33107	39517	43439

Source: Bangladesh Bureau of Statistics.

Table 2.2
ESTIMATES OF PRIVATE FIXED INVESTMENT, 1974/75-1983/84
(Tk crore)

	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84
A. NON-MONETIZED SECTOR										
(1) Index of rural wages (1976/77 = 100) /a	10.3	9.9	10.0	10.6	12.2	14.0	15.4	17.3	19.0	21.9
(2) Non-monetized investment (in constant prices of 1976/77) /b	308.6	317.9	327.4	337.2	347.3	357.8	368.5	379.6	391.0	403.0
(3) Non-monetized investment (in current prices) (A1 x A2/100)	317.9	314.7	327.4	357.4	423.7	500.9	567.5	656.7	742.9	882.6
B. INDUSTRY										
(1) Disbursements of BSB and BSRS	..	10.0	9.4	21.9	49.9	83.9	110.6	97.5	99.8	73.4
(2) Private industrial investment (1.9 x B1) /c	10.0	19.0	17.9	41.6	94.8	159.4	210.1	185.2	189.6	208.0
C. AGRICULTURE										
(1) Medium-term agricultural credit /d	10.2	9.1	14.5	19.2	30.9	72.9	76.5	107.6	168.7	278.7
(2) Agricultural investment (1.3 x C1) /e	13.3	11.8	18.8	25.0	40.2	94.8	100.4	139.9	219.3	362.3
D. CONSTRUCTION /f										
(1) Imports and domestic production of cement ('000 tons)	45.5	37.9	51.9	73.1	76.6	82.5	79.1	84.2	106.6	102.1
(2) 3-year moving average	33.4	45.1	54.3	67.2	77.4	79.4	81.2	75.5	97.8	105.0
(3) Construction cost index (1976/77 = 100)	9.8	11.2	10.0	10.2	10.7	12.6	15.3	16.7	17.5	17.6
(4) Total construction (D2/519 x D3/100 x 4390) /g	264.6	408.3	439.0	554.1	669.5	808.7	1004.3	1066.5	1439.4	1563.0
(5) Public construction /h	104.2	145.2	203.7	232.2	325.1	400.4	464.1	531.0	613.1	631.7
(6) Industrial construction /i	4.0	7.6	7.9	16.7	37.9	61.0	83.2	74.1	75.8	83.2
(7) Private construction (4-5-6)	156.4	255.5	192.3	305.2	306.5	347.3	457.0	461.4	750.5	848.1
E. TRANSPORT										
(1) Imports and domestic production of trucks and buses (mill. Tk)	14.4	11.5	12.5	20.2	44.0	50.0	56.6	97.9	35.8	47.0
(2) Private investment /j	11.5	9.2	10.0	16.2	35.2	40.0	45.3	78.3	28.6	37.6
TOTAL	509.1	610.2	566.4	745.4	900.4	1142.4	1380.3	1521.5	1930.9	233.8

.. = not available.

/a Average daily wages (without food) of non-skilled agricultural labor (BBS).

/b 1976/77 based on estimates of rural house and farm building construction and private land improvement, in Planning Commission, Estimation of Gross Fixed Capital Formation in Bangladesh, June 1980.

/c Approximately 85% of BSB and BSRS loans sanctioned have been for private industry; debt:equity ratios have typically been 60:40, and it is estimated that projects financed by BSB and BSRS account for roughly 75% of private industrial investment (including small-scale industry). In 1983/84 BSB/BSRS accounted for only about 50% of private investment.

/d Estimates for 1974/75 and 1975/76 are based on data for BKB alone.

/e Institutional credit is estimated to account for 75% of private monetized investment in agriculture.

/f Excluding industrial construction.

/g Estimate for 1976/77 based on estimates provided in Planning Commission, op cit. Time series based on trends in supply of cement and construction cost index.

/h Estimated as 30% of public fixed investment financed through the Central Government's Annual Development Program.

/i Estimated as 40% of private industrial investment.

/j Assumed to be 80% of the total supply of trucks and buses.

Source: Staff estimates.

Table 2.3
GDP AT CONSTANT PRICES, 1980/81-1985/86
[Tk crore at 1972/73 market prices]

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Agriculture	3491	3523	3685	3744	3779	3909
- Crops	2763	2744	2879	2912	2946	3076
- Forestry	170	188	192	210	196	186
- Livestock	348	368	377	384	393	402
- Fisheries	210	222	237	239	245	245
Industry	1070	1102	1109	1201	1276	1306
Mining & quarrying	1	1	1	1	1	2
Manufacturing	760	772	760	788	813	828
- Large & medium-scale	439	443	421	439	454	459
- Small-scale & cottage	321	330	339	349	359	369
Construction	285	300	304	365	409	417
Electricity, gas & water	25	30	45	49	53	59
Services	2604	2598	2689	2855	3035	3234
Transport & communications	485	485	523	534	548	579
Trade & catering	687	627	643	680	721	760
Banking & insurance	139	129	122	129	154	195
Owner-occupied housing	530	542	555	568	581	595
Other services	491	523	557	594	634	673
Public administration & defense	273	291	290	350	397	432
Gross Domestic Product, at market prices	7164	7223	7484	7800	8090	8448
Net indirect taxes	413	377	402	420	422	469
Gross Domestic Product, at factor cost	6751	6846	7082	7380	7668	7979
(Real Annual Growth, in %)	6.2	1.4	3.4	4.2	3.9	4.1

Source: Bangladesh Bureau of Statistics.

Table 2.4
GDP DEFLATORS, 1977/78-1985/86
[1972/73 = 1.0000]

	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Agriculture	2.3860	2.7610	3.0030	3.1211	3.4589	3.6870	4.5224	5.5041	6.2155
- Crops	2.3590	2.6470	2.8640	3.0272	3.4591	3.6282	4.4588	5.2502	5.8768
- Forestry	2.7280	3.1280	3.0780	3.4339	3.4803	4.4340	5.6687	6.0441	6.6180
- Livestock	2.4550	3.1740	3.8320	3.5810	3.4546	3.9206	4.3547	6.8015	8.0836
- Fisheries	2.3740	3.2740	3.3370	3.3422	3.4446	3.4265	4.5615	5.9755	6.8730
Industry	2.3350	2.4860	2.9640	3.4302	3.8579	4.0312	4.2450	4.6667	5.0109
Mining & quarrying	2.0000	2.5000	2.2500	3.0000	3.0000	3.0000	4.0000	4.0000	4.0000
Manufacturing	2.1520	2.2410	2.7130	3.0072	3.3284	3.6944	3.9295	4.2595	4.4475
- Large & medium-scale	2.1520	2.2410	2.7130	3.0073	3.3284	3.6944	3.9294	4.2621	4.4531
- Small-scale & cottage	2.1520	2.2410	2.7130	3.0072	3.3285	3.6944	3.9297	4.2563	4.4403
Construction	2.8880	3.0290	3.7100	4.6004	5.2806	4.9465	4.9589	5.5061	6.1929
Electricity, gas & water	2.2150	2.4720	2.7200	2.9760	3.2399	3.5578	3.9979	4.4340	4.4610
Services	2.1830	2.4450	2.8730	3.3649	3.8792	4.0098	4.5396	4.9255	5.1827
Transport & communications	2.0710	2.0700	2.4430	3.7835	4.7110	4.7920	4.8704	4.9763	4.9764
Trade & catering	2.2840	2.5000	2.8090	3.0306	3.5209	3.5998	4.1943	4.8932	4.9240
Banking & insurance	2.2150	2.4650	2.7230	2.9784	3.2413	3.5582	3.9907	4.4740	4.8595
Owner-occupied housing	2.1850	2.5320	3.0360	3.2707	3.6837	3.5180	4.3795	4.8193	5.2189
Other services	2.1400	2.6480	3.3110	3.7640	4.3303	4.5748	5.2318	5.4196	5.9056
Public administration & defense	2.2150	2.4670	2.7210	2.9777	3.2402	3.5579	3.9931	4.4559	4.8611
Gross Domestic Product at market prices	2.3110	2.6090	2.9510	3.2559	3.6710	3.8541	4.4860	5.1564	5.6397
Average annual aggregate inflation rate [%]	30.4	12.9	13.1	10.3	12.7	5.0	16.4	14.9	9.4

Source: Bangladesh Bureau of Statistics.

Table 3.1
BALANCE OF PAYMENTS, 1980/81-1986/87
(US\$ millions)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
Merchandise exports, fob	710.7	626.0	686.0	811.0	934.0	819.0	980.0
Merchandise imports, fob/c&f /a	-2533.0	-2572.0	-2309.0	-2353.0	-2647.0	-2364.0	-2460.0
Trade Balance	-1822.3	-1946.0	-1623.0	-1542.0	-1713.0	-1545.0	-1480.0
Non-factor services, net	37.5	27.0	57.0	32.4	11.4	-1.9	-15.9
Non-factor services, receipts	222.3	214.0	213.0	222.4	228.0	221.0	221.0
(- Other transport)	40.3	36.0	--	26.0	31.0	23.0	22.0
(- Travel)	16.6	16.0	--	30.0	29.2	18.0	15.0
(- Government services, n.e.i.)	30.3	33.0	--	53.0	35.0	--	--
(- Other)	135.1	129.0	--	113.4	132.8	180.0	184.0
Non-factor services, payments	-184.8	-187.0	-156.0	-190.0	-216.6	222.9	236.9
(- Other transport)	-39.2	-47.0	--	-63.0	-58.5	-39.0	-42.9
(- Travel)	-18.4	-20.0	--	-24.0	-39.9	-53.0	50.0
(- Government services, n.e.i.)	-37.0	-39.0	--	-78.0	-76.8	--	--
(- Other)	-90.2	-81.0	--	-26.0	-41.4	-130.9	144.0
Investment income, net	-22.6	-97.0	-169.0	-64.4	-89.6	-123.2	-110.5
Investment income, receipts	51.9	34.0	17.0	56.6	58.0	39.0	37.0
(- Interest on reserves /b)	18.4	13.0	--	47.8	53.0	31.0	30.0
(- Other interest & investment income)	33.5	20.5	--	8.8	5.0	8.0	7.0
Investment income, payments	-74.6	-131.0	-186.0	-121.0	-147.6	-162.2	-147.5
(- Interest on external public M< debt)	-42.0	-47.2	-46.3	-63.0	-65.0	-72.5	-81.5
(- IMF service charges)	-8.0	-37.1	-33.7	-37.0	-37.0	-37.5	-26.0
(- Other interest & investment income)	-24.6	-46.2	-105.0	-21.0	-45.6	-34.6	-20.0
Private unrequited transfers, net	379.1	424.0	628.0	627.0	476.8	586.0	670.0
Private unrequited transfers, receipts	379.4	424.1	628.0	627.0	477.0	586.0	670.0
Private unrequited transfers, payments	-0.4	-0.1	--	-0.2	-0.2	--	--
Current Account Balance	-1428.3	-1592.0	-1107.0	-948.0	-1314.4	-1084.0	-936.0
Amortization of public M< debt	-50.1	-39.0	-74.0	-72.0	-110.0	-117.0	-138.0
Total IMF transactions, net	193.1	49.5	46.9	19.0	-7.0	-3.0	159.0
Aid disbursements, total	1147.2	1236.1	1345.5	1268.0	1267.0	1306.0	1469.0
Other long-term capital, net	40.1	0.0	0.0	-2.5	-1.0	-5.0	-36.0
(- Direct & portfolio investment, net)	0.0	0.0	0.0	0.2	1.2	-5.1	--
(- Subscriptions to int'l non-monetary orgs)	-1.9	0.0	0.0	-2.8	-3.6	-0.2	--
(- Other, net)	42.0	0.0	0.0	0.1	-0.7	0.3	-36.0
Short-term capital, net	28.1	65.0	-36.0	64.8	-34.9	1.0	15.0
(- Resident official sector, net)	87.6	0.0	0.0	40.7	11.8	--	--
(- Deposit money banks, net)	-94.3	0.0	0.0	33.6	-21.2	--	--
(- Other, net)	34.9	65.0	-36.0	-9.5	-25.5	--	--
Liabilities constituting foreign authorities' reserves, net	90.7	165.0	-6.0	-40.1	-30.0	0.0	0.0
Food borrowing, net	0.0	0.0	0.0	-9.0	91.0	-69.0	-96.0
(- Food Borrowing, gross)	0.0	0.0	0.0	51.0	190.0	13.0	0.0
(- Food Loan Amortization)	0.0	0.0	0.0	-60.0	-99.0	-82.0	-96.0
Errors & omissions, net /c	-45.2	-12.6	65.8	2.2	-4.7	39.6	-40.0
Change in reserves /d (- = increase)	24.4	128.0	-235.2	-189.0	144.0	-81.0	-397.0
MEMORANDUM ITEMS:							
Reserve level, end of June /c (US\$ m)	250.0	105.1	340.3	516.0	395.0	476.0	873.0
- Reserves, excluding gold (US\$ m)	231.5	87.9	322.5	499.9	357.5	459.8	404.6
- Gold, national valuation (US\$ m)	18.5	17.0	17.8	16.1	14.3	--	--
Average annual exchange rate (Tk/US\$)	16.3447	20.0400	23.7600	24.9000	26.0000	29.8861	30.8000

-- = not available separately.

/a Merchandise imports are reported on a mixed valuation basis, partly fob and partly cif.

/b 7% on average level of reserves.

/c Including valuation changes other than those of reserves.

/d Including changes in the valuation of reserves.

Sources: Bangladesh Bank; Ministry of Finance and Planning, External Resources Division, Planning Commission; IMF; IBRD, External Debt Reporting System; and staff estimates.

Table 3.2
BALANCE OF PAYMENTS - REQUIREMENTS AND SOURCES FORMAT, 1980/81-1986/87
(US\$ millions)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
FOREIGN EXCHANGE REQUIREMENTS							
CURRENT ACCOUNT							
Merchandise imports	2533.0	2572.0	2309.0	2353.0	2647.0	2364.0	2460.0
Payments on investments	74.6	131.0	186.0	121.0	147.6	162.2	147.5
Non-factor services	184.8	187.0	156.0	191.0	216.6	222.9	236.9
Subtotal	2792.4	2890.0	2651.0	2665.0	3011.2	2749.1	2844.4
CAPITAL ACCOUNT							
Public M< debt amortization	50.1	39.0	74.0	71.0	110.0	117.0	138.0
Food loan amortization	0.0	0.0	0.0	60.0	99.0	82.0	96.0
Long-term capital, net	-40.1	0.0	0.0	2.5	1.0	5.0	36.0
Short-term capital, net	-28.1	-65.0	36.0	-64.8	34.9	-2.0	-15.0
Subtotal	-18.1	-26.0	110.0	68.7	244.9	202.0	255.0
TOTAL REQUIREMENTS	2774.3	2864.0	2761.0	2733.7	3256.1	2943.0	3099.0
FOREIGN EXCHANGE SOURCES							
CURRENT ACCOUNT							
Merchandise exports	710.7	626.0	686.0	822.0	934.0	819.0	980.0
Remittances	379.1	424.0	628.0	552.0	477.0	586.0	670.0
Investment income	51.9	34.0	17.0	56.6	58.0	39.0	37.0
Non-factor services	222.3	214.0	213.0	222.4	228.0	221.0	221.0
Subtotal	1364.0	1298.0	1544.0	1653.0	1697.0	1665.0	1908.0
CAPITAL ACCOUNT							
Aid disbursements	1147.2	1236.1	1345.5	1268.0	1267.0	1306.0	1469.0
IMF transactions, net	193.1	49.5	0.0	19.0	-7.0	-3.0	159.0
Food borrowing, gross	0.0	0.0	0.0	51.0	190.0	13.0	0.0
Other	90.7	165.0	-6.0	-40.1	-30.0	0.0	0.0
Subtotal	1431.0	1450.6	1339.5	1293.9	1420.0	1318.0	1628.0
TOTAL SOURCES	2795.0	2748.6	2883.5	2946.9	3117.0	2983.0	3536.0
Increase in gross reserves	-18.1	-26.0	110.0	68.7	-144.0	81.0	397.0
Errors and omissions	38.8	-89.4	12.5	144.5	4.9	40.0	40.0

Sources: Bangladesh Bank; Ministry of Finance and Planning, External Resources Division; Planning Commission; IMF; IBRD, External Debt Reporting System; and mission estimates.

Table 3.3
TRADE BALANCE BY COMMODITY GROUP, 1980/81-1985/86
(US\$ million)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Foodgrains and products	-249.20	-285.00	-359.74	-394.51	-494.91	-202.30
Meat, fish, and related	42.93	52.81	74.68	80.16	90.19	121.50
Tea, fruit, spices, tobacco, etc.	-33.46	37.94	50.34	67.01	65.44	34.39
Oil, oilseeds, oilcake	-102.44	-76.00	-87.87	-88.91	-112.00	-147.00
Sugar, molasses	1.06	0.00	0.63	0.00	0.00	0.00
Subtotal: Food and related	-341.11	-270.25	-321.96	-336.25	-451.28	-193.41
Jute and products	485.32	393.23	427.63	474.18	540.61	419.07
Leather and other animal products	57.43	63.08	59.55	86.68	71.02	61.84
Fibers, textiles, and garments	-186.04	-122.45	-92.15	-171.56	-68.86	-23.09
Handicrafts and related	5.04	0.00	3.67	2.82	2.59	1.93
Subtotal: Non-food agro-based	361.75	333.86	398.70	392.12	545.37	459.75
Paper and related products	8.68	0.00	4.36	8.14	10.09	7.34
Cement and clinker	-47.63	-31.00	-44.00	-37.00	-32.00	-40.00
Chemical industry products	-92.20	-105.00	-52.26	-66.54	-132.21	-103.95
Crude oil and products	-454.28	-505.59	-425.17	-329.16	-357.22	-340.04
Coal, coke, and pig iron	-47.64	0.00	0.00	-8.00	0.00	0.00
Subtotal: Non-Ag industrial commodities	-633.07	-641.59	-517.07	-432.56	-511.34	-477.04
Capital goods	-689.40	-615.00	-681.00	-666.00	-616.00	-680.00
Other	-520.48	-786.20	-501.06	-501.94	-710.58	-662.41
Subtotal: Other	-1209.88	-1401.20	-1182.06	-1167.94	-1326.58	-1342.41
Trade balance	-1822.32	-1979.18	-1622.40	-1544.63	-1743.83	-1553.11

Source: Tables 3.4 and 3.8.

Table 3.4
EXPORTS, 1980/81-1986/87
(US\$ million)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87 (1st half)
Raw jute	118.86	101.69	109.81	117.19	150.81	123.89	37.86
Jute manufactures	357.03	283.50	305.32	336.12	357.72	294.32	127.50
Jute specialty products	9.42	8.04	12.50	20.87	32.08	0.86	0.00
Leather & leather products	56.68	63.08	58.46	85.27	69.80	60.73	61.62
Frozen shrimps, fish & froglegs	39.95	52.81	72.06	76.99	86.85	114.70	86.60
Other fish products	1.98	0.00	1.64	2.19	2.45	5.42	0.48
Tea	40.67	37.94	46.58	68.90	61.02	32.78	21.28
Spices, incl. tamarind & sesame	0.22	0.00	0.28	0.61	0.48	0.15	0.10
Fruits & vegetables	1.02	1.47	0.00	3.43	4.25	14.75	9.17
Tobacco	0.02	0.00	2.28	3.25	2.57	0.66	1.13
Betel leaves	0.96	0.00	1.20	1.25	1.38	4.33	1.79
Raw cotton	0.17	0.00	0.00	0.14	0.46	0.43	0.03
Cotton waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cotton yarn & thread waste	0.12	0.00	0.36	0.31	0.16	0.00	0.00
Kapok	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sugar	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Molasses	1.03	2.00	0.63	0.00	0.00	0.00	0.00
Oil cake	0.56	0.00	0.13	0.09	0.00	0.00	0.00
Wheat & rice bran	1.16	2.42	2.26	3.49	3.09	0.00	0.00
Rice	0.00	5.88	0.00	0.00	0.00	0.00	0.00
Crude fertilizers	0.49	0.00	0.40	0.32	0.24	0.39	0.16
Animal casings	0.14	0.00	0.19	0.08	0.05	0.00	0.00
Lizard skins	0.06	0.00	0.40	0.95	0.91	1.11	0.00
Tortoise & turtle meat & shells	1.00	0.00	0.98	0.99	0.90	1.38	0.68
Bees wax	0.06	0.00	0.10	0.06	0.02	0.00	0.00
Textiles, incl. silk & silk waste	0.83	0.55	0.65	0.42	0.32	0.00	0.00
Readymade garments	3.24	7.00	10.84	31.57	116.20	131.48	70.80
Handicrafts	3.45	0.00	2.48	2.38	1.91	1.93	1.58
Pottery & coir products	0.07	0.00	0.00	0.01	0.02	0.00	0.00
Wood & furniture components	0.28	0.00	0.36	0.20	0.08	0.00	0.00
Bamboo & bamboo products	1.24	0.00	0.83	0.24	0.59	0.00	0.00
Matches	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp	0.01	0.00	0.05	0.02	0.00	0.00	0.00
Newsprint	7.55	0.00	4.16	6.54	8.50	7.34	3.03
Paper	0.98	0.00	0.11	1.56	1.59	0.00	0.00
Hardboard & particle board	0.05	0.00	0.04	0.03	0.01	0.00	0.00
Cellophane	0.08	0.00	0.00	0.00	0.00	0.00	0.00
Rayon	0.61	0.00	0.22	0.02	0.00	0.00	0.00
Pharmaceuticals & crude drugs	0.02	0.00	0.55	0.18	0.00	0.00	0.00
Glycerine	0.38	0.00	0.62	0.53	1.15	1.09	0.31
Urea	9.58	0.00	10.35	9.74	4.79	2.57	3.02
Ammonium sulfate	0.74	0.00	0.00	0.00	0.00	0.00	0.00
Naphtha	29.85	30.16	18.91	22.72	20.68	13.91	4.98
Furnace oil	19.28	11.25	8.31	0.00	0.00	0.00	0.00
Bitumen	0.00	1.00	4.00	3.12	0.11	0.05	0.00
Wire & cables	0.02	0.00	0.14	0.72	0.55	0.00	0.00
All others /a	0.77	18.18	8.42	8.54	3.87	3.59	3.08
Total	710.69	626.97	686.60	811.00	934.43	817.86	435.20
MEMORANDUM ITEMS:							
Traditional exports	624.61	547.06	606.37	707.52	760.72	632.69	335.34
Readymade garments	3.24	7.00	10.84	31.57	116.20	131.48	70.80
Other nontraditional exports	82.84	38.76	69.39	69.28	53.25	53.69	29.06

/a In 1981/82, 1983/84 and 1984/85, includes all items for which details are not shown separately.

Source: Export Promotion Bureau; Bangladesh Bureau of Statistics; Bangladesh Jute Mills Corporation; Bangladesh Jute Export Corporation; Bangladesh Tea Board; Bangladesh Sugar and Food Industries Corporation; Bangladesh Petroleum Corporation; Planning Commission; and mission estimates.

Table 3.5
JUTE EXPORTS, 1980/81-1985/86

		1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Raw Jute							
	Value ('000 US\$)	118864	101692	110000	117192	150809	123890
	Quantity (bales)	1943946	1911370	2246000	1902000	1408000	2301000
	Unit price (US\$/bale)	61.14	53.2	48.91	61.61	107.15	53.84
Hessian	Quantity (metric tons)	182782	188562	224599	214097	184641	151371
Sacking	Quantity (metric tons)	238676	292912	195961	162234	176945	242486
Carpet-backing	Quantity (metric tons)	76244	54306	90750	94199	72600	69737
Carpets	Quantity (metric tons)	57	221	697	236	213	315
Others/discrepancy	Quantity (metric tons)	3677	1354	-3007	37234	-8550	..
Total Jute Manufactures							
	Value ('000 US\$)	357033	283502	306000	336115	357722	294318
	Quantity (metric tons)	501436	537355	509000	508000	425849	463909
	Unit price (US\$/metric ton)	712.02	527.39	556.6	661.64	840.02	634.43
Jute Speciality Products							
	Value ('000 US\$)	9422	8035	12000	20047	32079	856
	Quantity (metric tons)	14500	13200	22000	30000	35151	1011
	Unit price (US\$/metric ton)	650	608.71	545.46	668.23	912.61	846.69
Total Value ('000 US\$)		485319	393229	428000	473354	540610	419064

NA = not available.

Source: Export Promotion Bureau and Bangladesh Jute Mills Corporation.

Table 3.6
TEA, LEATHER AND FISH EXPORTS, 1980/81-1985/86

		1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Tea							
	Value ('000 US\$)	40672	37938	46000	68900	61018	32780
	Quantity ('000 lbs)	65675	69041	67647	67650	56533	65763
	Unit price (US\$/000 lbs)	619.29	549.5	680	1018.5	1079.3	498.5
Leather and Leather Products /a							
	Value ('000 US\$)	56682	63081	58000	85261	69799	60730
	Quantity ('000 square feet)	80607	87278	97890	102910	81750	71520
	Unit price (US\$/000 square feet)	703.19	722.76	617.74	828.5	853.8	849.1
Frozen Shrimps, Froglegs and Fish							
	Value ('000 US\$)	39950	52811	72000	95000	86845	114700
	Quantity ('000 lbs)	16552	20573	27490	38462	38240	47160
	Unit price (US\$/lb)	2.41	2.57	2.62	2.47	2.27	2.43
Other Fish Products and Preparations /b							
	Value ('000 US\$)	1984	1473	..	2186	2450	5420
Total Value ('000 US\$)		139288	155303	176000	233345	220112	213630

/a Excludes hides and skins, but includes leather goods.

/b Includes dried and salted fish and fish products, sharkfins, and fishmaws.

Source: Bangladesh Export Promotion Bureau and Bangladesh Tea Board.

Table 3.7
NON-TRADITIONAL EXPORTS, 1980/81-1985/86

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Newsprint						
Value ('000 US\$)	7552	5998	4000	6540	8498	7340
Quantity (tons)	16498	10542	9000	14000	18000	16000
Unit price (US\$/ton)	457.75	487.48	462.22	467.14	472.11	458.75
Paper						
Value ('000 US\$)	983	12	..	2560	1586	..
Quantity (tons)	1689	25	..	2371	2453	..
Unit price (US\$/ton)	582	480	..	657.95	646.56	..
Naphtha						
Value ('000 US\$)	29845	30160	19000	26000	20677	13910
Quantity (metric tons)	116367	106910	59000	100700	89000	80000
Unit price (US\$/metric ton)	256.47	282.11	320.5	258.18	232.33	173.88
Furnace Oil						
Value ('000 US\$)	19281	11250	8000	..	..	..
Quantity (metric tons)	106344	69169	50000	..	..	..
Unit price (US\$/metric ton)	181.31	162.65	166.2	..	..	..
Bitumen						
Value ('000 US\$)	0	1000	4000	3120	106	50
Quantity (metric tons)		4323	16000	13000	459	209
Unit price (US\$/metric ton)	0	231.3	225.63	240	230.94	239.23
Rice						
Value ('000 US\$)	0	5880	0	0	0	0
Quantity ('000 tons)	0	20000	0	0	0	0
Unit price (US\$/ton)	0	294	0	0	0	0
Urea						
Value ('000 US\$)	9584	0	10000	9734	4790	2570
Quantity ('000 tons)	39764	0	66000	61000	26300	20499
Unit price (US\$/ton)	241.02	0	156.82	159.57	182.13	125.37
Sugar						
Value ('000 US\$)	26	0	0	0	0	0
Others						
Value ('000 US\$)	18811	24137	37000	52533	142837	161296
Total Non-traditional exports ('000 US\$)	86082	78437	82000	103476	173707	185166
in constant prices of FY73 ('000 US\$)	48995	53123	53085	57025	70389	52276
percent of total	12.1	12.5	12.0	12.6	18.6	22.6
Growth rate (% p.a.)						
in constant prices of FY73 ('000 US\$)		-8.9	4.5	26.2	67.9	6.6
		8.4	-0.1	7.4	23.4	-25.7
Total Exports ('000 US\$)	710689	626969	686000	822000	934426	817860
in constant prices of FY73 ('000 US\$)	404497	424629	444100	453000	429825	463216

.. = not available separately.

Note: Non-traditional exports exclude raw jute, jute manufactures, tea, leather, shrimp, fish, froglegs, and other fish products.

Source: Export Promotion Bureau; Bangladesh Bureau of Statistics; Bangladesh Jute Mills Corporation; Bangladesh Jute Export Corporation; Bangladesh Tea Board; Bangladesh Sugar and Food Industries Corporation; Bangladesh Petroleum Corporation; Planning Commission; and mission estimates.

Table 3.8
IMPORT VALUES, QUANTITIES, AND PRICES, 1980/81-1986/87

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
Rice /a							
Value (mill. US\$)	40.4	46.0	97.0	56.0	176.0	8.0	47.5
Quantity (long tons)	82.0	144.0	345.0	179.0	700.0	39.0	235.0
Unit Price /a (US\$)	487.7	319.4	281.2	313.0	251.4	205.0	202.1
Wheat /a							
Value (mill. US\$)	210.0	239.0	289.0	342.0	322.0	212.0	264.6
Quantity (long tons)	976.6	1111.0	1527.0	1877.0	1899.0	1164.0	1637.0
Unit Price /a (US\$/long ton)	215.0	215.1	189.3	182.0	169.6	182.1	161.6
Edible Oil /a							
Value (mill. US\$)	92.0	71.0	83.0	87.0	103.0	135.5	42.5
Quantity ('000 tons)	141.0	109.0	129.0	100.0	136.0	272.0	100.0
Unit Price (US\$/ton)	652.5	651.4	643.4	870.0	757.4	498.0	425.0
Oilseeds							
Value (mill. US\$)	11.0	5.0	5.0	2.0	6.0	0.1	3.0
Quantity (metric tons)	29.7	13.0	17.0	5.4	20.0	0.4	15.0
Unit Price (US\$/metric ton)	370.0	384.6	294.1	370.0	300.0	368.0	200.0
Crude Petroleum /b							
Value (mill. US\$)	343.6	334.0	373.0	233.0	226.0	177.0	145.7
Quantity ('000 tons)	1304.7	1177.9	1443.0	1004.0	985.0	1008.0	1085.6
Unit Price (US\$/ton)	263.3	283.2	258.5	232.0	229.4	175.6	134.2
Petroleum Products /c							
Value (mill. US\$)	159.8	213.0	83.0	122.0	133.0	165.0	100.0
Quantity ('000 tons)	523.9	583.0	219.0	464.0	570.0	805.0	700.0
Unit Price (US\$/ton)	305.1	365.4	379.0	263.0	233.3	205.0	142.9
Fertilizer /d							
Value (mill. US\$)	104.0	104.4	66.0	75.0	137.0	108.0	23.3
Quantity (long tons)	350.3	457.2	330.0	356.0	666.0	639.0	150.0
Unit Price (US\$/long ton)	296.9	228.3	200.0	211.0	205.7	169.0	155.0
Cement							
Value (mill. US\$)	32.8	31.0	44.0	37.0	26.0	57.0	36.0
Quantity (metric tons)	446.0	435.0	759.0	748.0	588.0	1333.0	900.0
Unit Price (US\$/ton)	73.5	71.3	58.0	49.0	44.2	42.8	40.0
Raw Cotton							
Value (mill. US\$)	108.0	79.0	56.0	125.0	106.0	51.6	75.0
Quantity ('000 bales)	256.0	187.0	194.0	388.0	305.0	181.0	300.0
Unit Price (US\$/bale)	421.9	422.5	288.7	322.0	347.5	285.0	250.0
Staple Fibres							
Value (mill. US\$)	13.0	5.0	4.0	9.0	3.0	1.0	2.0
Quantity ('000 bales)	42.0	16.0	13.0	27.0	10.0	3.0	10.0
Unit Price (US\$/bale)	309.5	312.5	307.7	333.3	300.0	342.0	200.0
Yarn							
Value (mill. US\$)	20.1	22.0	30.0	39.0	31.0	50.0	66.0
Quantity (million .lbs)	14.0	18.0	20.0	37.0	26.0	56.0	60.0
Unit Price (US\$/lb)	1428.6	1222.2	1500.0	1054.1	1192.3	892.9	1100.0

/a As a large portion of food imports is financed on a grant basis, unit prices are often available for accounting purposes only.

/b Does not include crude oil shipped to and refined in Singapore for the account of BPC during FY80-FY83.

/c Includes petroleum products imported by BPC from its refining operations in Singapore as well as imports of non-fuel petroleum products.

/d As some fertilizer imports are financed on a grant basis, unit prices are often available for accounting purposes only.

Note: 1 bale of raw cotton = 500 lbs; 1 bale of polyester = 618 lbs;
1 bale of viscose = 441 lbs; 1 bale of yarn = 400 lbs.

Sources: Ministry of Finance and Planning, External Resources Division; Planning Commission; Bangladesh Bank; Bangladesh Bureau of Statistics; Ministry of Food; Bangladesh Petroleum Corporation; Bangladesh Agricultural Development Corporation; Bangladesh Chemical Industries Corporation; Ministry of Industries and Commerce, Coal Controller; Bangladesh Railways; Trading Corporation of Bangladesh; Bangladesh Textile Mills Corporation; World Food Programme, Dhaka; and mission estimates.

Table 3.9
AID PIPELINE, 1980/81-1985/86
(US\$ million)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
FOOD AID						
Opening pipeline	50.00	58.80	48.86	41.76	60.41	194.4
Commitments	202.87	220.56	248.35	285.16	380.16	329.57
Disbursements	194.07	230.50	255.45	276.38	244.50	202.75
Closing pipeline	58.80	48.86	41.76	50.54	196.07	323.83
COMMODITY AID						
Opening pipeline	398.77	361.18	454.32	476.70	591.69	374.73
Commitments	354.87	513.00	474.38	528.17	251.77	408.93
Disbursements	392.46	419.86	452.01	439.19	431.57	393.39
Closing pipeline	351.18	454.32	476.70	565.67	362.81	460.44
PROJECT AID						
Opening pipeline	2002.65	2444.23	3044.25	3374.13	3644.48	4061.8
Commitments	1001.49	1189.29	799.80	881.66	1339.56	922.94
Disbursements	559.91	589.27	469.93	552.82	590.91	709.79
Closing pipeline	2444.23	3044.25	3374.13	3702.96	4063.12	4633.19
TOTAL						
Opening pipeline	2451.43	2864.22	3547.44	3892.58	4296.58	4630.93
Commitments	1559.24	1922.85	1522.53	1694.99	1971.48	1661.44
Disbursements	1146.45	1239.63	1177.38	1268.40	1266.98	1305.93
Closing pipeline	2864.22	3547.44	3892.58	4319.17	4622.00	5417.46
DISBURSEMENTS RELATIVE TO RULES OF THUMB [PERCENT]						
Food aid [100% OPL + 75% NC]	96.0	102.8	108.6	108.1	70.8	45.9
Commodity [75% OPL + 25% NC]	98.8	111.7	99.6	94.0	78.2	102.6
Project aid [20% OPL]	139.8	120.5	77.2	81.9	81.1	87.4
Total	115.7	111.5	90.3	89.3	80.1	79.8

Note: OPL=Opening pipeline, NC=New commitments.
Commodity aid includes cash aid, and project aid includes technical assistance.
Discrepancies between closing pipeline in one year and opening pipeline in the next year result from adjustments for currency revaluations, aid cancellations, and reclassifications.

Source: Ministry of Finance, External Resources Division.

Table 3.10
IMF OPERATIONS, 1980/81-1985/86
(SDR million and US\$ million)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Quota (SDR million)	262.3	228.0	228.0	287.5	287.5	287.5
Reserve Position in the IMF	0.0	7.5	7.5	22.4	22.4	22.4
END-FY BALANCES (SDR million)						
Use of IMF Credit, net	330.8	331.0	375.7	394.7	388.2	385.6
-Credit Tranche Drawings (ordinary resources)	50.8	44.1	66.9	93.0	68.4	149.6
-Compensatory (CFF) Drawings	0.0	60.0	88.8	88.8	139.1	101.2
-EFF Drawings (ordinary resources)	126.6	110.0	110.0	110.0	105.3	86.9
-EFF Drawings (SFF)	126.6	110.0	110.0	102.9	75.4	47.9
-Oil Facility Drawings	26.9	6.9	0.0	0.0	0.0	0.0
Trust Fund loans outstanding	140.6	122.2	120.8	113.5	99.3	75.6
BALANCE OF PAYMENTS ITEMS (US\$ million)						
Use of IMF credit, net	155.1	49.5	46.9	19.0	-7.0	-3.0
Stand-By Agreements	-1.0	0.0	24.6	26.0	-24.0	94.3
Oil Facility	-28.9	0.0	0.0	0.0	0.0	0.0
Compensatory Drawings	-42.8	0.0	0.0	0.0	0.0	0.0
CFF: export earnings shortfall	0.0	68.3	-20.9	0.0	55.0	-44.0
CFF: cereal imports excess	0.0	0.0	52.0	0.0	0.0	-9.7
Extended Financing Facility: ordinary	135.7	0.0	0.0	0.0	-5.0	-21.6
Extended Financing Facility: SFF	135.7	0.0	0.0	-7.0	-33.0	-31.9
Currency subscriptions & repurchases	-19.3	0.0	0.0	0.0	0.0	0.0
Subscriptions & repurchases of reserve assets	-24.4	-18.8	-8.8	0.0	0.0	0.0
Exceptional financing	10.1	0.0	0.0	-13.0	81.0	--
Trust Fund loans, net	8.7	0.0	0.0	-8.0	-13.0	-25.0
Subsidy Account grants	1.4	0.0	0.0	4.0	3.0	--
SFF Subsidy Account grants	0.0	0.0	0.0	0.0	0.0	--
Counterpart items	19.7	0.0	0.0	0.0	0.0	0.0
SDR allocations & cancellations	19.7	0.0	0.0	0.0	0.0	0.0
Other items	8.2	0.0	0.0	0.0	0.0	0.0
Distribution of IMF gold sale profits, net	8.2	0.0	0.0	0.0	0.0	0.0
Restitution of gold by the IMF	0.0	0.0	0.0	0.0	0.0	0.0
IMF Service Charges	8.0	37.1	33.7	37.0	37.0	37.0

CFF = Compensatory Financing Facility.

Source: International Monetary Fund.

Table 3.11
TERMS OF TRADE
WEIGHTED BY NET TRADE OVER 1980/85 PERIOD
[80/85 AVERAGE PRICES = 100]

WEIGHTS		---MULTI-YEAR AVERAGES---			-----ANNUAL DATA-----					
		72/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
PRICE INDICES FOR NET EXPORTS										
18.6	Raw jute	74.82	92.21	100.00	92.06	80.15	73.73	92.77	161.29	81.08
50.8	Jute manufactures	71.19	80.05	100.00	104.89	78.72	90.44	99.56	126.40	95.46
2.6	Jute specialty products	17.24	35.94	100.00	96.02	89.92	80.56	98.71	134.80	125.06
5.9	Tea	39.73	74.18	100.00	78.45	69.61	86.15	129.03	136.75	64.29
10.5	Leather & leather products	39.16	82.93	100.00	94.38	97.00	82.88	111.17	114.56	114.56
10.6	Frozen shrimps, etc.	56.90	98.31	100.00	100.13	136.51	108.69	102.51	82.16	87.95
1.0	Newsprint	57.68	57.64	100.00	94.91	117.97	92.37	96.87	97.88	95.09
	Weighted Average	64.76	83.90	100.00	99.00	84.00	87.98	101.52	127.50	92.90
PRICE INDICES FOR NET IMPORTS										
3.0	Rice	82.00	90.98	100.00	145.87	95.52	89.83	93.60	75.19	72.79
10.9	Wheat	90.81	87.62	100.00	110.72	110.78	97.47	93.74	87.30	93.46
3.6	Edible oils	89.52	101.68	100.00	91.24	91.11	89.97	121.73	105.95	72.08
3.4	Fertilizers	91.56	92.18	100.00	130.93	99.98	96.38	93.46	79.25	65.33
11.6	Crude petroleum	26.68	49.50	100.00	103.94	111.92	102.03	91.56	90.56	69.60
4.3	Petroleum products	28.20	52.53	100.00	98.27	117.69	122.08	84.72	77.23	70.77
1.5	Cement	76.42	92.14	100.00	123.80	120.10	97.70	82.57	75.82	75.82
3.4	Raw cotton	77.82	85.52	100.00	117.88	118.02	80.64	89.95	93.51	86.23
1.3	Yarn	109.94	108.70	100.00	91.68	77.98	95.65	167.47	67.22	61.46
32.7	Capital goods	53.70	84.10	100.00	105.83	102.66	99.59	96.07	95.85	102.45
24.3	Others	53.70	84.10	100.00	105.83	102.66	99.59	96.07	95.85	102.45
	Weighted Average	59.07	80.74	100.00	107.85	105.02	99.13	96.08	91.91	91.50
	Terms of trade	1.14	1.03	1.01	0.92	0.80	0.89	1.06	1.39	1.02
	Percentage change	-18.24	4.85	-3.84	-22.00	-7.85	4.67	-1.30	7.30	-26.80

Note: The peak fiscal year value for this terms of trade index was 1.407, attained in 1972/73.

Source: Staff estimates.

Table 3.12
AVERAGE EXCHANGE RATES, PERIOD AVERAGES, 1972/73-1986/87

-----FISCAL YEAR AVERAGES-----					1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	
(Taka)					-----	-----	-----	-----	-----	-----	-----	
US\$	SDR	100 Yen	Unofficial Basket a/		(Taka per US\$)							
					MONTHLY AVERAGES							
72/73	7.7808	8.8009	2.7121	9.0346	July	14.7174	18.2498	22.1397	24.5000	25.2000	28.0870	30.3000
73/74	7.9661	9.6103	2.8700	9.7943	August	15.3008	18.5420	22.3419	24.5070	25.2590	28.7070	30.3000
74/75	8.8759	10.8609	3.0038	12.0012	September	15.1027	18.9374	22.7745	24.6110	25.3880	29.2740	30.3000
75/76	14.8521	17.3820	4.9422	17.7130								
76/77	15.4667	17.8732	4.1291	18.0240	October	15.6365	19.1705	22.9294	24.9170	25.5760	29.7610	30.3000
77/78	15.1215	18.1402	6.2371	18.4059	November	16.2532	18.8739	23.8690	25.0000	25.9770	30.1190	30.8000
78/79	15.2228	19.5135	7.6041	19.8163	December	16.5906	19.5321	24.1007	25.0000	26.0000	30.6430	30.8000
79/80	15.4777	20.1390	6.6382	19.9052								
80/81	16.3447	20.5078	7.6427	20.6996	January	16.1987	20.3203	24.5000	25.0000	26.0000	30.8480	30.8000
81/82	20.0400	22.7777	8.5750	23.8804	February	16.8981	20.7867	24.5000	25.0480	26.2130	30.3600	30.8000
82/83	23.7629	25.7411	9.6172	26.5788	March	16.6974	21.2765	24.5000	25.2000	26.5000	30.3000	30.8000
83/84	24.9486	26.2046	10.6530	26.3317								
84/85	26.0622	25.7747	10.4485	23.9581	April	17.2153	21.6819	24.5000	25.2000	26.5460	30.3000	30.8636
85/86	29.9166	32.8743	15.1594	31.4389	May	17.6162	21.2319	24.5000	25.2000	27.0000	30.3000	30.9000
					June	17.9089	21.8762	24.5000	25.2000	27.0870	30.3000	

					QUARTERLY AVERAGES							
					[Tk/US\$]							
					July-September	15.0403	18.5764	22.4187	24.5393	25.2823	28.6893	30.3000
					October-December	16.1601	19.1922	23.6330	24.9723	25.8510	30.1743	30.6333
					January-March	16.5981	20.7945	24.5000	25.0827	26.2377	30.5027	30.8000
					April-June	17.5801	21.5967	24.5000	25.2000	26.8777	30.3000	
					[Tk/SDR]							
					July-September	19.8487	21.0619	24.3445	25.8791	25.5882	29.4697	36.4432
					October-December	20.7835	22.2879	25.4622	26.2759	25.7036	32.5354	
					January-March	20.6265	23.6329	26.7491	26.3067	25.1509	34.3120	
					April-June	20.7726	24.1278	26.4086	26.3567	26.6560	35.1802	
					[Tk/100 Yen]							
					July-September	6.8340	8.0109	8.6606	10.1180	10.3846	12.0220	19.4518
					October-December	7.6715	8.5420	9.1008	10.6610	10.5077	14.5706	
					January-March	8.0742	8.9059	10.3928	10.8578	10.1822	16.2352	
					April-June	7.9910	8.8413	10.3145	10.9751	10.7197	17.8099	
					[Tk/Unofficial Basket /a]							
					July-September	18.8908	19.7499	22.4589	24.0067	23.6471	27.3384	36.2187
					October-December	19.8529	21.0121	23.4658	24.4797	23.6858	30.8717	
					January-March	19.7291	22.1458	24.9669	24.5475	23.4671	33.0821	
					April-June	19.6539	22.4609	24.6029	24.6092	25.0324	34.4632	

Note: Monthly averages are unweighted averages of daily rates, quarterly averages are unweighted averages of monthly rates, and annual averages are unweighted averages of quarterly rates.

/a The "basket" referred to consists of 1 SDR plus 30 Yen minus US\$ 0.20.
This is equivalent to US\$ 0.34, DM 0.46, French franc 0.74, 69 Japanese yen and 0.071 pounds sterling.
The result is a computationally convenient and approximately trade weighted foreign exchange index.
It has no official standing.

Source: International Monetary Fund and Bank staff estimates.

Table 4.1

EXTERNAL PUBLIC DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF JUN 30, 1986

INCLUDES ONLY DEBT COMMITTED 000000 - JUN 30, 1986
DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS
(IN THOUSANDS OF U.S. DOLLARS)

	D E B T O U T S T A N D I N G			: I N A R R E A R S	
	DISBURSED :	UNDISBURSED :	TOTAL	PRINCIPAL	INTEREST
CREDITOR TYPE	: SUPPLIERS CREDITS				
AUSTRIA	255	-	255	-	-
CHINA	-	9,179	9,179	-	-
FRANCE	2,502	16,787	19,289	-	-
NETHERLANDS	7,197	-	7,197	-	-
PAKISTAN	6,662	-	6,662	-	-
ROMANIA	1,786	6,067	7,853	-	-
SINGAPORE	1,279	-	1,279	-	-
USSR	3,865	75,750	79,615	-	-
YUGOSLAVIA	6,358	-	6,358	-	-
TOTAL SUPPLIERS CREDITS	29,904	107,783	137,687	-	-
CREDITOR TYPE	: FINANCIAL INSTITUTIONS				
AUSTRIA	7,060	-	7,060	-	-
FRANCE	22,635	642	23,277	-	-
INDIA	7,743	630	8,373	-	-
NETHERLANDS	1,240	5,023	6,263	-	-
UNITED KINGDOM	16,120	109	16,229	-	-
TOTAL FINANCIAL INSTITUTIONS	54,798	6,404	61,202	-	-
CREDITOR TYPE	: MULTILATERAL LOANS				
ASIAN DEV. BANK	644,867	1,211,673	1,856,540	-	-
EEC	48,000	-	48,000	-	-
IBRD	52,682	-	52,682	-	-
IDA	2,215,328	1,347,373	3,562,701	-	-
IMF TRUST FUND	92,074	-	92,074	-	-
INTL FUND ARG(IFAD)	60,639	82,580	149,219	-	-
ISLAMIC DEV. BANK	44,766	38,559	83,325	-	-
OPEC SPECIAL FUND	105,519	11,979	117,498	-	-
TOTAL MULTILATERAL LOANS	3,269,875	2,692,164	5,962,039	-	-
CREDITOR TYPE	: BILATERAL LOANS				
BELGIUM	25,017	14,038	39,055	-	-
BULGARIA	319	-	319	-	-
CHINA	45,824	38,595	84,419	-	-
CZECHOSLOVAKIA	16,591	-	16,591	-	-
DENMARK	22,667	-	22,667	-	-
FRANCE	52,466	48,554	101,020	-	-
GERMAN DEM. REP.	3,296	-	3,296	-	-
HUNGARY	17,476	-	17,476	-	-
INDIA	35,390	33,430	68,820	-	-
IRAN	11,668	-	11,668	-	-
IRAQ	24,571	68,745	93,316	-	-
JAPAN	1,689,423	247,538	1,936,961	-	-
KUWAIT	102,786	39,348	142,134	-	-
NETHERLANDS	16,438	-	16,438	-	-
POLAND	1,730	-	1,730	-	-
ROMANIA	14,397	-	14,397	-	-
SAUDI ARABIA	43,099	178,072	221,171	-	-
SWITZERLAND	5,244	-	5,244	-	-
TURKEY	1,859	-	1,859	-	-
UNITED ARAB EMIRATES	72,609	17,952	90,561	-	-
UNITED STATES	1,057,228	14,888	1,072,116	-	-
USSR	114,853	56,073	170,926	-	-
YUGOSLAVIA	32,732	323	33,055	-	-
TOTAL BILATERAL LOANS	3,407,683	757,556	4,165,239	-	-
SUPPLIERS CREDITS	29,904	107,783	137,687	-	-
FINANCIAL INSTITUTIONS	54,798	6,404	61,202	-	-
MULTILATERAL LOANS	3,269,875	2,692,164	5,962,039	-	-
BILATERAL LOANS	3,407,683	757,556	4,165,239	-	-
TOTAL EXTERNAL DEBT	6,762,260	3,563,907	10,326,167	-	-

NOTES: (1) ONLY DEBTS WITH AN ORIGINAL OR EXTENDED MATURITY OF OVER ONE YEAR ARE INCLUDED IN THIS TABLE.
(2) DEBT OUTSTANDING INCLUDES PRINCIPAL IN ARREARS BUT EXCLUDES INTEREST IN ARREARS

Table 4.2

SERVICE PAYMENTS, COMMITMENTS, DISBURSEMENTS AND OUTSTANDING AMOUNTS OF EXTERNAL P DEBT
 PROJECTIONS BASED ON DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF JUN 30, 1986
 INCLUDES ONLY DEBT COMMITTED 000000 - 198606
 DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS
 (IN THOUSANDS OF U.S. DOLLARS)

*** TABLE TOTAL ***

DATE :	DEBT OUTSTANDING AT :		TRANSACTIONS DURING PERIOD :					OTHER :	CHANGES :
:	END OF PERIOD :								
:	DISBURSED :	INCLUDING :	COMMIT-	DISBURSE-	SERVICE PAYMENTS :			CANCEL-	ADJUST-
:	ONLY :	UNDISBURSED :	MENTS :	MENTS :	PRINCIPAL :	INTEREST :	TOTAL :	LATIONS * :	MENT ** :
:	(1) :	(2) :	(3) :	(4) :	(5) :	(6) :	(7) :	(8) :	(9) :
198106	3,636,682	5,787,483	1,047,484	626,593	49,506	51,454	100,960	22,847	-
198206	4,132,527	6,798,637	1,263,598	680,388	39,753	57,899	97,652	14,289	-198,402
198306	4,678,451	7,495,348	785,589	604,574	73,793	61,303	135,096	17,541	2,456
198406	5,133,011	8,182,789	874,524	562,249	64,931	74,048	138,979	33,732	-88,420
198506	5,471,541	8,765,105	988,221	554,744	121,183	76,765	197,948	132,614	-152,108
198606	6,762,260	10,326,167	844,760	722,084	137,194	98,405	235,599	89,984	943,480

***** THE FOLLOWING FIGURES ARE PROJECTED *****

198706	7,513,527	10,115,556	-	961,879	210,616	118,133	328,749	-	5
198806	8,164,440	9,907,497	-	858,976	208,051	123,803	331,854	-	-8
198906	8,600,202	9,683,309	-	659,945	224,187	125,704	349,891	-	-1
199006	8,829,097	9,460,418	-	451,793	222,896	130,795	353,691	-	5
199106	8,895,197	9,223,712	-	302,816	236,716	129,498	366,214	-	10
199206	8,824,066	8,981,075	-	171,504	242,627	125,809	368,436	-	-10
199306	8,665,892	8,720,121	-	102,792	260,964	122,138	383,102	-	10
199406	8,434,437	8,445,166	-	43,502	274,946	116,927	391,873	-	-9
199506	8,148,177	8,149,724	-	9,193	295,441	111,083	406,524	-	-1
199606	7,830,306	7,831,853	-	-	317,851	104,892	422,743	-	-20
199706	7,508,407	7,509,952	-	-	321,881	99,432	421,313	-	-20
199806	7,196,402	7,197,947	-	-	311,996	94,170	406,166	-	-9
199906	6,889,795	6,891,340	-	-	306,595	89,088	395,683	-	-12
200006	6,581,410	6,582,955	-	-	308,370	84,176	392,546	-	-15
200106	6,280,129	6,281,673	-	-	301,258	79,273	380,531	-	-24
200206	5,978,063	5,979,607	-	-	302,056	74,560	376,616	-	-10
200306	5,675,096	5,676,639	-	-	302,951	70,024	372,975	-	-17
200406	5,367,328	5,368,871	-	-	307,744	65,487	373,231	-	-24
200506	5,060,065	5,061,608	-	-	307,243	61,006	368,249	-	-20
200606	4,755,948	4,757,491	-	-	304,096	56,740	360,836	-	-21

* PROJECTED AMOUNTS IN THIS COLUMN ARE AMOUNTS EXCLUDED FROM PROJECTIONS BECAUSE OF UNKNOWN TERMS.

** THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC IMBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE PERIOD TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFERS OF DEBTS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

Table 5.1
CONVENTIONAL BUDGET SUMMARY, 1980/81-1986/87
(Tk crore)

	1980/81	1981/82	1982/83	1983/84			1984/85		1985/86		1986/87
	Revised Budget	Revised Budget	Revised Budget	Budget	Revised Budget	Preliminary Actual	Budget	Revised Budget	Budget	Revised	Budget /b
A-REVENUE BUDGET											
Receipts	2323	2554	2711	3397	3033	2953	3569	3477	3951	4073	4840
Expenditures	-1462	-1850	-2147	-2414	-2503	-2452	-2803	-2930	-3313	3421	3740
Revenue Surplus	861	704	564	983	530	501	766	547	638	652	1100
B & C-Foreign Grants & Loans	1841	2264	3040	3415	3483	2502	3897	3307	3885	4018	4472
D-DOMESTIC CAPITAL NET											
Domestic Loans & Advances	-26	-42	-214	..	-109	..	..	-248	-383	-252	-254
Non-Development Capital Expr.											
Net Public Accounts	0	0	79	..	167	..	..	148	174	160	162
Total Net Domestic Capital	-26	-42	-135	..	58	..	..	-100	-209	-92	-92
Total Budgetary Source	2676	2926	3469	4960	4071	3246	4530	3754	4314	4579	5480
Extra-Budgetary Resources	57	68	86	0	106	0	163	203	226	254	250
Debentures of ABs /a											
Self-financing by ABs /a											
Accumulated Balances of ABs /a											
Net Food Borrowing	209	0	0	0		0	0	276	-150	-249	-346
TOTAL RESOURCES AVAILABLE	2942	2994	3555	4767	4178	3199	4693	4233	4390	4584	5384
E-USE OF RESOURCES											
ADP	2369	2715	2977	3484	3433	3008	3896	3508	3826	4096	4764
Non-ADP Projects	0	0	34	0	210	0	235	207	130	144	154
Food Budget	572	168	544	1283	535	191	562	518	434	344	466
Food-for-Work	105	160	148	159	198	191	562	216	277	348	307
Net Food Outlay	467	8	396	1124	337	0	0	302	157	-4	159

/a ABs = Autonomous Bodies.

/b Including effect of new fiscal measures.

Source: Ministry of Finance.

Table 5.2
CURRENT BUDGET, 1980/81-1986/87
(Tk crore)

	1980/81 Revised Budget	1981/82 Revised Budget	1982/83 Revised Budget	1983/84 Revised Budget	1984/85 Revised Budget	1985/86 Revised Budget	1986/87 Budget
REVENUES							
Tax Revenue	1782	1968	2160	2410	2807	3242	4045
Production, consumption and distribution taxes	1520	1666	1785	2028	2355	2710	3394
(Custom duties)	750	785	910	1000	1120	1338	1598
(Sales taxes)	340	350	316	345	410	461	659
(Excise duties)	373	463	480	600	705	772	991
(Stamp taxes)	53	64	72	75	110	125	130
(Motor vehicle taxes)	4	4	7	8	10	14	16
(Entertainment taxes)	0	0	0	0	0	0	0
Taxes on income	220	260	315	331	390	460	549
Land revenue tax /a	29	31	25	53	40	51	56
Other taxes and duties /b	13	12	36	18	22	21	46
Non-Tax Revenue	561	586	551	623	670	888	795
Nationalized sector	185	143	126	123	283	362	245
(Industries)	93	26	26	30	60	85	65
(Banks)	83	111	94	93	223	277	180
(Other public sector /c)	9	6	6	0	0	0	0
Interest receipts	145	161	100	102	140	233	180
Registration fees	23	27	29	30	40	43	56
Forest	30	35	28	29	36	50	45
Railways	105	125	158	154	-30	53	(-)49
Post Office and T&T (net)	1	8	2	-2	8	0	17
Other /d	73	87	109	187	193	253	301
Total Current Revenue	2343	2554	2711	3033	3477	4130	4840
EXPENDITURES							
General Services	724	855	948	973	1126	1367	1492
- General administration	264	280	387	289	317	404	462
- Justice and police	178	219	133	153	304	348	352
- Defense	274	348	418	521	493	596	659
- Scientific departments	8	9	10	10	13	19	19
Social Services	296	326	475	627	904	923	1159
- Education	207	232	294	365	493	600	697
- Health and population planning	77	83	102	129	167	113	241
- Social welfare	12	12	79	133	244	210	221
Economic Services	107	121	111	195	199	247	330
- Agriculture	30	32	41	80	110	95	160
- Manufacturing and construction	34	37	31	47	9	64	70
- Transport and communications	43	51	39	44	51	55	59
- Others	0	0	0	24	31	33	41
Debt Service	116	217	251	274	318	428	428
Food Subsidy	109	182	193	160	250	141	121
Railways	124	139	168	170	0	NA	NA
Contingency	5	5	1	104	133	315	210
Total Current Expenditures	1482	1845	2147	2503	2930	3421	3740

/a Tax levied on land holdings.

/b Includes electricity duties, estate duty on agricultural land, taxes on immovable property, gift taxes, capital gains tax, toll taxes, betterment tax on commercial establishments, and other levies.

/c Includes receipts from nationalized insurance, other industrial operations and disinvestment of industrial units.

/d Receipts of various Government departments, especially under civil works, education and health.

Source: Ministry of Finance.

Table 5.3
TAXES ON IMPORTS, 1980/81-1985/86

	5-YR AVG 80/85	ANNUAL DATA					Budget Estimate
		1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Total imports (US\$ m)	2480	2533	2572	2309	2353	2633	2371
Foodgrain imports (US\$ m)	366.2	250	285	385	398	513	220
Oilseeds, edible oil fertilizers, crude petroleum	464.4	551	514	391	395	471	433
Other imports (US\$ m) /a	1649.4	1732	1773	1533	1560	1649	1718
Total imports (Tk billion)	55.02	41.4	51.5	54.9	58.7	68.6	70.9
Other imports (Tk billion)	36.4	28.2	35.5	36.4	38.9	43	51.4
Dutiable imports /b (Tk billion)	32.14	27.1	26.6	29.3	32.7	45	45.8
Customs duty (Tk billion)	8.82	7.0	7.6	8.5	9.2	11.8	13.4
Sales taxes (Tk billion)	3.5	3.2	3.2	3.0	3.6	4.5	4.6
Percentages							
Dutiable/total imports (%)	59	66	54	53	56	66	65
Dutiable/non-foodgrain imports (%)	69	73	60	64	67	81	71
Dutiable other imports /a (%)	84.4	96	77	80	84	85	89
Average customs duty (%)	27.4	26	28	29	28	26	29
Average sales tax /c (%)	11	12	12	10	11	10	8

/a "Other" imports are imports less foodgrains, crude petroleum, fertilizers and edible oil (non-dutiable to FY84) and oils.

/b Dutiable imports as recorded by the National Board of Revenue. These imports form the basis for collection of Custom Duties and Sales Taxes (CDST).

/c These percentages are share of dutiable imports as recorded by NBR.

Source: Staff estimates.

Table 5.4
ANNUAL DEVELOPMENT PROGRAMME, 1972/73-1986/87
(Tk crore)

	1972/73 Revised Budget	1973/74 Revised Budget	1974/75 Revised Budget	1975/76 Revised Budget	1976/77 Revised Budget	1977/78 Revised Budget	1978/79 Revised Budget	1979/80 Revised Budget	1980/81 Revised Budget	1980/81 Actuals
Agriculture, Rural Development and Water Resources	135.0	157.9	178.4	299.0	314.8	348.0	468.8	665.8	754.8	789.3
(Agriculture)	0.0	57.6	63.9	115.0	152.9	154.0	234.4	293.8	322.7	282.3
(Rural Development)	0.0	30.6	28.5	48.0	42.0	51.0	61.9	74.8	74.9	98.1
(Water and Flood Control)	0.0	69.7	86.0	136.0	119.9	143.0	172.5	297.2	357.2	408.9
Industry	29.4	52.5	65.0	136.0	143.0	190.0	304.0	362.7	336.7	277.6
Power, Scientific Research and Natural Resources	0.0	53.7	71.2	151.0	131.3	168.0	252.5	398.9	377.8	375.9
Transport	115.7	96.5	81.2	125.0	196.2	176.0	213.5	404.0	375.1	465.9
Communications	0.0	13.1	18.6	34.5	30.7	51.0	43.1	80.2	71.3	66.9
Physical Planning and Housing	30.7	23.3	34.0	66.0	63.0	81.0	96.6	144.8	146.7	155.9
Education and Training	0.0	30.7	28.8	45.0	47.3	58.0	64.1	64.9	97.0	97.0
Health	0.0	20.7	21.8	33.0	32.0	43.0	47.6	70.0	65.8	61.2
Population Planning	0.0	5.0	7.7	25.0	21.6	31.0	46.7	59.3	69.6	46.6
Social Welfare	87.0	2.1	2.0	4.0	7.9	5.0	6.5	21.6	24.2	19.1
Manpower and Employment	0.0	0.3	1.3	3.0	2.0	4.0	6.9	9.7	10.5	9.1
Cyclone Reconstruction	0.0	8.0	15.0	28.5	8.0	14.0	16.2	5.0	0.0	0.0
Other /a	0.0									
Total ADP	397.8	463.8	525.0	950.0	1005.7	1203.0	1602.6	2330.0	2369.0	2364.5

	1981/82 Revised Budget	1981/82 Actuals	1982/83 Revised Budget	1982/83 Actuals	1983/84 Revised Budget	1983/84 Actuals	1984/85 Revised Budget	1984/85 Actuals	1985/86 Revised Budget	1985/86 Actuals	1986/87 Budget
Agriculture, Rural Development and Water Resources	882.0	783.4	956.5	838.2	1051.1	939.3	939.0	692.0	783.9	717.2	930.6
(Agriculture)	369.8	314.5	472.1	415.4	475.8	476.4	314.1	287.0	193.0	204.4	263.1
(Rural Development)	112.7	100.0	116.0	103.9	105.7	73.6	110.2	12.0	113.7	99.4	146.9
(Water and Flood Control)	399.5	368.9	368.4	318.9	469.6	389.3	514.7	393.0	477.2	413.4	520.6
Industry	367.7	270.0	314.5	247.0	332.5	233.6	239.8	241.0	590.5	536.9	709.9
Power, Scientific Research and Natural Resources	434.7	511.4	629.5	578.8	821.0	697.1	845.8	880.0	945.3	948.7	940.1
Transport	380.2	370.3	489.3	394.7	285.9	244.8	227.1	269.0	266.0	256.1	370.1
Communications	60.3	78.9	76.0	99.0	54.8	62.9	60.6	78.0	49.3	44.1	66.6
Physical Planning and Housing	177.4	146.5	149.6	130.0	147.2	163.6	108.2	114.0	102.9	114.0	156.4
Education and Training	107.1	86.1	108.6	105.2	133.4	137.0	128.8	138.0	181.7	128.1	253.4
Health	74.2	69.2	80.8	73.9	80.0	70.8	99.2	93.0	72.5	66.3	101.4
Population Planning	86.3	40.0	85.7	71.2	106.9	85.7	111.0	102.0	127.7	87.9	143.8
Social Welfare	29.6	20.5	13.8	12.1	15.5	14.2	18.3	16.0	14.7	13.5	27.8
Manpower and Employment	19.8	6.9	20.5	24.6	25.0	24.2	20.1	13.0	11.4	5.9	9.8
Upazillas				7.3	343.2	319.6	423.0	396.0	425.0	126.0	375.0
Other /a	96.0	7.9	201.4	105.7	188.2	13.2	287.5	141.0	524.6	384.7	679.1
Total ADP	2715.3	2391.1	3126.2	2687.7	3584.7	3173.0	3508.4	3173.0	4095.5	3429.4	4764.0

/a For 1984/85, includes Tk 4,230 for Upazillas.

/b Self-financing by autonomous agencies.

/c Excluding upazilla development assistance of Tk 200 crore which is included in sectoral expenditures.

Note: Reported actual expenditures are: Tk 2,674 million for 1972/73, Tk 3,050 million for 1973/74 and Tk 3,932 million for 1974/75. It is believed that these totals may understate the level of expenditure due to the provisional nature of some entries and the possibility of incomplete recording. Tk 8,500 million is the revised estimate for 1975/76.

Source: Ministry of Finance and Planning; and Planning Commission.

Table 5.5
FINANCIAL PERFORMANCE OF PUBLIC SECTOR INDUSTRIAL CORPORATIONS, 1980/81-1985/86
(Tk crore)

	1980/81	1981/82	1982/83	Revised 1983/84	Revised 1984/85	Revised 1985/86
A. NET PROFITS /a						
Bangladesh Jute Mills Corporation (BJMC) All Mills /b	33.8	-65.5	--	--	--	--
Bangladesh Jute Mills Corporation (BJMC) /c	25.5	-42.6	20.5	-28.1	-118.8	-160.3
Bangladesh Textile Mills Corporation (BTMC) All Mills /b	-33.2	-68.1	--	--	--	--
Bangladesh Textile Mills Corporation (BTMC) /c	-18.4	-41.8	6.9	43.4	22.9	-60.0
Bangladesh Sugar and Food Industries Corporation (BSFIC)	39.0	46.9	44.8	46.1	-20.6	-27.4
Bangladesh Steel and Engineering Corporation (BSEC)	12.4	-12.0	-23.7	-15.0	1.7	0.5
Bangladesh Chemical Industries Corporation (BCIC)	5.6	7.1	39.6	26.3	13.6	18.7
Bangladesh Forest Industries Development Corporation (BFIDC)	1.0	1.2	3.1	4.3	5.2	5.8
Bangladesh Petroleum Corporation	-9.2	-278.9	59.7	160.0	206.4	248.7
Total	49.4	-369.3	150.9	237.0	110.4	26.0
B. GROSS SALES						
Bangladesh Jute Mills Corporation (BJMC) All Mills /b	640.3	620.9	--	--	--	--
Bangladesh Jute Mills Corporation (BJMC) /c	455.2	447.0	544.5	509.7	746.0	622.7
Bangladesh Textile Mills Corporation (BTMC) All Mills /b	321.8	335.6	--	--	--	--
Bangladesh Textile Mills Corporation (BTMC) /c	188.2	201.1	251.2	299.0	372.9	289.5
Bangladesh Sugar and Food Industries Corporation (BSFIC)	268.4	307.5	271.2	361.3	138.6	231.0
Bangladesh Steel and Engineering Corporation (BSEC)	331.7	278.9	205.5	369.2	430.5	410.8
Bangladesh Chemical Industries Corporation (BCIC)	351.3	375.5	470.9	638.6	649.6	778.5
Bangladesh Forest Industries Development Corporation (BFIDC)	17.6	18.2	30.5	36.5	42.4	50.1
Bangladesh Petroleum Corporation	1136.2	1268.5	1391.7	1161.5	1266.7	1396.3
Total	3067.3	3205.1	3165.5	3375.8	3646.7	3778.9
C. PROFIT/SALES RATIO (%)						
Total	1.6	-11.5	4.8	7.0	3.0	0.7

-- = not available.

/a Pre-tax profits or losses. Negative sign (-) denotes net losses.

/b These are the accounts of all the mills, including the ones that were transferred to the private sector in 1982/83.

/c These are the accounts of the mills that are still in the public sector as of 1982/83.

Sources: Sector Corporations; Ministry of Commerce and Industries; and Ministry of Finance.

Table 6.1
MONEY SUPPLY AND DOMESTIC LIQUIDITY, 1983-1986
(Tk billion)

	June 30, 1983	June 30, 1984	June 30, 1985	Dec 26, 1985	June 30, 1986	Dec 31, 1986
1. Credit (net) to Government (of which Special Treasury Bonds)	19.8 (-)	24.1 (1.9)	23.4 (1.9)	20.9 (1.9)	18.6 (-)	18.6 (-)
2. Credit to Other Public Sector	24.6	25.5	32.3	34.2	40.4	38.9
3. Credit to Private Sector	31.0	49.1	68.9	73.4	85.2	85.5
4. Total Domestic Credit (1+2+3)	75.4	98.7	128.4	128.5	144.2	143.0
5. Net Foreign Assets	-3.9	1.5	-0.1	-6.1	-1.6	-2.1
6. Other Liabilities (net)	-12.5	-16.3	-19.2	-8.1	-19.2	-3.5
7. Total Liquidity (M2)	59.0	83.9	105.3	114.2	123.4	137.4
8. Currency Outside Banks	11.4	15.6	17.2	19.3	19.5	20.1
9. Demand Deposits	14.9	19.9	25.1	26.2	29.8	30.0
10. Currency and Demand Deposits (M1)	26.3	35.5	42.3	45.5	49.3	50.1
11. Time Deposits	32.7	48.3	63.0	68.7	74.1	87.3

Changes by Major Components (%)

	June'82/ June'82	June'83/ June'83	June'84/ June'84	June'85/ June'85	Dec 1985/ June'86	June'86/ Dec '86
1. Credit (net) to Government and Public Sector	1.2	11.6	12.3	-1.1	7.1	-2.5
Government	(1.4)	(21.7)	(-2.8)	(-10.7)	(11.0)	(0.0)
Other Public Sector	(1.1)	(3.6)	(26.5)	(5.9)	(18.1)	(-3.9)
2. Credit to Private Sector	31.0	58.7	40.2	6.5	16.1	0.4
3. Total Domestic Credit (1+2)	11.6	30.9	26.2	0.0	12.2	-0.8
4. Total Liquidity (M2)	29.7	42.2	25.6	8.5	8.1	11.3

Source: Bangladesh Bank, Statistics Department.

Table 6.2
AGRICULTURAL CREDIT, 1977/78-1985/86
(Tk crore)

	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Commercial Banks /a									
Short-term agricultural loans	76.7	64.8	87.4	103.8	95.0	148.0	288.1	349.0	164.2
Other agricultural financing /b	0.5	0.5	1.0	5.7	11.4	45.0	77.1	103.6	50.8
Fisheries financing	1.1	3.8	2.7	1.1	1.1	1.2	3.4	4.4	18.2
Tea production and development financing	3.5	6.3	6.7	2.8	3.6	2.4	2.7	6.7	6.3
Cold storage facilities for agricultural products	2.6	2.3	3.6	3.6	6.2	4.4	10.3	25.0	13.2
Total	84.5	77.7	101.3	116.9	117.3	200.9	381.5	489.8	252.7
Bangladesh Krishi Bank									
Short-term agricultural loans	18.7	17.3	25.5	73.0	110.0	216.1	329.8	192.8	101.8
Other agricultural financing /b	16.0	25.8	68.9	66.7	92.7	120.3	198.3	312.2	137.6
Fisheries financing	1.4	4.0	4.8	7.4	7.0	12.1	24.2	15.3	10.4
Tea production and development financing	17.9	24.8	41.2	58.0	56.3	45.9	33.3	81.4	100.8
Cold storage facilities for agricultural products	0.2	1.3	1.7	4.7	5.1	6.5	6.9	13.0	14.5
Total	54.2	74.2	142.0	209.7	271.0	400.8	592.4	614.7	365.1
Bangladesh Samabaya Bank									
Short-term agricultural loans	13.1	16.6	22.5	20.7	13.7	19.0	18.0	23.0	9.6
Other agricultural financing /b	2.7	3.5	3.1	5.0	3.7	3.5	3.3	5.3	4.4
Total	15.8	20.1	25.6	25.7	17.4	22.5	21.3	28.3	14.0
Totals by loan type									
Short-term agricultural loans	108.5	98.7	135.4	197.6	218.7	303.1	635.9	564.8	275.6
Other agricultural financing /b	19.3	29.9	72.9	77.4	107.7	168.7	278.7	421.1	192.8
Fisheries financing	2.5	7.7	7.5	8.5	8.0	13.4	27.6	19.8	28.5
Tea production and development financing	21.4	31.1	47.8	60.7	59.9	48.3	36.0	88.1	107.1
Cold storage facilities for agricultural products	2.9	3.6	5.2	8.3	11.4	10.8	17.2	38.0	27.7
Total	154.5	172.0	268.9	352.3	405.7	624.2	995.2	1132.8	631.7
Of which: Channelled through Cooperatives Under									
Bangladesh Rural Development Board									
Paddy	10.2	11.3	19.1	23.8	24.6	393.2	289.5	120.2	57.1
T. Aman	3.3	3.4	5.1	7.1	7.3	55.4	96.5	120.2	18.5
Boro	4.8	4.5	8.5	11.5	13.2	168.9	96.5	0.0	33.1
Aus/B. Aman	2.1	3.3	5.5	5.1	4.0	168.9	96.5	0.0	5.5
Wheat	0.2	0.4	0.8	1.1	0.9	9.6	33.2	0.0	0.7
Potato	0.4	0.6	0.6	0.8	0.4	3.7	0.0	0.0	1.8
Total	10.9	12.2	20.5	25.6	25.8	406.5	322.8	120.2	59.6

/a Includes refinancing provided by Sonali Bank to TCCAs/KSSs through the IRDP/RDB.

/b Includes agricultural term credit as well as financing for marketing, transport and agro-industries.

Sources: Bangladesh Bank, Agricultural Credit Department; Bangladesh Krishi Bank; Bangladesh Samabaya Bank, Ltd.; and commercial banks.

Table 6.3
DEVELOPMENT FINANCE INSTITUTIONS, 1976/77-1985/86
(Tk crore)

	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
A. BANGLADESH SHILPA BANK (BSB)										
Loans sanctioned										
Food and allied products	2.5	9.2	6.3	28.9	49.5	20.3	0.5	0.4	1.0	0.9
Specialized textiles and handloom sector /a	5.0	13.1	10.9	23.4	43.1	41.5	2.5	13.6	48.8	69.9
Paper, board, printing and publishing /b	4.2	4.5	4.0	10.8	10.5	4.0	0.0	1.0	0.4	0.4
Tannery, leather and rubber industries	0.8	0.0	2.5	6.8	10.6	1.2	1.2	1.2	4.3	15.2
Chemicals, pharmaceuticals and allied industries	1.1	3.3	1.4	10.4	10.4	9.0	0.1	2.2	0.2	6.5
Engineering industries	0.7	1.1	7.5	13.8	15.6	20.6	2.6	2.9	8.8	2.4
Non-Metallic minerals /c	0.0	0.2	0.0	1.1	2.3	0.0	1.3	0.1	2.5	1.1
Miscellaneous industries	0.0	0.0	0.0	0.0	0.0	0.6	0.1	0.5	0.0	0.6
Sub-total	14.3	31.4	32.6	97.1	142.0	97.2	8.3	21.9	66.0	97
Service industries /d	6.1	8.4	17.6	12.1	16.9	12.1	9.7	0.5	0.3	2.1
Total Sanctions	20.4	39.8	50.2	109.2	158.9	109.3	9.0	22.4	66.3	99.1
Private sector	17.9	34.5	49.4	102.6	158.9	109.3	9.0	22.4	66.3	99.1
Public sector	2.5	5.3	0.8	6.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Disbursements	4.5	11.6	28.1	35.2	52.4	64.6	62.2	36.9	28.8	12.2
End-fiscal year Resource Position										
Foreign Currency Resources (US\$ million)										
Resources available from aid agreements	33.0	29.6	58.6	60.4	104.8	94.4	96.8	65.3	49.7	71.6
(-) Disbursements	2.2	4.1	11.1	12.0	15.0	17.8	23.9	11.8	7.7	2.4
Resources available for disbursement	30.8	26.5	47.5	48.4	89.8	76.6	72.9	53.5	42.0	69.2
(-) Funds committed but not yet disbursed	7.4	11.0	15.1	17.1	32.5	40.9	37.1	22.9	16.9	33.5
Resources available for commitment	23.4	15.5	32.4	31.3	57.3	35.7	35.8	30.6	25.1	35.7
(+) Cancellations & withdrawals	0.0	0.0	0.6	1.9	5.5	2.6	2.1	2.5	0.9	5.6
(-) Approvals not yet committed	4.8	6.1	9.3	32.3	47.9	64.1	31.0	12.1	24.8	31.6
Foreign currency resources available for approval	18.6	9.4	23.7	0.9	14.9	-25.7	6.9	21.0	1.2	9.7
Local Currency Resources (Tk million)										
Cash on hand/in banks	3.9	15.1	15.7	27.3	19.2	11.1	39.7	57.8	74.2	90.9
(+) Money at call	37.3	37.0	27.2	14.3	7.9	11.0	0.0	16.3	b/* 8.0	b/* 6.8
(-) Reserves on deposit	6.8	10.1	10.9	13.8	14.2	3.8	4.5	5.7	6.5	6.7
(-) Commitments & approvals not yet disbursed	3.0	8.6	16.9	25.4	36.5	36.5	30.1	35.1	32.0	28.5
Local currency resources available for disbursement	31.4	33.4	15.1	2.4	-23.6	-18.2	5.2	33.3	43.7	62.5
B. BANGLADESH SHILPA RIN SANGSTHA (BSRS) /e										
Loans sanctioned										
Food and allied products	3.0	9.7	9.9	25.1	18.8	5.4	0.2	2.7	0.3	1.0
Specialized textiles and handloom sector /a	7.6	18.5	11.2	12.5	16.9	0.3	1.7	50.8	0.6	10.3
Paper, board, printing and publishing /b	0.0	0.5	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Tannery, leather and rubber industries	0.8	0.0	0.1	1.8	0.0	0.4	0.0	0.9	0.0	0.0
Chemicals, pharmaceuticals and allied industries	1.0	2.0	1.1	17.5	7.6	1.8	3.2	1.9	0.8	0.2
Engineering industries	0.9	1.0	6.1	2.2	10.4	0.8	3.5	0.8	0.1	0.0
Non-Metallic minerals /c	0.0	0.0	0.0	2.2	10.3	0.0	0.0	4.3	0.0	0.8
Miscellaneous industries	1.1	4.3	0.3	0.9	1.3	0.0	1.5	1.0	1.0	0.0
Sub-total	14.4	36.0	29.1	62.7	65.3	8.7	9.5	61.5	2.8	12.3
Service industries /d	0.0	0.8	10.4	20.0	4.5	0.0	4.4	0.2	1.6	0.4
Total Sanctions	14.4	36.8	39.5	82.7	69.8	8.7	13.9	61.7	4.4	12.7
Private sector	13.0	35.8	38.7	82.7	67.5	8.7	9.8	60.1	2.8	12.7
Public sector	1.4	1.0	0.8	0.0	2.3	0.0	4.1	1.6	1.6	0.0
Total Disbursements	4.9	11.0	21.8	48.8	58.2	33.7	46.9	42.4	19.7	8.9

/a Includes jute and allied fibers.

/b Includes forestry and wood products.

/c Includes glass and ceramics.

/d Includes inland water and road transport, cinemas, hotels, and clinics.

/e Net of subsequent cancellations and adjustments.

Sources: BSB & BSRS.

Table 6.4
INTEREST RATES
(percent per annum)

	August 1977 - Oct. 15, 1980	Oct. 16, 1980 - Dec. 1984	Jan. 1985 - Sept. 1985	Sept. 1985 - June, 1986	July, 1986 - Present
Bank Rate					
- Discount Rate	8.0	10.5	11.0	11.25	10.75
- Rate for borrowing by Bangladesh Krishi Bank	6.0	8.5	8.5	8.5	8.50
- Rate for borrowing by Bangladesh Samabaya Bank (Apex Cooperative Bank)	6.0	8.5	8.5	8.5	8.50
Deposits /aa					
(1) - Special notice accounts or deposits withdrawable at notice of 7 to 29 days	4.0	4.5	4.5	4.5	4.50
- Special notice accounts or deposits withdrawable at notice of 30 days or more	4.2	4.5	4.5	4.5	4.50
(2) - Savings bank accounts with checking facilities /cc	4.5	8.5	8.5	8.5	8.50
- Savings bank accounts without checking facilities /b /c /dd	7.0	10.0	10.0	10.0	10.00
(3) - Fixed (or term) deposits					
- For 3 months and over but less than 6 months	7.0	12.0	12.0	12.0	12.00
- For 6 months and over but less than 1 year	7.5	13.0	13.0	13.0	12.50
- For 1 year and over but less than 2 years /f /d	8.2	14.0	14.0	14.0	13.25
- For 2 years and over but less than 3 years /f /e	9.2	14.5	14.5	14.5	13.75
- For 3 years and over /f /g	10.2	15.0	15.0	15.0	14.25
(4) - Current accounts	-	-	-	-	-
Postal Savings Accounts					
- General accounts /g	8.5	11.5	11.5	11.5	11.50
- Fixed deposit accounts: - 1 year /g	9.2	15.0	15.0	15.0	15.00
- 2 years /g	10.2	15.5	15.5	15.5	15.50
- 3 years /g	11.2	16.0	16.0	16.0	16.00
- Bonus accounts (6 years) /i /k	16.6	22.0	22.0	22.0	22.00
- Bonus & profit-cum-bonus accounts (6 years)	9.25+B	9.25+B	9.25+B	9.25+B	9.25+B
- Savings Certificates /k					
- Pratirakha Sanchaya Patra (8 years) /l	15.0	21.0	21.0	21.0	21.00
- Bonus Sanchaya Patra (6 years) /m	16.6	22.0	22.0	22.0	22.00
- Sanchaya Patra (5 years) /m	12.2	12.2	12.2	18.0	18.00
Advances /bb					
- General advances extended by smaller banks /n /o	11-1	15.5	18.0	18.0	18.00
- General advances extended by larger banks /n /o	11-1	15.5	18.0	18.0	18.00
- Advances for exporting jute, jute goods & tea	10.5	12.0	12.0	12.0	9.00
- Advances for exporting other commodities /p	10.5	9.0	9.0*	9.0*	9.00
Industrial Lending					
Bangladesh Shilpa Bank & Bangladesh Shilpa Rin Sangstha /q					
- Short-term loans /r /s	11.5-13	14.0	14.0	14.5	14.50
- Long-term loans /r /s	11.5-13	14.0	14.0	14.5	/ff
- Small Loans Scheme for small-scale and cottage industries, etc.	11.0	13.0	13.0	13.0	10.00
House Construction Lending					
Bangladesh House Building Finance Corporation					
Construction/rehabilitation loans for:					
- Multi-dwelling units	5.0	10.5	10.5	10.5	10.50
- Single-dwelling units	11.0	13.0	13.0	13.0	13.00
Agricultural Lending					
(1) Bangladesh Krishi Bank					
- Short-term loans	11.0	12.0	16.0	16.0	16.00
- Tea	10.5			14.5	14.50
- Jute	10.5			16.0	16.00
- Potato storage	12.5			16.0	16.00
- Other purposes (incl. livestock, forestry & fisheries)	11.0	12.0	16.0	16.0	16.00
- Medium- and long-term loans	11.5		16.0	..	..
- Shallow tubewells	13.0			16.0	16.00
- Tea development	9.0			9.0	9.00
- Horticulture development in the Chittagong Hill Tracts	5.0			5.0	5.00
(2) Bangladesh Samabaya Bank (Apex Cooperative Bank) to TCCAs /u	7.0	7.0	7.0	10.0	10.00
- Thana Central Cooperative Associations (TCCAs) to BSSs /v	9.0	9.0	9.0	13.0	13.00
- Primary Societies (BSSs) to BSS members /v	12.0	12.0	12.0	16.0	16.00
(3) Integrated Rural Development Program (IRDP)					
Short-term:					
- Bangladesh Bank to Sonali Bank /w /x /ee	-	6.0	8.5	8.5	8.50
- Sonali Bank to TCCAs /w /x /ee	6.0	7.5	10.0	10.0	10.00
- TCCAs to Farmers' Cooperative Societies (KSSs) /y /x /ee	14.5	14.5	14.0	13.0	13.00
- KSSs to KSE members /y /x /ee	17.5	17.5	19.0	19.0	19.00
Medium-term:					
- Sonali Bank to TCCAs /w /x /ee	6.0	7.5	10.0	11.0	11.00
- TCCAs to Farmers' Cooperative Societies (KSSs) /y	14.5	14.5	14.0	14.0	14.00
- KSSs to KSS members /y /x /ee	17.5	17.5	19.0	16.0	16.00
(4) 100-Crore Special Agricultural Credit Program (SACP) /z	11.0	12.0	16.0	16.0	16.00
Money Lenders (Unorganized Sector)					
Rates vary; typical annual rates are:	..... 30 and above				

- = not in effect.
.. = not available.
B = bonus.
* Effective from July 1, 1983.

Source: Bangladesh Bank.

Notes to Table

- /a With effect from June 21, 1974.
- /b Accounts from which withdrawals are permitted only with withdrawal slip and upon presentation of passbook.
- /c From October 1, 1978, to October 15, 1980, interest on accounts opened by individuals in rural areas was 7.75%.
- /d From October 1, 1978, to October 15, 1980, interest on accounts opened by individuals in rural areas was 8.5%.
- /e Interest on accounts opened by individuals in rural areas was 8.5% from December 16, 1977, to September 30, 1978, and 9.0% from October 1, 1978, to October 15, 1980.
- /f Depositors have the option of withdrawing accumulated interest every twelve months or leaving interest to be added to principal.
- /g From December 1, 1977, to October 15, 1980, interest on accounts opened by individuals in rural areas was 9.25%.
- /h With effect from July 1, 1976.
- /i With effect from January 2, 1974.
- /j With effect from April 16, 1980.
- /k Savings certificates can be purchased directly, but they can also be acquired by purchasing Savings Stamps (in denominations of Tk 0.25, Tk 0.5 and Tk 1) at post offices or National Savings Offices and exchanging these for savings certificates. Savings stamps can also be exchanged for Prize Bonds or used to open post office savings accounts.
- /l Introduced with effect from March 8, 1976.
- /m Introduced with effect from December 20, 1977.
- /n Includes loans extended by Bangladesh Krishi Bank under the "Special Agricultural Credit Program" (see note z).
- /o Increased to 16.0% on December 5th, 1981.
- /p With effect from July 19, 1976.
- /q Lending rate is 3.5% above the Bank Rate. Onlending of foreign aid funds is in accordance with the terms of the respective aid agreements.
- /r To encourage development in the Chittagong Hill Tracts, interest on loans and advances for this district was 11% only.
- /s Only 13.0% in the Chittagong Hill Tracts and for certain industries in less-developed areas. These rates were increased on August 1, 1981, to 14.5% (and 13.5% for the Chittagong Hill Tracts).
- /t Special credit program for small and cottage industries, weavers (through weavers' cooperatives), salt producers, rural bank (Grameen Bank) project, and self-employment program.
- /u Bangladesh Samabaya Bank borrows from Bangladesh Krishi Bank and lends to Thana Central Cooperative Associations.
- /v TCCAs borrow from Bangladesh Samabaya Bank and lend to Farmers' Cooperative Societies (KSSs), and KSSs lend to their individual members.
- /w Refinancing from Bangladesh Bank to Sonali Bank for IRDP lending was initiated on July 1, 1982.
- /x With effect from July 1, 1982.
- /y Rates charged by TCCAs and KSSs include a service charge of 0.5%.
- /z Introduced on February 15, 1977.
- /aa For deposits, Bangladesh Krishi Bank and Bangladesh Shilpa Bank (Agricultural Development Bank and Industrial Development Bank of Bangladesh, respectively) are allowed to quote 1% more than the rates shown above. However, deposits with these institutions have been negligible because their services are more limited than those provided by commercial banks.
- /bb For advances, the rates given are maximum rates. Effective rates are 2-3 percentage points higher than nominal rates because of margins (15-30%, depending on the creditworthiness of the borrower or on the type of commodity financed).
- /cc 10.5% in rural areas (individuals only).
- /dd 11.0% in rural areas (individuals only).
- /ee Short term.
- /ff With effect from August 12, 1986, rates of interest on term loans have been revised. A number of interest rates, varying from 10% to 13.5%, have been fixed, which depend on debt-equity ratio and location of investment.

Table 6.5
BANK BRANCHES IN OPERATION, 1975/80-1985/86

Division/District	5-YEAR AVERAGES		ANNUAL DATA					
	1975/80	1980/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Rajshahi	600	1066	1001	1026	1059	1113	1131	1158
Dinaipur	91	161	149	155	161	169	170	177
Rangpur	137	246	237	240	242	255	257	263
Bogra	103	178	166	173	179	185	189	195
Rajshahi	165	288	267	271	286	304	311	317
Pabna	105	193	182	187	191	200	204	206
Khulna	481	955	808	823	847	882	916	968
Kushtia	74	136	130	133	135	138	145	153
Jessore	111	203	196	200	203	206	211	236
Khulna	144	249	238	239	247	257	263	269
Barisal	112	191	175	180	190	200	210	220
Patuakhali	41	75	69	71	72	81	87	90
Dhaka	824	1397	1327	1348	1381	1437	1494	1531
Jamalpur /a	96	90	85	86	88	93	100	102
Mymensingh	64	226	213	220	225	234	239	244
Tangail	48	114	107	108	110	120	123	126
Dhaka	514	776	742	752	770	796	818	838
Faridpur	101	192	180	182	188	194	214	221
Chittagong	795	1328	1242	1273	1316	1385	1422	1456
Sylhet	218	364	342	351	362	378	386	389
Comilla	179	308	299	303	307	313	320	330
Noakhali	119	206	201	203	204	209	212	226
Chittagong	247	377	349	361	372	392	410	420
Chittagong Hill Tracts	31	73	51	55	71	93	94	91
Total	2700	4648	4378	4470	4613	4817	4963	5113

/a Included in Mymensingh through 1978/79.

Note: Includes all branches of scheduled commercial banks and specialized financial institutions.

Source: Bangladesh Bank.

Table 7.1
LAND USE SUMMARY, 1984/85
(thousand hectares)

Division/ District	Land area and classification					Current Fallow	Net Cropped Area /c	Land Utilization			Gross Cropped Area /d
	Total Area	Not Cultiva- ble /a	Forests	Cultivable Area /b	Cultiva- ble Waste			Single Cropped	Double Cropped	Triple Cropped	
RAJSHAHI	3456	741	14	2701	54	84	2564	1314	1042	208	4022
Dinaipur	676	126	10	540	13	17	511	340	143	28	710
Rangpur	959	217	2	740	24	23	693	167	437	89	1308
Bogra	389	90	0	299	0	6	293	113	143	37	510
Rajshahi	946	211	2	733	17	21	695	500	174	21	911
Pabna	486	97	0	389	0	17	372	194	145	33	583
KHULNA	3411	729	609	2073	45	73	1955	1336	534	85	2659
Kushtia	348	61	0	287	0	31	256	146	99	11	377
Jessore	658	142	0	516	6	20	489	350	127	12	640
Khulna	1205	187	575	443	2	8	433	330	89	14	550
Barisal	723	203	17	503	22	5	476	307	132	37	682
Patuakhali	477	136	17	324	15	9	301	203	87	11	410
DHAKA	3092	641	93	2358	36	100	2224	1019	1020	185	3614
Jamalpur	340	53	7	280	7	4	269	91	154	24	471
Mymensingh	971	193	16	762	16	33	713	228	427	58	1256
Tangail	337	35	43	259	6	6	247	103	112	32	423
Dhaka	746	173	27	546	6	31	511	332	155	24	714
Faridpur	698	187	0	511	1	26	484	265	172	47	750
CHITTAGONG	4514	803	1426	2285	155	230	1896	1058	722	116	2850
Sylhet	1272	345	67	860	92	105	663	443	204	16	899
Comilla	672	118	1	553	2	37	514	215	269	30	843
Noakhali	546	90	58	398	22	21	355	198	119	38	550
Chittagong	701	137	215	349	14	43	291	142	117	32	472
Chittagong HT	1323	113	1085	125	25	24	76	60	13	3	95
Total	14473	2914	2142	9417	290	487	8639	4727	3318	594	13145

	---Cropping Intensity---			---Area Irrigated---		Total	Irrigation Percentage /i
	A/e	B/f	C/g	Pumps and Tubewells	Other Methods/h		
RAJSHAHI	1.57	1.52	1.49	494.0	118.0	612.0	22.7
Dinaipur	1.39	1.34	1.31	70.0	8.0	78.0	14.4
Rangpur	1.89	1.83	1.77	126.0	66.0	192.0	26.0
Bogra	1.74	1.71	1.71	108.0	13.0	121.0	40.5
Rajshahi	1.31	1.27	1.24	117.0	25.0	142.0	19.4
Pabna	1.57	1.5	1.50	73.0	6.0	79.0	20.3
KHULNA	1.36	1.31	1.28	193.0	124.0	317.0	15.3
Kushtia	1.47	1.31	1.31	63.0	48.0	111.0	38.7
Jessore	1.31	1.26	1.24	76.0	18.0	94.0	18.2
Khulna	1.27	1.25	1.24	25.0	21.0	46.0	10.4
Barisal	1.43	1.42	1.36	21.0	36.0	57.0	11.3
Patuakhali	1.36	1.32	1.27	8.0	1.0	9.0	2.8
DHAKA	1.63	1.56	1.53	531.0	91.0	622.0	26.4
Jamalpur	1.75	1.73	1.68	84.0	6.0	90.0	32.1
Mymensingh	1.76	1.68	1.65	201.0	55.0	256.0	33.6
Tangail	1.71	1.67	1.63	84.0	4.0	88.0	34.0
Dhaka	1.40	1.32	1.31	126.0	19.0	145.0	26.6
Faridpur	1.55	1.47	1.47	36.0	7.0	43.0	8.4
CHITTAGONG	1.50	1.34	1.25	342.0	179.0	521.0	22.8
Sylhet	1.36	1.17	1.05	81.0	101.0	182.0	21.2
Comilla	1.64	1.53	1.52	128.0	31.0	159.0	28.8
Noakhali	1.55	1.46	1.38	27.0	15.0	42.0	10.6
Chittagong	1.62	1.41	1.35	101.0	25.0	126.0	36.1
Chittagong HT	1.25	0.95	0.76	5.0	7.0	12.0	9.6
Total	1.52	1.44	1.40	1560.0	512.0	2072.0	22.0

/a Rivers, tidal creeks, lakes, ponds, roads, buildings, homesteads, etc.

/b Total area net of not cultivable area and forests.

/c Area cropped at least once during the year.

/d Sum of single-cropped area plus 2 x double-cropped area plus 3 x triple-cropped area.

/e Ratio of gross cropped area to net cropped area.

/f Ratio of gross cropped area to net cropped area plus current fallows.

/g Ratio of gross cropped area to cultivable area.

/h Area irrigated by gravity systems, canals and traditional methods (such as swing baskets, doons, etc.).

/i Percentage of cultivable area irrigated.

Source: Bangladesh Bureau of Statistics.

Table 7.2
FARM SIZE PATTERN AND LANDLESSNESS, 1960-1983/84

	1960 ----	1977 ----	1983/84p -----
Percentage of farms by farm size (ha)			
up to 0.40	24.3	15.9	40.5
0.41-1.01	27.3	33.8	29.9
1.02-3.04	37.7	40.9	24.7
above 3.04	10.7	9.4	4.9
Percentage of land operated by farm size (ha)			
up to 0.40	3.2	2.7	7.8
0.41-1.01	12.9	16.3	21.2
1.02-3.04	45.7	49.4	45.1
above 3.04	38.1	32.7	25.9
Rural Households ('000)			
Total	8239	10871	13818
Farm	6139	6257	10048
Non-Farm	2100	4614	3770
Landless	2100	4614	3770
Near Landless /a	803	342	2417
Subtotal	2903	4956	6187

/a Owning less than 0.2 ha.

Sources: Agricultural Census Reports, 1960 and 1977, and preliminary estimates of 1983/84.

Table 7.3
AREA UNDER CROPS BY SEASON, 1980/81-1985/86
('000 hectares)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
YEAR-ROUND						
Sugarcane	152	165	170	170	167	160
Fruit	152	152	154	155	124	123
Tea	45	46	46	46	46	45
Betelnuts	37	36	36	36	36	34
Betel leaves	12	13	13	13	13	12
Total	399	412	419	420	385	374
of which: irrigated	10	10	7	8	8	11
EARLY WET SEASON (April-July)						
Aus	3181	3216	3229	3209	3004	2845
Jute	649	584	590	594	691	1058
30% of Aman	1852	1844	1838	1843	1752	1806
Year-round	399	412	419	420	385	374
Total	6081	6056	6076	6066	5832	6083
of which: irrigated	175	182	194	205	200	233
LATE WET SEASON (August-November)						
100% of Aman	6172	6146	6128	6142	5839	6020
Cotton	8	17	20	18	13	17
Vegetables	120	98	100	100	100	100
Year-round	399	412	419	420	385	374
Total	6700	6672	6667	6680	6337	6511
of which: irrigated	199	249	260	223	222	257
DRY SEASON (December-March)						
Boro	1186	1331	1465	1433	1610	1534
Wheat	604	546	531	538	691	540
Oilseeds	315	310	300	300	299	288
All other crops	731	654	531	679	579	600
Year-round	399	412	419	420	385	374
Total	3139	3236	3253	3246	3370	3336
of which: irrigated	1363	1410	1508	1600	1762	1612
unirrigated	1775	1826	1745	1646	1608	1724
MEMORANDUM ITEMS:						
Cultivable area	9370	9370	9370	9370	9370	9370
Cropping intensity (%)						
Early wet season	64.9	64.9	64.6	64.8	64.7	64.0
Late wet season	71.5	71.5	71.2	71.2	71.3	69.5
Dry season	33.5	34.5	34.7	34.6	36.0	35.6
Overall /a	141.6	141.9	142.2	142.0	138.9	142.0
Average percent of cultivable area under crops	56.6	57.0	56.9	56.9	57.3	56.5
of which:						
Rice & Jute	46.4	46.7	47.1	47.0	45.9	47.0
Other Crops	10.2	10.3	9.7	9.9	11.5	9.5

/a Total adjusted to avoid double cropping of aman and year-round crops.

Source: Bangladesh Bureau of Statistics.

Table 7.4
AREA UNDER MAIN CROPS, 1980/81-1985/86
('000 hectares)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Foodgrains	11220	11313	11462	11371	11188	10946
- Rice	10540	10693	10823	10784	10452	10399
(Aus)	3181	3216	3229	3209	3004	2845
(Aman)	6172	6146	6128	6142	5839	6020
(Boro)	1186	1331	1465	1433	1610	1534
- Wheat	604	546	531	538	691	540
- Barley	19	15	13	10	10	7
Pulses	334	315	287	280	262	243
- Gram	59	55	55	53	51	47
- Khesari	94	95	95	78	79	73
- Mashkalai	48	44	41	39	34	31
- Masur	86	77	75	74	72	67
- Matar	14	12	11	11	10	10
- Mung	15	16	15	16	16	15
Oilseeds	315	310	300	300	299	288
- Rape and mustard	206	197	191	192	203	190
- Til	38	43	41	41	34	36
- Groundnut	24	22	22	21	18	18
- Linseed	15	15	15	15	13	13
- Coconut	30	31	31	31	31	31
Fibres	668	612	620	715	705	1075
- Jute	649	584	590	594	691	1058
- Cotton	8	17	20	18	13	17
Drugs & Narcotics	148	152	149	147	147	145
- Tea	45	46	46	46	46	45
- Tobacco	53	56	53	53	53	54
- Betelnuts	37	36	36	36	36	34
- Betel leaves	12	13	13	13	13	12
Spices	147	154	153	315	131	124
- Rabi chillies	69	71	71	71	68	63
- Onion	31	34	34	34	35	34
- Garlic	13	13	13	13	13	12
- Turmeric	14	15	14	14	15	15
Tubers	174	180	179	177	177	164
- Potato	104	108	113	113	114	108
- Sweet potato	70	68	67	67	63	56
Sugar Plants	184	184	185	181	181	170
- Sugarcane	152	165	170	170	167	160
- Date palm	11	11	11	11	11	10
Fruits	152	152	154	155	124	123
- Banana	41	43	44	43	41	41
- Mango	45	46	47	46	46	46
- Pineapple	15	15	15	14	14	13
- Jackfruit	21	21	22	22	23	23
Vegetables	120	98	100	100	100	100
- Brinjal	28	29	29	29	27	26
Total, all crops	13455	13503	13587	13741	13101	14216
of which: crops shown	13211	13253	13367	13308	12321	13378
all others	245	250	220	433	780	838

Note: Crops with less than 10,000 ha average not shown separately.

Source: Bangladesh Bureau of Statistics.

Table 7.5
IRRIGATION SUMMARY, 1980/81-1985/86
('000 hectares)

BY METHOD	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Modern methods	1033	1130	1340	1536	1739	1721
Tubewells	227	277	421	682	898	963
Low-lift pumps	681	720	763	682	696	609
BWDB gravity schemes	125	133	156	172	145	149
Traditional methods	643	634	549	463	376	377
Swing-baskets	85	88	87	86	81	84
Doons	377	364	300	244	188	170
Canals	28	34	8	0	2	14
Other	153	148	154	133	105	109
Total, net	1676	1764	1889	1999	2115	2098
of which:						
modern (%)	61.6	64.1	71.0	76.8	82.2	82.0
traditional (%)	38.4	35.9	29.0	23.2	17.8	18.0
BY CROP						
Aus	122	116	128	148	144	165
Aman	144	188	199	162	160	190
Boro	1021	1065	1165	1225	1314	1259
Wheat	199	194	198	219	290	267
Other cereals	4	5	4	7	3	3
Pulses	5	3	2	2	3	4
Oilseeds	5	4	5	7	12	12
Potato	73	79	75	75	71	68
Vegetables	44	48	51	45	50	53
Sugarcane	10	10	7	8	8	11
Cotton	2	2	3	7	4	3
Others	47	50	53	57	61	63
Total, gross	1676	1764	1889	1963	2120	2098
Errors and omissions	0	0	0	-39	1	0
IRRIGATED AREA AS PERCENT OF TOTAL AREA UNDER PARTICULAR CROP						
Aus	3.8	3.6	4.0	4.6	4.5	5.8
Aman	2.3	3.1	3.2	2.6	2.6	3.2
Boro	86.1	80.0	79.5	85.5	91.7	82.1
Wheat	32.9	35.5	37.3	40.8	53.9	49.4
Other cereals	5.9	7.2	27.3	58.7	6.1	n.a.
Pulses	1.4	0.8	0.6	0.6	1.1	1.7
Oilseeds	1.5	1.4	1.6	2.4	4.0	4.2
Potato	70.0	72.5	66.4	67.0	63.1	63.0
Vegetables	36.9	36.1	52.0	45.0	49.9	53.0
Sugarcane	6.3	6.1	3.9	4.8	4.7	6.9
Cotton	22.7	14.0	16.8	37.5	22.5	17.7

Source: Bangladesh Bureau of Statistics.

Table 7.6
PUBLIC SECTOR IRRIGATION PROGRAMS, 1980/81-1985/86

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
AREA IRRIGATED UNDER BWDB SCHEMES ['000 HECTARES]						
Gravity Schemes	125.4	133.1	156.2	172.4	145.4	148.8
Deep Tube Wells [DTWs]	4.8	3.5	10.9	10.5	6.1	4.5
Low Lift Pumps [LLPs]	4.0	4.9	6.8	8.2	5.8	2.3
Total	134.2	141.5	174.0	191.1	157.3	155.6
BADC IRRIGATION PROGRAMS						
LOW LIFT PUMPS [LLPs]						
Number fielded	36049	41354	43039	43615	50661	51242
Avg. Cusecs per pump	1.80	1.71	1.82	1.65	1.65	1.65
Avg. area irrigated per cusec [ha]	8.7	8.2	7.1	9.6	9.1	9.7
Total area irrigated ['000 ha]	565.7	576.9	552.8	417.4	459.6	497.8
SHALLOW TUBE WELLS [STWs]						
Wells sunk	10900	20566	17338	6929	7678	964
Wells commissioned	10691	20517	19092	6919	7500	964
Wells in operation	20931	42843	64508	67803	73066	69763
Total area irrigated ['000 ha]	101.4	206.7	305.4	303.5	300.4	275.4
Avg. area irrigated per well [ha]	4.8	4.8	4.7	4.5	4.1	3.9
DEEP TUBE WELLS [DTWs]						
Wells sunk	1239	2085	2581	2406	1527	1295
Wells commissioned	663	1310	2522	2168	1987	1410
Wells in operation	10131	11486	13794	15519	16901	17883
Total area irrigated ['000 ha]	265.2	311.5	413.7	415.5	441.2	466.7
Avg. area irrigated per well [ha]	26.2	27.1	30.0	26.8	26.1	26.1
BANGLADESH KRISHI BANK						
STWs fielded	5714	4510	6116	11762	8633	4062
INTEGRATED RURAL DEVELOPMENT PROGRAMME						
HAND TUBE WELL [MOSTI]						
Cooperatives [TCCA] involved	30	21	131	261	78	159
MOSTI distributed	4187	2145	50000	69550	43480	30315

Note: Comparison with EBS data suggest that data for tube well and LLP acreage irrigated may be overreported by implementing agencies.

Source: Bangladesh Bureau of Statistics, Bangladesh Water Development Board, Bangladesh Agricultural Development Corporation, Bangladesh Krishi Bank, and Integrated Rural Development Programme.

Table 7.7
 COMMERCIAL FERTILIZER DISTRIBUTION, 1980/81-1985/86
 ('000 metric tons)

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Urea	569.5	518.8	629.1	708.1	831.8	794.9
Triple super-phosphate [TSP]	218.4	208.5	206.0	260.7	345.7	297.4
Di-ammonium phosphate [DAP]	41.3	48.5	73.2	93.8	0.4	0.1
Muriate of potash [MP]	45.8	44.8	50.4	63.2	69.3	59.9
Hyper-phosphate [HP]	2.8	0.4	0.1	1.0	0.3	0.2
Super phosphate [SP]	0.0	0.0	0.0	0.0	0.0	0.0
Ammonium sulfate [AS]	0.0	0.0	0.0	0.0	0.0	0.0
Potassium sulfate [PS]	0.0	0.0	0.0	0.0	0.0	0.0
NitroPhosKa [NPK]	10.5	7.5	8.8	0.2	10.2	0.0
Triple phosphate [TP]	0.1	0.0	0.0	0.0	0.0	0.0
Zinc sulfate and oxy-sulfate	0.2	0.8	0.5	6.7	1.2	0.7
Gypsum	0.0	0.0	0.4	1.3	1.4	3.3
Total	888.7	829.3	968.4	1129.0	1260.2	1156.4

Source: Bangladesh Agricultural Development Corporation.

Table 7.8
AVERAGE CROP YIELDS, 1970/75-1985/86
(metric tons per hectare)

	---FIVE-YEAR AVERAGES---			-----ANNUAL DATA-----					
	70/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Foodgrains									
- Rice	1.10	1.22	0.78	1.32	1.29	1.32	1.34	1.35	1.45
(Aus)	0.84	0.95	0.99	1.04	1.02	0.95	1.00	0.93	0.99
(Aman)	1.06	1.23	1.27	1.29	1.17	1.24	1.29	1.36	1.42
(Boro)	2.06	1.96	2.35	2.22	2.36	2.42	2.34	2.43	2.4
- Wheat	0.86	1.71	2.00	1.80	1.77	2.07	2.26	2.25	1.93
- Barley	0.65	0.64	0.66	0.62	0.68	0.69	0.66	0.64	0.67
Pulses									
- Gram	0.74	0.72	0.72	0.63	0.68	0.74	0.78	0.75	0.77
- Khesari	0.77	0.70	0.73	0.68	0.69	0.75	0.75	0.78	0.76
- Mashkalai	0.79	0.72	0.69	0.69	0.68	0.70	0.69	0.69	0.67
- Masur	0.70	0.62	0.63	0.58	0.63	0.60	0.65	0.68	0.71
- Matar	0.72	0.65	0.63	0.61	0.63	0.60	0.62	0.66	0.66
- Mung	0.65	0.58	0.55	0.50	0.53	0.56	0.58	0.59	0.58
Oilseeds									
- Rape and mustard	0.55	0.60	0.65	0.60	0.62	0.64	0.69	0.70	0.71
- Til	0.58	0.54	0.53	0.51	0.54	0.55	0.55	0.49	0.58
- Groundnut	1.31	1.17	1.06	1.00	1.03	1.06	1.06	1.16	1.19
- Linseed	0.49	0.49	0.53	0.48	0.51	0.54	0.54	0.56	0.55
- Coconut	2.25	2.42	2.59	2.57	2.53	2.56	2.63	2.64	2.66
Fibres									
- Jute	1.23	1.38	1.48	1.38	1.44	1.54	1.64	1.38	1.53
- Cotton	0.87	0.75	0.53	0.46	0.85	0.48	0.45	0.40	0.32
Drugs & narcotics									
- Tea	0.56	0.80	0.71	0.88	0.85	0.90	0.93	0.83	0.97
- Tobacco	0.80	0.88	0.92	0.90	0.91	0.95	0.90	0.93	0.87
- Betelnuts	0.57	0.66	0.66	0.68	0.67	0.65	0.68	0.64	0.68
- Betel leaves	4.87	4.80	4.90	4.87	4.70	5.37	4.69	4.84	4.93
Spices									
- Rabi chillies	0.67	0.60	0.46	0.53	0.57	0.61	0.60	0.61	0.64
- Onion	4.90	4.31	2.99	3.09	3.84	4.12	3.98	4.04	4.04
- Garlic	3.44	3.19	3.12	2.95	3.16	3.20	3.20	3.07	3.07
- Turmeric	1.64	1.69	1.77	1.72	1.71	1.73	1.78	1.91	2.03
Tubers									
- Potato	9.37	9.28	10.07	9.57	10.01	10.21	10.35	10.19	10.17
- Sweet Potato	10.71	10.66	10.49	10.14	10.21	10.56	10.68	10.86	10.95
Sugar plants									
- Sugarcane /a	42.65	43.61	42.67	43.39	43.35	43.42	42.09	41.11	41.43
- Date palm (juice)	43.61	34.70	31.97	34.35	34.40	30.72	31.33	29.08	29.72
Fruits									
- Banana	15.21	15.26	16.01	15.86	15.79	15.97	15.75	16.67	17.03
- Mango	8.12	5.51	3.94	4.55	3.96	4.19	3.46	3.52	3.45
- Pineapple	9.16	9.49	10.11	10.39	10.41	10.36	9.71	9.68	9.82
- Jackfruit	10.81	10.27	9.70	9.88	9.74	9.60	9.59	9.70	9.86
Vegetables									
- Brinjal	7.24	6.54	6.41	6.46	6.52	6.42	6.39	6.27	6.31

/a Mill farm yields; average for others is probably 60-65% of these figures.

Source: Bangladesh Bureau of Statistics.

Table 7.9
PRODUCTION OF MAIN CROPS, 1970/75-1985/86
(thousand metric tons except as noted)

	---FIVE-YEAR AVERAGES---			---ANNUAL DATA---					
	70/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Foodgrains	11055	13101	15375	15026	14648	15321	15759	16120	16084
- Rice	10872	12615	14172	13882	13630	14216	14508	14622	15037
(Aus)	2670	3138	3126	3289	3270	3066	3222	2783	2827
(Aman)	6075	7337	7728	7963	7209	7603	7936	7930	8539
(Boro)	2128	2140	3317	2631	3152	3546	3350	3909	3671
- Wheat	109	429	1166	1092	967	1095	1211	1464	1042
- Barley	19	14	8	11	10	9	6	5	5
Pulses	250	229	86	216	212	204	192	191	176
- Gram	48	41	39	38	37	42	42	39	36
- Khesari	68	68	65	64	66	72	59	62	56
- Mashkalai	42	38	29	34	29	19	26	24	21
- Masur	49	49	48	50	49	45	49	50	48
- Matar	15	10	8	9	7	7	7	7	6
- Mung	10	10	9	7	8	9	9	9	9
Oil seeds	243	252	155	251	256	258	267	273	268
- Rape and mustard	115	123	129	122	123	124	133	144	135
- Til	27	28	21	19	23	23	22	17	21
- Groundnut	34	27	23	24	23	23	22	21	22
- Linseed	7	7	8	7	8	8	8	7	7
- Coconut	58	66	81	77	77	80	84	84	83
Fibres									
- Jute ('000 bales)	5371	5302	4959	4943	4646	4881	5216	5111	8660
- Cotton ('000 bales)	7	5	39	10	54	58	46	29	29
Drugs & narcotics									
- Tea	25	35	40	40	39	41	42	38	43
- Tobacco	39	48	50	48	51	51	49	50	46
- Betelnuts	22	25	24	25	24	24	24	23	23
- Betel leaves	54	55	64	60	61	72	62	63	61
Spices	336	303	107	241	293	251	251	256	246
- Rabi chillies	50	46	33	37	43	43	43	43	40
- Onion	158	142	102	96	132	140	138	143	137
- Garlic	46	40	41	38	42	43	44	41	38
- Turmeric	22	23	26	25	25	25	26	29	31
Tubers	1522	1648	1456	1703	1776	1893	1909	1872	1715
- Potato	797	866	1123	999	1084	1167	1185	1178	1103
- Sweet Potato	725	782	708	704	692	725	724	694	612
Sugar plants									
- Sugarcane /a	6417	6575	7097	6599	7136	7477	7285	6990	6640
- Date palm (juice)	472	376	353	378	379	343	350	317	312
Fruits	1426	1376	567	1405	1431	1280	1201	1226	1207
- Banana	588	594	687	652	684	710	686	701	691
- Mango	343	243	183	203	184	199	162	166	159
- Pineapple	104	141	148	153	155	159	139	134	128
- Jackfruit	196	200	213	204	207	212	214	225	229
Vegetables	755	760	328	803	835				
- Brinjal	205	179	182	178	185	187	185	174	166

/a Based on total area and mill farm yield estimates; probably substantially overestimated.

Source: Bangladesh Bureau of Statistics.

Table 7.10
PUBLIC FOODGRAIN DISTRIBUTION SYSTEM OPERATIONS
('000 metric tons)

	---FIVE-YEAR AVERAGES---			-----ANNUAL DATA-----					
	70/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Opening Stocks	256	550	809	791	1240	616	611	800	1017
Domestic Procurement	100	396	425	1033	102	192	270	344	349
Imports	1981	1564	1757	1076	256	1843	2028	2590	1202
Total Availability	2336	2510	2991	2900	2807	2651	2909	3784	2569
Statutory rationing	386	419	303	349	312	308	293	282	160
Priority categories /a	312	710	651	611	665	648	641	712	467
Modified rationing	919	367	379	182	491	368	399	465	103
Relief	215	55	133	55	75	156	120	452	205
Food-for-Work & Canal Digging	0	239	427	349	370	338	441	458	468
Marketing Operations /b	1	19	47	0	110	0	51	8	8
Open Market Sales /c	0	31	81	0	46	118	107	201	129
Total Distribution	1832	1839	2021	1546	2069	1936	2052	2578	1340
Losses	122	117	107	105	102	104	57	139	95
Exports & repayments in kind	0	0	5	0	20	0	0	0	0
Closing Stocks	472	556	855	1249	616	611	800	1017	976

/a Includes: essential priorities; other priorities; large employers; and direct sales to flour mills.

/b Marketing operations involve direct sale of grains to dealers at subsidized prices.

/c OMS in paddy and rice were initiated during 1981/82; wheat OMS began in 1978/79.

Sources: Ministry of Food; Bangladesh Bureau of Statistics; and World Food Programme, Dhaka.

Table 7.11
SEASONALITY OF PUBLIC FOODGRAIN DISTRIBUTION SYSTEM OFFTAKE
('000 metric tons)

Month	---MULTI-YEAR AVERAGES---			-----ANNUAL DATA-----						
	72/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
July	188	153	124	107	90	116	87	218	84	92
August	213	157	136	107	89	131	99	254	93	109
September	221	177	190	134	163	196	171	286	125	151
October	210	200	235	145	249	281	214	286	164	235
November	168	154	185	125	190	171	175	262	132	196
December	134	118	148	90	163	123	129	236	115	121
January	140	145	171	110	156	178	162	251	148	197
February	137	160	197	142	214	191	218	222	155	220
March	152	163	198	161	214	187	232	196	159	246
April	160	156	182	160	232	140	227	152	161	243
May	171	140	156	144	182	128	202	122	139	150 (p)
June	171	141	110	121	126	93	135	77	65	115 (p)
Total	2066	1866	2034	1554	2068	1935	2051	2562	1540	2075 (p)
(Monthly Average)	172	156	170	130	172	161	171	214	128	172 (p)

p = projection.

Source: Ministry of Food and World Food Programme, Dhaka.

Table 7.12
LAND USE AND POPULATION DENSITY, 1984/85
('000 hectares)

Division/ District	Total area	Not Cultivable	Forests	Cultivable	Cultivable Waste	Population ('000)	Pers/ha on total area	Pers/ha on cultivable area
RAJSHAHI	3456	741	14	2701	54	24339	7.0	9.0
Dinajpur	676	126	10	540	13	3738	5.5	6.9
Rangpur	959	217	2	740	24	7401	7.7	10.0
Bogra	389	90	0	299	0	3139	8.1	10.5
Rajshahi	946	211	2	733	17	6121	6.5	8.4
Pabna	486	97	0	389	0	3940	8.1	10.1
KHULNA	3411	729	609	2073	45	19715	5.8	9.5
Kushtia	348	61	0	287	0	2611	7.5	9.1
Jessore	658	142	0	516	6	4614	7.0	8.9
Khulna	1205	187	575	443	2	5041	4.2	11.4
Barisal	723	203	17	503	22	5315	7.4	10.6
Patuakhali	477	136	17	324	15	2134	4.5	6.6
DHAKA	3092	641	95	2358	36	30542	9.9	13.0
Jamalpur	340	53	7	280	7	2783	8.2	9.9
Mymensingh	971	193	16	762	16	7449	7.7	9.8
Tangail	337	35	43	259	6	2767	8.2	10.7
Dhaka	746	173	27	546	6	12151	16.3	22.3
Faridpur	653	187	0	511	1	5393	7.7	10.6
CHITTAGONG	4514	803	1426	2285	155	25996	5.8	11.4
Sylhet	1272	345	67	860	92	6430	5.1	7.5
Comilla	672	118	1	553	2	7811	11.6	14.1
Noakhali	546	90	58	398	22	4322	7.9	10.9
Chittagong	701	137	215	349	14	6474	9.2	18.6
Chittagong HT	1323	113	1085	125	25	959	0.7	7.7
Total	14473	2914	2142	9417	290	100592	7.0	10.7

-----Land Utilization-----

Division/ District	Cultiva- ble Area [C]	Current Fallows	Net Cropped Area			Triple Cropped	Gross Cropped Area [G]	---Cropping Intensity---		
			[N]	Single Cropped	Double Cropped			[N]:[C]	[G]:[N]	[G]:[C]
RAJSHAHI	2701	84	2564	1314	1042	208	4022	0.95	1.57	1.4
Dinajpur	540	17	511	340	143	28	710	0.95	1.39	1.3
Rangpur	740	23	693	167	437	89	1308	0.94	1.89	1.7
Bogra	299	6	293	113	143	37	510	0.98	1.74	1.7
Rajshahi	733	21	695	500	174	21	911	0.95	1.31	1.2
Pabna	389	17	372	194	145	33	583	0.96	1.57	1.5
KHULNA	2073	73	1955	1336	534	85	2659	0.94	1.36	1.2
Kushtia	287	31	256	146	99	11	377	0.89	1.47	1.3
Jessore	516	20	489	350	127	12	640	0.95	1.31	1.2
Khulna	443	8	433	330	89	14	550	0.98	1.27	1.2
Barisal	503	5	476	307	132	37	682	0.95	1.43	1.3
Patuakhali	324	9	301	203	87	11	410	0.93	1.36	1.2
DHAKA	2358	100	2224	1019	1020	185	3614	0.94	1.63	1.5
Jamalpur	280	4	269	91	154	24	471	0.96	1.75	1.6
Mymensingh	762	33	713	228	427	58	1256	0.94	1.76	1.6
Tangail	259	6	247	103	112	32	423	0.95	1.71	1.6
Dhaka	546	31	511	332	155	24	714	0.94	1.40	1.3
Faridpur	511	26	484	265	172	47	750	0.95	1.55	1.4
CHITTAGONG	2285	230	1896	1058	722	116	2850	0.83	1.50	1.2
Sylhet	860	105	663	443	204	16	899	0.77	1.36	1.0
Comilla	553	37	514	215	269	30	843	0.93	1.64	1.5
Noakhali	398	21	355	198	119	38	550	0.89	1.55	1.3
Chittagong	349	43	291	142	117	32	472	0.83	1.62	1.3
Chittagong HT	125	24	76	60	13	3	95	0.61	1.25	0.7
Total	9417	487	8639	4727	3318	594	13145	0.92	1.52	1.4

Note: "Not cultivable" includes rivers, tidal creeks, lakes, ponds, roads, buildings, homesteads, etc.

Sources: Bangladesh Bureau of Statistics and staff estimates.

Table 7.13
AGRICULTURAL INPUT AND IRRIGATED AREA BY DISTRICT

COMMERCIAL FERTILIZER DISTRIBUTION
('000 metric tons)

	---FIVE-YEAR AVERAGES---			---ANNUAL DATA---					
	70/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Rajshahi	66.8	174.1	328.3	268.7	252.1	304.3	390.8	404.1	390.0
Dinaajpur	12.6	32.3	58.1	45.9	40.8	52.1	68.7	79.2	57.4
Rangpur	14.5	35.1	69.0	57.0	50.6	63.4	85.5	84.1	83.3
Bogra	16.0	42.0	79.4	70.8	71.1	74.2	91.4	84.3	93.1
Rajshahi	14.3	38.6	73.7	59.6	56.2	65.9	87.2	94.9	80.4
Pabna	9.4	26.1	48.0	35.3	33.4	48.7	58.0	61.6	75.8
Khulna	47.1	95.9	146.2	132.3	116.6	127.2	156.3	188.9	166.6
Kushtia	8.5	28.2	46.4	43.3	37.1	36.3	51.7	60.5	55.4
Jessore	8.8	29.2	49.4	41.3	39.6	41.2	55.2	66.8	52.9
Khulna	6.6	9.9	19.7	16.9	15.0	17.5	19.8	27.8	28.1
Barisal	17.8	21.9	24.7	24.6	20.0	25.2	24.6	27.7	25.3
Patuakhali	5.4	6.8	6.0	6.3	4.9	7.0	5.1	6.2	4.9
Dhaka	85.8	178.4	288.0	241.2	236.5	274.5	313.5	355.3	352.8
Jamalpur /a			34.3		24.8	29.9	38.3	42.1	43.0
Mymensingh /a	38.1	81.0	96.9	108.8	70.7	87.2	93.7	118.3	100.4
Tangail	7.5	22.3	44.3	35.8	37.7	46.2	48.5	50.5	41.2
Dhaka	34.1	63.0	97.8	82.0	87.6	91.3	108.1	113.9	139.0
Faridpur	5.9	12.1	21.4	14.7	15.7	20.0	24.9	30.5	29.2
Chittagong	123.7	215.9	266.2	247.0	224.1	262.4	268.5	311.9	247.0
Sylhet	15.3	21.0	33.8	26.9	25.8	29.7	37.9	46.6	35.3
Comilla	41.7	96.1	123.0	121.7	111.2	125.0	121.5	127.7	105.4
Noakhali	17.1	31.1	31.7	33.2	29.0	28.5	26.7	39.4	34.7
Chittagong	47.3	64.8	70.8	60.7	53.1	75.5	74.7	85.2	58.0
Chittagong HT	2.3	2.9	6.9	4.5	5.0	3.8	7.7	13.1	13.6
Total	323.4	664.3	1028.7	889.2	829.3	968.4	1125.1	1260.2	1156.4

IRRIGATED AREA, 1984/85
('000 hectares)

	-----Irrigated area-----				As % of Cultivable Area
	Cultiv- able Area	Pumps and Tubewells	Other Methods	Total	
RAJSHAHI	2701	494	118	612	22.7
Dinaajpur	540	70	8	78	14.4
Rangpur	740	126	66	192	26.0
Bogra	299	108	13	121	40.5
Rajshahi	733	117	25	142	19.4
Pabna	389	73	6	79	20.3
KHULNA	2073	193	124	317	15.3
Kushtia	287	63	48	111	38.7
Jessore	516	76	18	94	18.2
Khulna	443	25	21	46	10.4
Barisal	503	21	36	57	11.3
Patuakhali	324	8	1	9	2.8
DHAKA	2358	531	91	622	26.4
Jamalpur	280	84	6	90	32.1
Mymensingh	762	261	55	256	33.6
Tangail	259	84	4	88	34.0
Dhaka	546	126	19	145	26.6
Faridpur	511	36	7	43	8.4
CHITTAGONG	2285	342	179	521	22.8
Sylhet	860	81	101	182	21.2
Comilla	553	128	31	159	28.8
Noakhali	398	27	15	42	10.6
Chittagong	349	101	25	126	36.1
Chittagong HT	125	5	7	12	9.6
Total	9417	1560	512	2072	22.0

/a Jamalpur included in Mymensingh through 1980/81.

Source: Bangladesh Agricultural Development Corporation, Bangladesh Bureau of Statistics.

Table 7.14
FOODGRAIN PRODUCTION BY DISTRICT, 1970/75-1985/86
('000 metric tons)

Division/District	---FIVE-YEAR AVERAGES---			---ANNUAL DATA---					
	70/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Rajshahi	3083	3559	4490	4277	4248	4355	4755	4817	4970
Dinajpur	564	671	834	866	772	769	881	883	857
Rangpur	1073	1170	1466	1437	1399	1484	1467	1540	1609
Bogra	440	512	708	661	637	661	763	816	862
Rajshahi	704	783	937	857	892	878	1042	1018	1058
Pabna	302	423	545	456	548	562	602	560	584
Khulna	1920	2554	2778	2820	2561	2664	2829	3016	3073
Kushtia	191	273	345	342	309	307	357	413	405
Jessore	478	615	640	620	620	607	638	715	708
Khulna	380	575	640	646	573	610	634	739	725
Barisal	587	705	723	783	661	720	733	719	759
Patuakhali	284	386	428	428	394	421	467	430	476
Dhaka	2878	3401	4108	3807	4016	4323	4121	4270	4122
Jamalpur /a			477	480	477	539	519	576	556
Mymensingh /b	1563	1687	1629	1571	1598	1646	1582	1746	1646
Tangail	277	418	545	491	541	620	563	512	533
Dhaka	627	745	862	838	864	912	865	832	773
Faridpur	413	464	554	428	537	607	592	606	614
Chittagong	3120	3529	3961	4071	3771	3969	4014	3982	3914
Sylhet	1071	1002	1193	1295	1177	1169	1191	1133	1133
Comilla	795	961	1145	1103	1113	1186	1173	1152	1135
Noakhali	523	720	694	720	600	687	702	759	706
Chittagong	640	743	823	838	778	826	842	831	826
Chittagong Hill Tracts	90	103	106	114	103	101	107	107	114
Total	10982	13043	15338	14975	14598	15311	15719	16086	16079

/a Jamalpur was a subdivision of Mymensingh until December 26, 1978.

/b Including Jamalpur from 1969/70 through 1978/79.

Source: Bangladesh Bureau of Statistics.

Table 7.15
FOODGRAIN SURPLUS AND DEFICIT DISTRICTS, 1970/75-1984/85

[PRODUCTION IN OUNCES PER DAY PER CAPITA]									
Division/District	---FIVE-YEAR AVERAGES---			-----ANNUAL DATA-----Preliminary					
	70/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	
Rajshahi	16.5	16.7	18.7	18.8	18.2	18.2	19.3	19.1	
Dinajpur	20.3	21.0	22.8	25.1	21.7	21.0	23.4	22.8	
Rangpur	18.2	17.7	20.0	20.5	19.5	20.3	19.5	20.1	
Bogra	18.2	18.7	22.9	22.5	21.2	21.4	24.0	25.1	
Rajshahi	15.3	14.9	15.6	15.1	15.3	14.6	16.9	16.1	
Pabna	9.9	12.3	14.0	12.4	14.5	14.5	15.1	13.7	
Khulna	12.5	14.7	14.3	15.2	13.5	13.7	14.2	14.8	
Kushtia	9.3	11.9	13.4	14.0	12.3	11.9	13.5	15.3	
Jessore	13.2	15.2	14.0	14.3	14.0	13.3	13.7	15.0	
Khulna	9.8	13.1	12.9	13.8	11.9	12.3	12.4	14.2	
Barisal	13.8	14.8	13.7	15.5	12.8	13.7	13.6	13.1	
Patuakhali	17.6	20.9	20.4	21.5	19.3	20.1	21.7	19.5	
Dhaka	12.5	12.9	13.7	13.4	13.8	14.4	13.4	13.5	
Jamalpur			18.8	18.2	17.7	19.5	18.4	20.0	
Mymensingh	19.0	19.6	22.1	22.2	22.1	22.3	20.9	22.6	
Tangail	12.2	16.7	19.8	18.6	20.1	22.6	20.0	17.9	
Dhaka	7.7	7.6	7.4	7.7	7.7	7.8	7.1	6.6	
Faridpur	9.3	9.5	10.3	8.3	10.2	11.3	10.8	10.9	
Chittagong	15.5	15.5	15.5	16.7	15.1	15.5	15.3	14.8	
Sylhet	20.8	17.4	18.7	21.2	18.9	18.4	18.2	17.0	
Comilla	12.6	13.7	14.8	14.9	14.7	15.3	14.8	14.3	
Noakhali	14.9	18.5	16.2	17.5	14.3	16.0	16.0	17.0	
Chittagong	13.8	13.7	13.1	14.2	12.8	13.1	12.9	12.4	
Chittagong Hill	16.9	14.8	11.9	14.1	12.1	11.3	11.3	10.8	
Total	14.2	14.9	15.5	15.9	15.1	15.5	15.5	15.5	
[THOUSAND METRIC TONS, RELATIVE TO 16 OZ/CAP-DAY STANDARD]									
Division/District	---FIVE-YEAR AVERAGES---			-----ANNUAL DATA-----Preliminary					
	70/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	
Rajshahi	82.6	159.0	654.8	634.7	512.8	523.8	815.2	787.5	
Dinajpur	120.4	159.7	248.7	313.4	203.9	184.5	277.8	264.1	
Rangpur	127.3	114.2	292.3	315.8	252.9	312.5	265.5	315.0	
Bogra	53.8	74.0	213.2	192.0	155.5	167.5	255.0	296.2	
Rajshahi	-33.8	-60.8	-23.6	-52.4	-42.0	-81.9	53.5	4.7	
Pabna	-185.1	-128.4	-75.9	-134.1	-57.6	-58.7	-36.5	-92.5	
Khulna	-540.0	-219.6	-335.1	-142.4	-473.4	-445.4	-365.9	-248.4	
Kushtia	-135.7	-94.5	-66.9	-50.1	-93.3	-105.1	-66.5	-19.7	
Jessore	-98.6	-34.5	-88.8	-73.8	-90.8	-121.4	-109.7	-48.6	
Khulna	-235.3	-125.4	-152.8	-105.6	-198.7	-182.5	-181.3	-95.9	
Barisal	-95.5	-55.4	-119.8	-22.8	-162.6	-122.0	-130.8	-160.7	
Patuakhali	25.1	90.1	92.4	110.0	67.9	85.5	122.3	76.4	
Dhaka	-806.8	-809.4	-686.3	-726.2	-642.2	-464.2	-812.6	-786.1	
Jamalpur	0.0	4.3	76.4	57.3	44.9	97.4	67.1	115.4	
Mymensingh	248.4	305.7	446.8	440.8	443.2	465.4	372.1	512.4	
Tangail	-84.6	18.6	105.1	68.7	109.7	180.1	112.9	54.1	
Dhaka	-676.9	-821.3	-1010.0	-897.3	-937.3	-956.3	-1079.6	-1179.7	
Faridpur	-293.7	-316.6	-304.3	-395.7	-302.8	-250.9	-285.0	-287.2	
Chittagong	-108.8	-116.7	-138.9	174.2	-224.4	-126.7	-195.4	-322.1	
Sylhet	244.7	81.8	172.8	319.7	179.3	150.2	146.3	68.3	
Comilla	-215.9	-161.6	-95.6	-84.8	-101.1	-54.0	-97.2	-141.1	
Noakhali	-39.0	96.5	6.6	61.9	-71.9	0.3	-0.7	43.4	
Chittagong	-102.6	-124.8	-185.2	-107.5	-197.5	-180.8	-199.4	-240.7	
Chittagong Hill	4.0	-8.6	-37.4	-15.0	-33.1	-42.4	-44.4	-52.0	
Total	-1392.7	-986.8	-505.0	-59.6	-826.1	-512.5	-558.7	-568.1	

Source: Bangladesh Bureau of Statistics and Bank staff estimates.

Table 7.16
AUS AND AMAN PRODUCTION BY DISTRICT
('000 metric tons rice equivalent)

AUS	---FIVE-YEAR AVERAGES---			-----ANNUAL DATA-----						
	70/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
Rajshahi	768.8	904.7	870.9	868.2	939.6	822.7	895.9	827.9	803.2	748.1
Dinaajpur	143.3	184.8	182.1	190.7	163.8	163.4	196.0	196.5	169.9	145.7
Rangpur	301.1	327.9	297.5	295.9	330.3	320.9	279.5	261.1	290.3	245.3
Bogra	84.1	108.4	114.6	136.1	120.8	118.1	112.7	85.7	84.3	90.9
Rajshahi	152.6	167.8	159.8	115.8	184.8	119.6	200.0	178.9	154.8	168.8
Pabna	87.9	115.8	116.8	129.8	140.0	100.8	107.7	105.8	103.9	97.4
Khulna	562.4	662.8	615.1	758.0	591.8	572.3	636.8	516.5	601.8	859.4
Kushtia	113.6	128.6	132.8	143.8	127.7	96.9	136.5	159.3	170.3	
Jessore	219.9	258.4	184.4	227.9	208.7	175.7	168.0	141.7	156.7	240.4
Khulna	37.9	48.0	55.0	81.7	46.9	58.4	58.0	30.2	32.2	37.4
Barisal /a	157.3	182.6	176.5	229.5	148.4	173.0	192.1	139.3	172.0	195.6
Patuakhali /b	33.4	45.2	66.5	75.0	60.0	69.2	82.2	46.0	70.6	88.2
Dhaka	701.8	850.1	922.2	897.6	930.6	945.9	958.0	878.7	812.8	873.9
Jamalpur /c			128.4	137.1	120.2	140.1	130.0	114.5	119.8	107.5
Mymensingh /d	337.2	435.0	381.0	356.2	378.4	361.6	378.0	430.8	343.5	331.7
Tangail /e	76.0	113.1	99.9	115.3	107.0	111.3	93.8	71.8	76.0	79.1
Dhaka	140.8	158.2	176.4	165.3	182.0	184.4	195.8	154.6	123.7	143.9
Faridpur	147.9	143.7	136.5	123.7	143.0	148.5	160.3	107.0	149.8	211.7
Chittagong	637.0	720.4	733.3	764.7	807.7	725.1	730.9	638.1	609.1	748.0
Sylhet	145.7	167.8	198.6	209.4	254.5	203.0	178.4	147.5	163.1	230.2
Comilla	179.1	213.1	225.6	220.7	232.9	237.2	239.8	197.4	160.5	202.3
Noakhali	147.0	176.1	155.8	180.4	145.5	142.1	164.2	146.5	149.8	204.5
Chittagong	125.5	127.4	121.9	120.2	138.4	116.6	118.1	116.3	103.6	80.5
Chittagong H. Tracts			21.0				30.4	11.5	21.6	17.2
Bandarban /f			4.5					8.9	10.5	13.3
Total :	2670.0	3138.0	3125.6	3288.6	3269.6	3066.0	3221.5	2782.5	2826.9	3129.4
AMAN										
Rajshahi	2046.1	2221.1	2496.9	2491.8	2394.3	2437.7	2594.9	2566.1	2691.2	2536.7
Dinaajpur	405.3	437.7	490.4	505.6	450.0	461.0	506.2	529.1	545.8	525.1
Rangpur	727.9	737.9	876.1	865.6	834.7	866.4	885.9	928.1	930.0	887.8
Bogra	319.0	329.6	387.1	395.4	356.8	362.0	395.6	425.7	445.6	410.1
Rajshahi	445.8	482.9	529.7	524.1	521.9	516.4	560.5	525.4	557.3	510.1
Pabna	148.2	233.0	213.7	201.2	230.9	231.9	246.7	157.7	212.5	203.6
Khulna	1087.5	1611.0	1709.1	1696.3	1544.4	1629.5	1778.0	1897.1	2068.5	1917.5
Kushtia	56.7	76.6	80.7	76.6	69.7	68.2	81.6	107.1	120.6	114.1
Jessore	227.7	303.1	304.2	297.8	271.9	295.8	333.0	322.4	412.2	380.7
Khulna	305.2	489.6	528.5	516.8	472.8	501.1	528.8	622.7	607.9	497.0
Barisal /a	302.1	428.0	449.9	462.7	411.8	430.8	463.2	481.0	531.5	546.5
Patuakhali /b	195.8	313.7	345.8	342.3	318.1	333.5	371.3	363.9	396.3	379.2
Dhaka	1380.4	1686.8	1651.1	1754.6	1582.5	1692.2	1639.0	1587.0	1763.5	1760.4
Jamalpur	ERR	249.0	247.2	271.4	231.8	249.9	240.5	242.5	263.5	263.1
Mymensingh /d	ERR	646.7	678.5	742.4	629.2	687.6	634.8	698.5	756.7	709.5
Tangail /e	142.5	195.9	191.3	201.0	187.6	204.2	205.1	158.9	177.9	193.5
Dhaka	285.0	347.3	361.0	343.0	523.4	319.9	317.1	301.3	309.7	335.5
Faridpur	188.6	241.9	213.7	196.8	213.7	230.7	241.5	185.9	255.7	258.8
Chittagong	1560.6	1818.0	1871.4	2020.0	1687.2	1844.1	1925.0	1880.6	2016.2	2052.2
Sylhet	523.4	490.2	541.6	577.6	517.2	534.2	573.5	505.6	582.7	552.6
Comilla	416.1	484.0	489.9	513.6	449.0	502.8	501.7	482.5	531.4	524.3
Noakhali	269.0	398.5	380.3	422.8	320.1	350.6	385.1	423.1	418.6	418.9
Chittagong	319.5	398.6	410.5	446.5	358.0	410.2	415.1	422.8	429.3	509.5
Chittagong H. Tracts	30.6	46.7	46.8	59.4	42.9	46.3	38.6	46.6	54.2	46.9
Total	6074.6	7336.9	7728.4	7962.7	7208.4	7603.5	7936.9	7930.8	8539.4	8266.8

/a From 1967/68 to 1969/70, including Patuakhali.

/b From 1967/68 to 1969/70, included in Barisal.

/c From 1967/68 to 1978/79, included in Mymensingh.

/d From 1967/68 to 1969/70, including Jamalpur and Tangail; from 1970/71 to 1975/76, including Jamalpur.

/e From 1967/68 to 1969/70, included in Mymensingh.

/f Bandarban was a subdivision of Chittagong Hill Tracts until 1982.

Source: Bangladesh Bureau of Statistics.

Table 7.17
PRODUCTION OF BORO AND WHEAT BY DISTRICT, 1970/75-1985/86
('000 metric tons, rice equivalent)

BORO	---FIVE-YEAR AVERAGES---			-----ANNUAL DATA-----					
	70/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
BORO									
Rajshahi	193.1	235.5	544.9	307.8	461.2	550.7	666.4	738.4	1022.4
Dinaipur	9.6	13.6	30.5	21.0	26.0	31.7	35.2	38.4	52.6
Rangpur	34.4	42.4	118.8	76.6	107.5	126.9	128.2	154.5	280.7
Bogra	30.7	43.5	145.8	71.1	110.1	129.6	193.0	225.1	270.5
Rajshahi	83.3	94.8	134.8	97.6	115.2	132.2	169.8	159.1	237.9
Pabna	35.0	41.2	115.2	41.5	102.4	130.3	140.3	161.3	180.7
Khulna	237.8	180.1	246.0	169.0	225.7	264.0	215.9	355.4	233.1
Kushtia	4.0	3.9	7.5	4.1	7.3	9.0	6.9	10.2	19.4
Jessore	23.6	24.5	79.7	26.4	63.3	79.5	78.1	151.2	81.0
Khulna	36.4	29.7	49.6	39.8	41.2	44.9	42.4	80.0	74.9
Barisal	120.4	95.2	93.6	88.1	97.9	112.5	75.1	94.5	49.0
Patuakhali	53.3	27.0	15.5	10.6	16.0	18.2	13.4	19.5	8.8
Dhaka	739.9	777.5	1313.3	1001.0	1321.3	1456.3	1262.6	1525.3	1279.9
Jamalpur	0.0	9.1	119.9	62.8	115.1	131.5	117.9	172.4	140.6
Mymensingh	269.4	65.5	552.3	450.9	569.4	565.2	528.7	647.4	503.0
Tangail	49.9	87.1	213.6	132.8	209.7	266.4	223.9	235.1	229.5
Dhaka	189.6	214.0	315.8	298.1	320.9	360.4	301.2	298.5	264.0
Faridpur	53.2	55.9	111.6	56.4	106.1	132.8	90.8	171.8	142.8
Chittagong	886.4	910.7	1213.2	1152.5	1143.9	1275.1	1204.6	1290.0	1135.4
Sylhet	415.5	341.0	441.7	500.2	396.0	418.2	430.0	464.0	378.2
Comilla	175.2	203.5	299.1	245.3	308.7	336.2	287.5	317.7	302.1
Noakhali	87.5	143.3	155.8	115.2	132.4	193.4	151.4	186.5	135.7
Chittagong	187.1	203.2	290.8	271.1	283.4	299.1	308.4	292.2	292.5
Chittagong H. Tracts	21.2	19.7	25.8	20.6	23.4	28.3	27.2	29.5	26.9
Total:	2057.2	2103.9	3317.4	2630.2	3152.0	3546.2	3349.5	3909.1	3670.8
WHEAT									
Rajshahi	49.0	117.6	577.8	609.5	453.8	543.5	598.1	684.3	453.0
Dinaipur	2.9	19.2	131.0	148.6	130.9	113.0	143.1	119.2	88.6
Rangpur	5.8	21.2	173.2	198.9	127.4	169.9	173.6	196.2	108.4
Bogra	3.3	19.4	60.3	59.5	48.3	52.2	61.7	79.8	61.1
Rajshahi	14.4	28.5	113.5	118.9	72.3	109.3	112.3	154.4	108.4
Pabna	22.6	30.3	100.0	83.6	75.0	99.1	107.4	134.7	86.5
Khulna	19.2	74.9	207.8	196.7	199.7	198.2	197.8	246.7	170.2
Kushtia	14.4	51.1	125.2	117.7	108.4	132.1	131.9	136.1	94.3
Jessore	4.5	19.3	71.8	67.8	75.2	56.3	59.3	100.5	58.6
Khulna	0.2	4.2	7.4	8.3	13.3	5.1	4.7	5.6	10.4
Barisal	0.1	0.3	3.3	2.8	2.9	4.5	1.8	4.4	6.7
Patuakhali	0.0	0.0	0.1	0.1	0.0	0.2	0.0	0.1	0.2
Dhaka	27.3	47.4	237.3	153.4	183.8	228.9	261.6	359.1	265.8
Jamalpur	1.0	2.9	22.7	8.5	10.5	17.3	30.6	46.5	31.9
Mymensingh	1.1	6.0	32.6	20.8	22.0	32.1	40.2	47.8	43.2
Tangail	2.4	11.6	40.5	41.5	36.7	38.2	39.8	46.6	49.5
Dhaka	5.1	9.3	49.1	31.8	38.2	47.2	50.5	78.0	75.5
Faridpur	17.7	17.7	92.4	50.7	76.4	94.1	100.5	140.3	65.7
Chittagong	11.3	47.2	143.1	133.0	130.0	124.8	154.0	173.8	152.9
Sylhet	0.2	1.7	10.9	7.9	8.3	13.8	8.8	15.8	9.3
Comilla	10.9	44.4	130.2	122.9	120.6	109.3	143.7	154.7	140.9
Noakhali	0.2	1.0	1.6	1.5	0.8	1.4	1.3	3.0	2.4
Chittagong	0.0	0.1	0.3	0.4	0.3	0.2	0.2	0.2	0.2
Chittagong H. Tracts	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1
Bandarban /a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total :	106.7	287.2	1166.1	1092.5	967.4	1095.4	1211.5	1463.9	1041.9

/a From 1967/68 to 1982/83, included in Chittagong Hill Tracts.

Source: Bangladesh Bureau of Statistics.

Table 7.18
JUTE PRODUCTION BY DISTRICT

	---FIVE-YEAR AVERAGES---			---ANNUAL DATA---						
	70/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87
('000 bales of 400 lb.)										
Rajshahi	1600.2	1705.6	1659.8	1784.0	1501.5	1614.5	1625.8	1773.4	3067.2	2384.8
Dinaajpur	179.2	179.7	163.6	182.4	165.8	150.8	142.2	177.0	215.6	242.9
Rangpur	926.2	1008.4	1007.4	1012.3	937.0	975.4	1014.7	1097.7	1634.3	1447.5
Bogra	118.2	136.0	170.6	168.3	177.1	266.9	121.1	119.6	356.3	176.8
Rajshahi	173.9	162.0	151.3	165.1	99.5	142.0	161.4	188.7	481.4	343.2
Pabna	202.7	219.5	186.9	255.9	122.2	179.4	186.4	190.5	379.6	174.4
Khulna	798.4	838.4	909.9	854.6	783.0	927.5	922.5	1061.7	1571.0	1052.5
Kushtia	172.5	180.1	263.2	202.8	191.6	253.5	289.4	378.6	474.9	299.9
Jessore	454.6	517.9	528.9	511.1	504.3	560.6	567.0	501.4	888.1	584.3
Khulna	98.6	110.1	113.0	102.8	70.8	100.1	121.8	169.8	198.1	150.0
Barisal	69.9	28.3	17.1	36.7	14.5	11.6	12.5	10.4	8.2	16.3
Patuakhali	2.8	2.0	1.6	1.2	1.8	1.7	1.8	1.5	1.7	2.0
Dhaka	2455.7	2392.8	2047.8	1929.2	2025.9	2033.8	2281.5	1968.7	3427.4	2674.0
Jamalpur	0.0	192.2	242.3	226.2	256.9	253.3	263.7	211.5	292.6	222.4
Mymensingh	1013.8	779.8	660.1	566.6	708.0	672.9	738.1	614.9	1207.0	893.1
Tangail	327.4	367.1	228.1	272.9	188.5	206.8	277.7	194.7	340.5	289.7
Dhaka	546.5	525.9	431.1	438.1	447.1	419.4	419.7	431.3	811.2	583.5
Faridpur	568.0	527.9	486.2	425.4	425.4	481.4	582.4	516.3	776.1	685.3
Chittagong	516.2	364.8	327.7	374.7	335.2	305.6	315.8	307.1	594.4	642.2
Sylhet	55.5	18.2	17.2	18.8	28.9	16.7	11.5	10.1	46.7	23.8
Comilla	399.7	301.8	285.9	289.5	285.4	275.4	292.7	286.3	530.5	610.7
Noakhali	58.4	42.9	23.6	65.1	19.4	12.7	10.7	10.0	16.1	7.4
Chittagong	1.0	0.7	0.4	0.6	0.6	0.4	0.3	0.2	0.0	0.0
Chittagong H. Tracts	1.5	1.2	0.6	0.7	0.9	0.5	0.5	0.5	1.1	0.3
Total :	5370.6	5301.6	4959.2	4942.5	4645.7	4881.4	5215.7	5110.9	8660.0	6753.5
('000 metric tons)										
Rajshahi	290.3	309.5	301.2	323.7	272.4	292.9	295.0	321.8	572.3	445.0
Dinaajpur	32.5	32.6	29.7	33.1	30.1	27.4	25.8	32.1	40.2	45.3
Rangpur	168.1	183.0	182.8	183.7	170.0	177.0	184.1	199.2	305.0	270.1
Bogra	21.4	24.7	31.0	30.5	32.1	48.4	22.0	21.7	66.5	33.0
Rajshahi	31.5	29.4	27.5	30.0	18.0	25.8	29.3	34.2	89.8	64.0
Pabna	36.8	35.8	33.9	46.4	22.2	32.6	33.8	34.6	70.8	32.5
Khulna	144.9	152.1	165.1	155.1	142.1	168.3	167.4	192.6	293.1	196.4
Kushtia	31.3	32.7	47.7	36.8	34.8	46.0	52.5	68.7	88.6	56.0
Jessore	82.5	94.0	96.0	92.7	91.5	101.7	102.9	91.0	165.7	109.0
Khulna	17.9	20.0	20.5	18.6	12.8	18.2	22.1	30.8	37.0	28.0
Barisal	12.7	5.1	3.1	6.7	2.6	2.1	2.3	1.9	1.5	3.0
Patuakhali	0.5	0.4	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4
Dhaka	445.6	434.1	371.6	350.0	367.6	369.0	414.0	357.2	639.6	499.0
Jamalpur	0.0	34.9	44.0	41.0	46.6	46.0	47.8	38.4	54.6	41.5
Mymensingh	183.9	141.5	119.8	102.8	128.5	122.1	133.9	111.6	225.2	166.7
Tangail	59.4	68.6	41.4	49.5	34.2	37.5	50.4	35.3	63.5	54.1
Dhaka	99.2	95.4	78.2	79.5	81.1	76.1	76.1	78.3	151.4	108.9
Faridpur	103.1	95.8	88.2	77.2	77.2	87.3	105.7	93.7	144.8	127.9
Chittagong	93.7	66.2	59.5	68.0	60.8	55.4	57.3	55.7	110.9	119.8
Sylhet	10.1	3.3	3.1	3.4	5.2	3.0	2.1	1.8	8.7	4.4
Comilla	72.5	54.8	51.9	52.5	51.8	50.0	53.1	51.9	99.0	114.0
Noakhali	10.6	7.8	4.3	11.8	3.5	2.3	1.9	1.8	3.0	1.4
Chittagong	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Chittagong H. Tracts	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.0
Total :	974.4	961.9	899.8	896.8	842.9	885.7	946.3	927.3	1615.9	1260.2

Source: Bangladesh Bureau of Statistics.

Table 7.19
PUBLIC FOODGRAIN PROCUREMENT BY DISTRICT, 1975/80-1985/86
('000 metric tons, rice equivalent)

Division/District	5-YEAR AVERAGES		ANNUAL DATA					
	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Rajshahi	196.6	253.1	482.0	174.1	121.3	227.3	260.7	280.4
Dinajpur	74.2	102.7	190.5	87.1	54.8	99.5	81.8	96.7
Rangpur	36.8	53.1	82.3	24.6	26.3	67.0	65.3	61.1
Bogra	24.5	34.4	50.5	13.6	20.5	35.8	51.8	57.3
Rajshahi	53.0	46.0	122.8	41.8	14.4	14.2	36.8	44.9
Pabna	8.1	16.8	36.0	7.0	5.4	10.8	25.0	20.4
Khulna	65.7	34.9	108.0	7.6	12.0	13.9	32.9	25.5
Kushtia	5.3	4.2	10.3	1.1	0.3	1.4	8.0	6.4
Jessore	8.0	7.5	8.1	0.1	2.7	5.1	21.5	6.9
Khulna	11.3	6.5	25.9	2.0	1.0	1.0	2.6	1.7
Barisal	15.4	6.6	27.0	0.6	2.0	2.4	0.8	4.1
Patuakhali	25.7	10.1	36.7	3.9	6.0	3.9	0.1	6.4
Dhaka	62.8	68.6	201.1	64.3	31.4	16.4	29.6	20.4
Jamalpur /a	2.5	11.5	35.1	7.7	5.5	5.1	4.3	0.8
Mymensingh	50.4	32.9	99.6	29.1	17.9	8.4	9.7	3.7
Tangail	2.2	8.3	22.9	5.6	2.2	1.4	9.4	7.7
Dhaka	6.0	13.7	38.2	21.6	5.3	1.3	1.8	2.2
Faridpur	1.7	3.2	5.4	5.4	0.5	0.2	4.4	6.0
Chittagong	71.4	68.0	225.6	52.4	27.3	9.1	25.8	15.2
Sylhet	30.0	28.3	92.3	27.2	12.2	3.1	6.5	2.2
Comilla	16.1	16.5	41.7	13.4	8.2	3.0	15.9	8.9
Noakhali	11.1	10.6	45.8	1.1	3.4	1.6	0.9	1.1
Chittagong	11.7	7.0	29.6	3.3	1.6	0.3	0.1	1.4
Chittagong Hill Tracts	2.6	5.8	16.1	7.3	1.9	1.2	2.4	1.6
Total	396.5	424.6	1016.7	298.2	192.1	266.7	349.0	350.0
AS PERCENT OF ESTIMATED SURPLUS /b								
Dinajpur	39.8	37.9	56.6	39.3	27.8	34.8	31.0	--
Rangpur	25.5	16.7	22.7	8.5	7.8	23.8	20.7	--
Bogra	28.1	14.9	23.9	8.0	11.5	13.7	17.5	--
Fatuakhali	23.0	8.9	29.8	5.0	6.5	3.1	0.1	--
Jamalpur /a	NA	15.2	46.9	13.1	5.1	7.0	3.7	--
Mymensingh	13.4	6.8	20.4	6.1	3.7	2.2	1.9	--
Tangail	NA	10.2	26.6	4.6	1.2	1.2	17.5	--
Sylhet	NA	11.4	25.6	12.9	7.1	1.9	9.5	--

-- = not available.

/a Jamalpur was a subdivision of Mymensingh until December 26, 1978.

/b Surplus estimated relative to consumption standard of 16 oz. per day per capita.

Districts shown are those with estimated surpluses exceeding 50,000 tons in most recent years.

NA indicates a year in which estimated surplus fell below 50,000 tons.

Note: 1.0 ton rice equivalent = 1.0 ton wheat = 1.5 ton paddy.

Source: Ministry of Food.

Table 7.20
PERCENTAGE DISTRIBUTION OF FOODGRAIN PRODUCTION AND PROCUREMENT BY DISTRICT, 1975/80-1985/86
(percent of country total)

PRODUCTION	75/80	80/85	ANNUAL DATA					
			1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Rajshahi	27.3	29.3	28.6	29.1	28.4	30.3	30.3	30.9
Dinaajpur	5.1	5.5	5.8	5.3	5.0	5.6	5.6	5.3
Rangpur	9.0	9.5	9.6	9.6	9.7	9.3	9.3	10.0
Bogra	3.9	4.6	4.4	4.4	4.3	4.9	4.9	5.4
Rajshahi	6.0	6.2	5.7	6.1	5.7	6.6	6.6	6.6
Pabna	3.2	3.6	3.0	3.8	3.7	3.8	3.8	3.6
Khulna	19.6	18.0	18.8	17.5	17.4	18.0	18.0	19.1
Kushtia	2.1	2.2	2.3	2.1	2.0	2.3	2.3	2.5
Jessore	4.7	4.1	4.1	4.2	4.0	4.1	4.1	4.4
Khulna	4.4	4.1	4.3	3.9	4.0	4.0	4.0	4.5
Barisal	5.4	4.8	5.2	4.2	4.7	4.7	4.7	4.7
Patuakhali	3.0	2.9	2.9	2.7	2.7	3.0	3.0	3.0
Dhaka	26.1	26.7	25.4	27.5	28.2	26.2	26.2	25.6
Jamalpur /a	3.2	3.3	3.2	3.3	3.5	3.3	3.3	3.5
Mymensingh	13.0	10.5	10.5	10.9	10.8	10.1	10.1	10.2
Tangail	3.2	3.6	3.3	3.7	4.0	3.6	3.6	3.3
Dhaka	5.7	5.7	5.6	5.9	6.0	5.5	5.5	4.8
Faridpur	3.6	3.6	2.9	3.7	4.0	3.8	3.8	3.8
Chittagong	27.0	26.0	27.2	25.8	25.9	25.5	25.5	24.4
Sylhet	7.7	7.9	8.7	8.1	7.6	7.6	7.6	7.1
Comilla	7.4	7.5	7.4	7.6	7.7	7.5	7.5	7.1
Noakhali	5.5	4.5	4.8	4.1	4.5	4.5	4.5	4.4
Chittagong	5.7	5.4	5.6	5.3	5.4	5.4	5.4	5.1
Chittagong Hill Tracts	0.8	0.7	0.8	0.7	0.7	0.7	0.7	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PROCUREMENT								
Rajshahi	50.6	65.8	47.4	58.4	63.2	85.2	74.7	82.1
Dinaajpur	19.1	27.4	18.7	29.2	28.5	37.3	23.4	28.3
Rangpur	9.3	14.8	8.1	8.3	13.7	25.1	18.7	17.9
Bogra	6.4	9.7	5.0	4.6	10.7	13.4	14.8	16.8
Rajshahi	13.6	9.9	12.1	14.0	7.5	5.3	10.5	13.1
Pabna	2.2	4.0	3.5	2.4	2.8	4.0	7.2	6.0
Khulna	15.9	6.8	10.6	2.6	6.3	5.2	9.4	7.5
Kushtia	1.4	0.9	1.0	0.4	0.2	0.5	2.3	1.9
Jessore	2.0	2.1	0.8	0.0	1.4	1.9	6.2	2.0
Khulna	2.8	1.0	2.5	0.7	0.5	0.4	0.7	0.5
Barisal	3.7	1.0	2.7	0.2	1.0	0.9	0.2	1.2
Patuakhali	6.0	1.9	3.6	1.3	3.1	1.5	0.0	1.9
Dhaka	15.7	14.5	19.8	21.5	16.3	6.1	8.5	6.0
Jamalpur /a	0.7	2.4	3.4	2.6	2.8	1.9	1.2	0.2
Mymensingh	12.4	7.0	9.8	9.7	9.3	3.1	2.8	1.1
Tangail	0.6	1.7	2.2	1.9	1.1	0.5	2.7	2.2
Dhaka	1.6	3.0	3.8	7.2	2.7	0.5	0.5	0.6
Faridpur	0.5	0.8	0.5	1.8	0.3	0.1	1.3	1.8
Chittagong	17.8	13.0	22.2	17.6	14.2	3.4	7.4	4.4
Sylhet	7.6	5.5	9.1	9.1	6.3	1.2	1.9	0.6
Comilla	4.1	3.7	4.1	4.5	4.3	1.1	4.6	2.6
Noakhali	2.6	1.5	4.5	0.4	1.8	0.6	0.3	0.3
Chittagong	2.8	1.0	2.9	1.1	0.9	0.1	0.0	0.4
Chittagong Hill Tracts	0.6	1.2	1.6	2.5	1.0	0.4	0.7	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

/a Jamalpur was a subdivision of Mymensingh until December 26, 1978.

Note: Data include rice and wheat only.

Source: Bangladesh Bureau of Statistics, Ministry of Food, and World Food Programme, Dhaka.

Table 7.21
PUBLIC PROCUREMENT OF AUS AND AMAN RICE AND PADDY BY DISTRICT, 1975/80-1985/86
(metric tons, rice equivalent)

AUS	5-YEAR AVERAGES		ANNUAL DATA					
	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Rajshahi	5769	8365	19708	12137	912	8926	144	0
Dinajpur	3350	7023	16613	11147	886	6375	94	0
Rangpur	429	535	1304	312	1	1056	0	0
Bogra	931	136	41	90	8	541	0	0
Rajshahi	861	499	1741	581	17	105	50	0
Pabna	198	173	9	7	0	849	0	0
Khulna	2025	3497	16799	422	6	260	0	0
Kushtia	574	915	4316	257	0	0	0	0
Jessore	1225	548	2381	100	0	260	0	0
Khulna	110	604	2957	65	0	0	0	0
Barisal	56	998	4983	0	6	0	0	0
Patuakhali	60	432	2162	0	0	0	0	0
Dhaka	281	4179	16666	2496	68	1665	0	0
Jamalpur /a	27	524	2416	33	0	169	0	0
Mymensingh	238	2258	8987	816	66	1419	0	0
Tangail	9	37	116	4	0	66	0	0
Dhaka	1	1094	3852	1603	2	11	0	0
Faridpur	7	267	1295	40	0	0	0	0
Chittagong	5014	7913	33680	4348	3	105	1430	0
Sylhet	3875	3192	13504	1364	0	95	998	0
Comilla	22	480	1785	616	0	1	0	0
Noakhali	140	2938	14050	627	3	9	0	0
Chittagong	713	497	2146	341	0	0	0	0
Chittagong Hill Tracts	264	805	2195	1400	0	0	432	0
Total	13089	23955	86853	19403	989	10956	1574	0
AMAN								
Rajshahi	163001	114620	262658	107091	60308	71393	71651	122341
Dinajpur	65914	61747	122766	61160	36537	43668	44602	62419
Rangpur	32799	20354	44341	20869	15847	11275	9436	27105
Bogra	16773	7517	16391	3129	4422	8219	5424	17105
Rajshahi	43972	23369	72266	21499	3398	7512	12170	14277
Pabna	3543	1634	6894	434	104	719	19	1435
Khulna	57178	19865	77248	5945	8361	7374	397	10896
Kushtia	2089	229	1006	5	53	58	25	111
Jessore	3791	761	3639	15	65	40	46	532
Khulna	10906	4675	20684	1447	258	950	35	91
Barisal	14745	4580	17666	612	1966	2414	240	3811
Patuakhali	25648	9620	34253	3866	6019	3912	51	6351
Dhaka	41529	16478	66785	1414	11162	1646	1385	1822
Jamalpur /a	1336	3425	14194	863	1502	522	44	556
Mymensingh	28260	10565	41480	492	9022	773	1057	616
Tangail	952	651	3102	4	61	27	63	21
Dhaka	1829	1575	7309	21	249	170	124	0
Faridpur	1152	263	700	34	328	154	97	629
Chittagong	43965	23197	94606	2021	13549	3367	2440	3496
Sylhet	14993	7105	29535	346	5365	246	33	284
Comilla	7278	2251	8585	18	2092	359	200	42
Noakhali	10604	6929	29069	8	3405	1562	601	1074
Chittagong	9261	3708	17065	66	1222	130	57	656
Chittagong Hill Tracts	1829	3204	10352	1583	1465	1070	1549	1440
Total	305673	174160	501297	116471	93380	83780	75873	138555

/a Jamalpur was a subdivision of Mymensingh until December 26, 1978.

Note: 1.0 ton rice equivalent = 1.0 ton wheat = 1.5 ton paddy.

Source: Ministry of Food.

Table 7.22
PUBLIC PROCUREMENT OF BORO AND IRRI RICE AND PADDY AND WHEAT, 1975/80-1985/86
(metric tons, rice equivalent)

	5-YEAR AVERAGES		ANNUAL DATA					
	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
BORO AND IRRI								
Rajshahi	5782	47997	69766	47081	44704	37185	41249	70850
Dinajpur	411	12512	12875	12817	11070	13998	11800	19813
Rangpur	278	5841	8800	899	5185	10084	4235	11372
Bogra	603	11733	8760	9882	13664	7603	18755	22785
Rajshahi	3982	12912	30147	17372	10729	2203	4110	13446
Pabna	508	4985	9184	6048	4047	3297	2349	3434
Khulna	789	2160	8428	809	636	7	921	20
Kushtia	83	429	1670	335	55	0	85	0
Jessore	98	23	88	0	0	0	26	6
Khulna	40	770	2090	474	575	7	705	0
Barisal	564	887	4322	0	6	0	105	20
Patuakhali	4	52	258	0	0	0	..	0
Dhaka	16505	37244	91700	57681	17950	9744	9144	4850
Jamalpur /a	520	4775	10535	6197	5228	1831	82	45
Mymensingh	13722	18829	47533	26379	7832	6170	6233	2755
Tangail	570	4318	12255	5479	1110	725	2020	1426
Dhaka	1660	8965	19778	19578	3779	1018	672	449
Faridpur	33	357	1599	48	1	0	137	175
Chittagong	15845	29066	82883	43809	9829	3740	5069	3691
Sylhet	10997	17151	47566	25419	6486	2434	3848	1886
Comilla	2387	6810	18884	11161	2499	1066	440	930
Noakhali	299	588	2616	0	18	3	302	0
Chittagong	1680	2743	10258	2889	418	125	25	711
Chittagong Hill Tracts	482	1774	3556	4340	408	112	454	164
Total	38922	116654	252777	149317	74119	50676	56383	79411
WHEAT								
Rajshahi	22037	82113	129877	7871	15418	109756	147642	87182
Dinajpur	4508	21445	38201	2002	6269	35468	25287	14464
Rangpur	3248	26373	27870	2529	5252	44547	51668	22629
Bogra	6234	14604	25287	475	240	19440	27579	17363
Rajshahi	4161	9211	18639	2328	272	4387	20427	17176
Pabna	3887	10047	19880	537	1221	5914	22681	15550
Khulna	5710	9378	5560	465	3015	6270	31582	14463
Kushtia	2540	2656	3287	465	232	1370	7928	6313
Jessore	2904	6179	2022	0	2598	4848	21427	6313
Khulna	257	445	183	0	181	52	1811	1578
Barisal	9	98	68	0	4	0	416	257
Patuakhali	0	0	0	0	0	0	..	2
Dhaka	4494	10456	25984	2666	1203	3323	19105	13597
Jamalpur /a	576	3199	7931	557	730	2582	4193	160
Mymensingh	180	1075	1590	1380	14	15	2374	299
Tangail	708	3101	7396	157	29	567	7357	6263
Dhaka	2480	1802	7296	409	248	18	1040	1708
Faridpur	551	1280	1771	163	182	141	4141	5167
Chittagong	6604	7871	14385	2227	3956	1931	16858	8017
Sylhet	158	810	1715	105	313	324	1595	71
Comilla	6419	6918	12468	1615	3643	1603	15263	7937
Noakhali	21	123	109	507	0	0	0	9
Chittagong	0	19	92	0	0	4	0	0
Chittagong Hill Tracts	4	0	1	0	0	0	0	0
Total	38845	109819	175806	13229	23592	121280	215187	123259

/a Jamalpur was a subdivision of Mymensingh until December 26, 1978.

Note: 1.0 ton rice equivalent = 1.0 ton wheat = 1.5 ton paddy.

Source: Ministry of Food.

Table 8.1
BANGLADESH BUREAU OF STATISTICS INDUSTRIAL PRODUCTION INDICES, 1980/81-1985/86
[1973/74 = 100]

	-----Weights (%)-----		1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
	[Mfg Index]	[Ind Index]						
Food Products	10.45	10.17	141	174	168	142	106	103
Fish processing	0.40	0.39	82	93	80	36	147	233
Flour milling	0.43	0.42	37	57	54	40	87	86
Bakeries	0.59	0.57	191	211	199	..	47	170
Sugar & molasses	4.95	4.82	160	222	195	168	97	91
Edible oils & fats	0.49	0.48	149	177	190	131	49	96
Vegetable ghee	1.04	1.01	93	129	160	117	105	107
Tea	2.55	2.48	137	130	128	136	143	133
Beverages	0.89	0.87	168	187	143	241	202	199
Distilling & spirits	0.47	0.46	197	230	182	340	181	169
Non-alcoholic beverages	0.42	0.41	135	140	98	131	172	233
Tobacco Products	13.65	13.28	125	133	118	124	121	121
Textiles	47.39	46.11	114	109	115	111	111	100
Cotton textiles	22.57	21.96	115	105	114	114	117	110
Jute manufacturing	24.27	23.61	114	114	114	109	105	91
Rayon & other synthetic textiles	0.55	0.54	71	41	165	87	161	117
Paper and Paper Products	0.95	0.92	124	136	100	114	160	170
Paper	0.52	0.51	142	137	112	118	265	180
Newsprint	0.29	0.28	115	146	100	113	174	180
Particle board & hardboard	0.14	0.14	78	108	53	99	111	115
Chemicals and Chemical Products	10.46	10.18	166	182	175	237	264	282
Chemical fertilizers	4.87	4.74	146	143	157	234	280	329
Basic industrial chemicals	0.17	0.17	93	71	81	95	103	118
Paints, varnishes, lacquers	0.22	0.21	116	118	107	140	157	142
Medicines & pharmaceuticals	2.84	2.76	191	244	203	270	284	265
Disinfectants & insecticides	0.28	0.27	375	266	156	389	474	306
Matches	2.08	2.02	162	191	198	209	211	219
Petroleum Products	1.42	1.38	333	313	247	256	265	252
Non-Metallic Minerals	0.74	0.72	534	518	492	452	410	462
Glass	0.16	0.16	114	165	180	220	226	139
Cement	0.58	0.56	650	615	579	514	460	551
Iron and Steel	12.09	11.76	195	167	65	128	154	164
Non-Electric Machinery	0.46	0.45	361	304	1990	720	1062	409
Electric Machinery	0.89	0.87	298	322	295	349	507	655
Electric motors	0.12	0.12	74	62	110	213	181	107
Electric fans	0.37	0.36	247	291	290	320	388	409
Lamps & bulbs	0.02	0.02	311	379	390	457	557	565
Communications equipment	0.27	0.26	528	523	405	499	869	1348
Cables & wires	0.11	0.11	142	205	223	271	365	394
Transport Equipment	0.28	0.27	125	115	48	86	74	82
Shipbuilding	0.04	0.04	177	178	132	110	126	81
Motor vehicles	0.15	0.15	98	71	12	62	58	88
Bicycles & rickshaws	0.09	0.09	147	160	74	117	81	73
Other	0.33	0.32	68	58	81	80	63	123
Jute baling & pressing	0.30	0.29	67	58	84	85	66	131
Rubber products	0.01	0.01	62	55	49	167	109	107
Ice making	0.02	0.02	81	72	27	2	13	11
Index of Manufacturing Production /a	100.00	97.29	143	143	136	142	147	143
Public sector	77.50	75.40	NA	NA	NA	NA	NA	NA
Private sector	22.50	21.89	NA	NA	NA	NA	NA	NA
Index of Mining Production /b		0.29	144	177	186	220	245	265
Index of Electricity Production /b		2.42	210	240	271	296	360	377
Index of Industrial Production		100.00	145	146	139	146	152	149

/a Weights shown in second column apply to the overall index of industrial production.

/b Entirely in the public sector.

Note: The index of manufacturing production covers approximately 93% of value added in large and medium-scale manufacturing. Excluded are, among others, the manufacturing of footwear, leather, furniture and non-ferrous metal products, printing and publishing, as well as all small and cottage industries (which include spinning, dyeing and handloom weaving).

Source: Bangladesh Bureau of Statistics.

Table 8.2
JUTE AND COTTON MILLING STATISTICS, 1980/81-1985/86

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
BJMC JUTE MILL STATISTICS						
Number of mills	77	77	40	36	34	33
Labor force, permanent and "badlis"	194106	200704	135148	125916	124395	93673
Number of looms (annual average)						
Installed	25791	25791	18289	16303	16295	15808
Operating	23759	23441	16648	15343	15507	14495
Hessian production						
('000 meters)	711061	681543	598527	569418	497584	352016
(metric tons)	205413	197466	166198	160362	140363	102012
Sacking production						
('000 meters)	669848	744768	368916	257929	307276	289963
(metric tons)	309681	329277	157833	103042	127503	128080
Carpet backing (CBC) production	71278	56274	69054	66342	53314	43699
Other production	3751	3788	6330	8184	6123	1289
Total production (metric tons)	590123	586805	399415	337930	327303	275080
Raw jute consumption						
Thousands of bales	3.35	3.29	2.29	1.88	1.85	1.5
Bales per ton of production	5.67	5.60	5.74	5.58	5.66	5.59
COTTON MANUFACTURING CAPACITY AND PRODUCTION /a						
Number of mills	56	56	31	32	35	35
Installed capacity						
Spindles	1057460	1032238	606331	623060	661108	712552
Looms	7592	6848	3187	3108	3111	3118
Capacity in operation						
Spindles	863112	786119	521474	512640	520760	474185
Looms	5203	4531	2272	2319	2400	2209
Yarn Production						
Metric tons	46245	43223	29002	29424	29028	25202
32-count equivalent	55228	49849	35994	36120	35513	
Cloth Production						
'000 meters	78613	66291	35593	34520	37274	33990
'54-pick equivalent	81239	71705	39839	37887	39809	
Raw Cotton Consumption (metric tons)	46409	44521	30811	29288	32286	25506

/a Data shown for 1982/83 and beyond are not directly comparable with those for earlier years, as BTMC disinvested itself of a number of its mills during 1982/83 and 1983/84.

Notes: - Capacity data are annual averages.

- At the end of June 1982, BTMC had 66 enterprises under its control: 31 spinning mills, 22 composite spinning & weaving mills, 4 specialized mills, 1 engineering unit, 8 composite mills still under construction, and 8 enterprises without any physical assets.
- At the end of June 1983, BTMC had 47 enterprises under its control: 19 spinning mills, 12 composite spinning & weaving mills, 4 specialized mills, 1 engineering unit, 6 textile mills still under construction (and 5 enterprises without any physical assets); 1 composite mill was under going BMR and 1 of the mills under construction was in trial production.

Source: Bangladesh Textile Mills Corporation, Bangladesh Jute Mills Corporation.

Table 8.3
SUGAR AND PULP AND PAPER MILL STATISTICS, 1980/81-1985/86

DIVISION District Mill	Start-up Date	Capacity /a		-----Production in Metric Tons-----					
		Installed	Achievable/b	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
SUGAR									
DHAKA		35562	33530	24913	35096	31887	24913	14999	16164
Dhaka									
Deshbandhu Sugar Mills /c	1934	2032	2032	363	573	368	194	40	0
Faridpur									
Faridpur Sugar Mills	1977	10161	10161	9197	13382	12980	11851	6293	5780
Jamalpur									
Zeal Bangla Sugar Mills	1959	10161	10161	10080	13156	11262	8203	6420	7917
Mymensingh									
Kaliachapra Sugar Mills	1971	10161	10161	5272	7984	7277	4665	2245	2467
National Sugar Mills /c	1933	3048	1016	0	0	0	0	0	0
KHULNA		37594	35562	24075	54023	43560	41839	22431	17731
Jessore									
Mobarakgonj Sugar Mills	1969	10161	10161	11216	16237	14787	13582	7672	3610
Kushtia									
Kushtia Sugar Mills	1966	15241	15241	1539	19921	16345	15063	8394	7871
Carew & Co. Ltd. /c	1938	12193	10161	11320	17865	12428	13195	6366	6250
RAJSHAHI		128531	124467	65743	113051	105907	84601	50519	48603
Bogra									
Jaipurhat Sugar Mills	1963	20321	20321	7880	22011	21224	15880	9096	5938
Dinajpur									
Panchagarh Sugar Mills	1969	10161	10161	6819	9926	10379	9257	6897	6160
Thakurgaon Sugar Mills	1959	15241	15241	11114	16692	10310	8826	5018	4173
Setabganj Sugar Mills /c	1933/1982	12701	12701	0	0	5115	5185	2421	2710
Natore									
Natore Sugar Mills	1984	15241	15241	0	0	0	0	819	5437
Rajshahi									
Rajshahi Sugar Mills	1966	15241	15241	6027	22212	20020	15717	9099	6510
North Bengal S. Mills /d	1933	14225	12193	12995	16843	20113	16564	9719	10175
Rangpur									
Shampur Sugar Mills	1968	10161	10161	9830	12826	8836	6432	4020	3702
Rangpur Sugar Mills	1958	15241	13209	11078	13541	9910	6740	3431	3798
Total		201687	192543	145213	202169	181354	151353	87950	82498
Memo Items:									

Cane crushed, total ('000 metric tons)				1827	2473	2217	1900	1177	1018
Sugar recovery in % of cane crushed				8.1	8.3	8.3	8.1	7.6	8.1
Molasses produced ('000 metric tons)				68	92	81	70	44	38
Bagasse produced ('000 metric tons)				679	915	821	701	424	NA
PULP & PAPER									
Karnaphuli Paper Mills (paper)				24302	24744	21340	18451	28876	31131
Khulna Newsprint Mills									
(Newsprint)				30412	38652	26550	28670	45972	48414
(Mechanical printing paper)				3748	5351	4652	9094	4880	6686
North Bengal Paper Mills (paper)				7517	7628	4795	9506	9974	10906
Sylhet Pulp & Paper Mills (pulp)				14023	9131	12128	10822	12190	14054
Total				80002	85506	69465	76543	101892	111191

/a Based on 120 days of crushing.

/b In 1982/83: based on technical feasibility.

/c Nationalized in 1972.

/d Nationalized in 1965. Shut down in 1975; rehabilitated and reopened up 1982/83.

Note: All mills established after 1947 were in the public sector.

Sources: Bangladesh Sugar and Food Industries Corporation, Bangladesh Chemical Industries Corporation and Bangladesh Bureau of Statistics.

Table 8.4
PRODUCTION OF SELECTED INDUSTRIAL PRODUCTS BY PUBLIC SECTOR CORPORATIONS /a
(units as shown)

		---MULTI-YEAR AVERAGES---			---ANNUAL DATA---					
		72/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Jute Textiles	'000 metric tons	310.4	499.6	575.8	590.0	586.8	569.9	600.9	521.4	458.7
Hessian		188.0	167.8	212.7	205.4	197.4	228.2	238.9	208.4	162.5
Sacking		242.8	238.4	277.7	309.6	329.3	241.6	256.8	223.5	224.4
Carpet Backing		51.7	67.7	79.2	71.3	56.3	94.0	96.4	81.3	67
Others		27.9	25.7	6.2	3.7	3.8	6.1	8.8	8.2	4.8
Cotton Textiles										
Cloth	mill. yds	65.6	79.0	75.8	86.0	72.5	65.5	66.2	68.4	64.6
Yarn	mill. lbs	92.5	89.6	98.9	102.0	95.3	99.7	102.0	106.1	94.7
Paper and Board										
Newsprint	'000 tons	30.0	24.9	32.3	30.4	38.6	26.3	28.2	46	48.4
Paper		25.7	27.8	29.7	32.7	31.7	25.7	27.3	38.1	42.1
Rayon Yarn		2.2	1.5	1.4	1.5	0.9	1.6	1.2	1.5	0.8
Hardboard	mill. sq.ft.	12.3	17.0	16.1	19.9	11.1	16.4	14.4	17.2	17.4
Particle Board	'000 tons	3.0	2.0	1.8	1.2	2.5	0.5	2.4	2.3	2.4
Steel Ingots	'000 metric tons	64.3	103.6	101.0	139.3	108.6	47.4	72.2	101.4	95.5
Engineering Products		0.0	0.0	0.0						
Diesel Engines	'000	1.3	1.4	4.4	8.5	1.8	4.7	4.7	7.9	4.5
Pumps		1.1	4.0	17.7	16.1	19.2	25.7	21.2	15.2	6.8
Commercial and Heavy Vehicles		1.3	1.2	1.7	2.4	1.6	0.4	1.9	1	1
Radios		13.8	102.2	164.3	198.0	185.8	112.0	102.8	213.9	162.4
Television sets		0.5	4.9	24.8	26.7	27.8	33.6	50.0	57.0	69.8
Petroleum Products	'000 tons	650.7	947.4	1089.3	1207.7	1135.0	919.0	1004.2	978.3	949.4
Fertilizers										
Urea		191.9	224.7	422.6	336.4	340.0	365.1	716.4	729.8	835
TSP		0.0	44.5	68.6	70.1	57.0	69.8	79.9	56.7	100.8
Ammonium Sulphate		6.6	6.8	10.6	9.1	11.4	12.1	10.8	9.5	10
Glass Sheets	mill. feet	6.7	6.6	10.2	6.7	9.4	13.1	12.8	12.9	7.9
Matches	mill. gross boxes	8.4	7.6	11.0	10.1	11.8	11.8	12.1	13.1	13.6
Food and Allied Product										
Soyabean Oil	'000 tons	5.2	10.7	17.8	15.2	18.1	20.9	16.6	9	8.2
Fish Processing	mill. lbs	3.0	5.8	2.6	2.5	2.5	2.4	1.1	0.9	7.1
Soft Beverages	'000 cases	294.0	297.2	487.4	386.0	401.0	568.0	731.0	995	1345
Cigarettes	million	13627.7	11897.4	14627.0	14906.0	13778.0	15778.0	14843.0	14393	14365
Biscuits and Bread	'000 tons	4.9	4.9	6.9	8.4	9.2	8.7	..	2	3
Sugar		66.8	126.2	151.7	142.9	199.0	174.8	148.8	87.1	82.5
Molasses		35.5	56.8	70.5	66.4	91.3	79.2	69.7	41.5	38.3
Salt	'000 metr. tons	417.7	695.4	308.6	269.0	570.0	241.0	654.6	643.6	...
Cement	'000 metr. tons	45.4	250.5	316.4	344.8	326.2	306.7	268.3	240.2	292.1
Limestone	'000 tons	87.0	53.1	40.0	37.9	43.9	31.6	41.9	39.8	22.1
Sulphuric Acid	'000 tons	6.2	5.9	3.5	3.8	2.1	3.1	4.3	4.4	6
Caustic Soda		3.7	4.9	5.8	5.9	6.0	5.6	6.0	6.7	6.9
Hydrochloric Acid		1.0	1.7	1.7	2.5	1.0	1.2	1.4	1.4	1.6
Chlorine		2.6	3.4	3.9	4.0	4.1	3.8	4.1	4.5	4.6
Natural Gas	mill. cubic feet	9041.3	30250.4	63055.0	49936.0	64781.0	72104.0	83090.0	94580	106652
Electricity	mill. kWh	1139.4	1686.3	3101.8	2661.8	3034.6	3432.9	3966.2	4592	4776

/a Includes private sector production of tea, cigarettes, and matches.

Sources: Ministry of Industry, corporations, Planning Commission, and Bangladesh Bureau of Statistics.

Table 8.5
NATURAL GAS STATISTICS
(million SCF)

	1960	1965	1970	1975	1980	1981	1982	1983	1984	1985	1986
PRODUCTION BY CALENDAR YEAR											
Sylhet	0	3203	3865	4898	7091	7122	7062	5193	3854	2961	(1st half) 2106
Chhatak	281	547	799	1037	2070	1980	1660	1990	1744	314	0
Titas	0	0	8685	15383	32253	37037	45032	53411	60260	48659	24859
Habiganj	0	0	5567	2233	5638	10221	14438	15504	17656	26191	16197
Kailashtila	0	0	0	0	0	0	0	1028	3786	5360	2052
Bakhrabad	0	0	0	0	0	0	0	0	2501	11819	8494
Kamta	0	0	0	0	0	0	0	0	474	5389	2410
Total	281	3750	18916	23551	47052	56360	68192	77127	90275	100693	56118

	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
PRODUCTION BY FISCAL YEAR							
Sylhet		7008	7045	7118	6935	3825	3793
Chhatak		1935	2081	1643	1971	1778	0
Rashidpur		0	0	0	0	0	0
Titas	31580	33408	42643	48472	57823	57367	45429
Kailastila		0	0	0	2898	5008	4265
Habiganj	4975	7417	13410	14717	16761	18126	32734
Bakhrabad		0	0	0	1712	6694	15290
Semutang		0	0	0	0	0	0
Kutubdia /b		0	0	0	0	0	0
Begumganj		0	0	0	0	0	0
Feni		0	0	0	0	0	0
Beanibazar		0	0	0	0	0	0
Kamta		0	0	0	0	5340	5141
Total		45497	49950	64813	72095	84797	106652

	1981/82	1982/83	1983/84	1984/85	1985/86
CONSUMPTION BY SECTOR					
Power	18515	22246	27706	30372	38901
Fertilizers	17610	26111	25193	31830	30888
Industrial	7774	8734	9485	10418	13507
Commercial	1493	1844	2188	2091	2233
Households	3475	4377	5363	5796	6346
Total	48867	63312	69935	80507	90958

MEMORANDUM ITEMS:

Field	Year	Methane of Dis- covery	Methane Content [vol %]	Calorific Value [btu/scf]	Condensate Recovery (bbls/MMCF)	Estimated Reserves [TCF]		
						Low	Likely /a	High
Sylhet	1955	96.26	1052	3.40	0.26	0.29-0.43	0.44	
Chhatak	1959	99.00	1007	trace	0.01	0.04	0.07	
Rashidpur	1960	98.02	1014	0.30	0.49	1.06	2.01	
Titas	1962	96.27	1036	1.50	0.83	2.25	4.35	
Kailastila	1962	95.70	1050	10.00-13.00	0.38	0.60	0.95	
Habiganj	1963	95.70	1020	0.03-0.9	0.72	1.28	3.70	
Bakhrabad	1968	97.80	1022	2.00	1.48	2.78-3.70	7.96	
Semutang	1968	94.30		trace	0.01	0.03	0.06	
Kutubdia /b	1977	96.94	1043	trace		1.00		
Begumganj /c	1980	94.41	1064	0.29	0.062	0.125		
Feni /d	1981	92.25			0.067	0.177		
Beanibazar /e	1982	97.00		20.00		1.10		
Kamta	1982	94.66		0.16	0.013	0.094		
Total /f /g					6.42	10.83-11.8	22.04	

bbls = barrels.
btu = British Thermal Units = 0.252 kilocalories.
scf = (standard) cubic foot.
MMCF = million (standard) cubic feet.
TCF = trillion (standard) cubic feet.

/a Based on probabilities of 1.0 for proved reserves, 0.5 for probable reserves, and 0.25 for possible reserves.
/b Offshore field.
/c Proven for Estimated Reserves (Low and Likely).
/d Probable for Estimated Reserves (Low and Likely).
/e Preliminary estimate for Likely Estimated Reserves.
/f Total for Low Estimated Reserves includes likely reserves for Kutubdia and Beanibazar fields.
/g Total for High Estimated Reserves includes likely reserves for Kutubdia, Begumganj, Feni, Beanibazar and Kamta fields.

Sources: Petrobangla; IBRD.

Table 8.6
PETROLEUM BALANCES, 1975/80-1985/86
(thousand metric tons)

	5-YEAR AVERAGES		ANNUAL DATA					
	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
CHITTAGONG REFINERY OPERATIONS								
Crude oil received	1080.2	1071.0	1263.9	1170.5	924.0	1003.9	990.6	1005.8
Crude oil processed	1070.5	1070.5	1070.5	1070.5	1070.5	1070.5	975.4	971.1
Gross Production	1031.6	1031.6	1031.6	1031.6	1031.6	1031.6	974.7	970.3
Net Production	1018.8	1036.8	1214.0	1138.5	894.8	993.9	942.9	949.5
Liquefied Petroleum Gas (LPG)	0.7	5.7	4.8	4.7	4.4	6.2	8.1	8.8
Distillate Products								
Motor spirits, Naphtha, etc. /a	133.8	135.5	150.1	150.3	115.2	133.6	132.2	138.6
Kerosene, Diesel, etc. /b	421.3	462.3	479.9	458.0	393.0	504.1	473.5	438.2
Furnace or Fuel Oil /c	430.1	329.4	463.5	391.5	283.4	256.1	252.1	268.9
Jute Batching Oil (JBO)	31.4	29.7	37.2	29.6	29.6	27.9	31.0	25.1
Bitumen Plant Feedstock	0.0	73.0	77.3	102.8	68.0	64.8	51.9	68.8
Solvents /d	1.5	1.3	1.1	1.6	1.2	1.2	1.3	1.1
Sales	1019.1	1051.2	1264.2	1024.6	939.2	1047.9	953.9	949.0
Domestic	920.0	905.3	1041.4	844.2	803.4	946.9	864.7	861.9
Exports	99.0	145.8	222.7	180.4	135.8	101.1	89.2	87.1
PETROLEUM PRODUCT IMPORTS AND EXPORTS /e [80/84]								
Imports	381	331	524	583	219	451	620	786
Diesel								
Furnace or Fuel Oil								
Exports	101	160	223	180	125	114	90	80
Naphtha	66	96	116	107	59	101	89	80
Furnace or Fuel Oil	35	56	106	69	50	0	0	0
Bitumen	0	8	0	4	16	13	1	0
PETROLEUM PRODUCT DEMAND								
Liquefied Petroleum Gas (LPG)	0.7	5.4	4.5	5.0	4.3	6.2	6.6	8.9
Distillate Products								
Motor spirits, Naphtha, etc. /a	59.3	51.8	56.6	54.4	44.3	48.3	56.8	61.4
Kerosene, Diesel, etc. /b	738.1	945.5	946.9	1002.7	853.0	913.5	1011.2	1124.3
Furnace or Fuel Oil /c	418.4	361.9	411.3	361.3	292.9	384.5	359.5	382.8
Total Fuels	1216.5	1364.6	1419.2	1423.4	1194.5	1352.5	1434.1	1577.4
Jute Batching Oil (JBO)	31.1	30.8	35.2	32.3	29.1	27.6	29.8	26.0
Lubricants	18.3	13.4	14.5	14.1	12.3	12.7	13.8	20.9
Bitumen	0.0	20.5	19.9	34.7	6.4	14.0	27.8	32.6
Others	0.0	2.2	2.5	1.8	0.7	4.5	1.1	1.5
Total Non-Fuels	49.4	67.0	72.1	83.0	48.5	58.7	72.5	81.0
Total	1266.0	1431.6	1491.3	1506.3	1242.9	1411.3	1506.6	1658.4
REFINERY OPERATIONS MEMORANDUM ITEMS								
Number of days in operation	308	304	320	318	270	315	295	NA
Average production, net, per day (metric)	3.3	3.5	3.8	3.7	3.4	3.2	3.2	NA
Apparent loss rate (%)	4.8	3.1	-13.4	-6.4	16.4	7.2	11.9	NA
Products stocks (end of year) /f	28.9	43.0	16.3	132.9	36.4		29.3	NA

/a Includes High Octane Blending Component.

/b Includes jet fuel.

/c High and low sulfur.

/d Includes mineral turpentine and special boiling point solvents.

/e Payments basis.

/f Includes refinery fuel.

Sources: Eastern Refinery, Ltd., Bangladesh Petroleum Corporation.

Table 8.7
ELECTRICITY PRODUCTION AND CONSUMPTION
[GWH EXCEPT AS NOTED]

	FIVE-YEAR AVERAGES		ANNUAL DATA					
	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Installed capacity [MW]	765.7	970.3	813.2	857.0	919.2	1121.0	1141.0	1141.0
Gross Generation	1892.6	3537.8	2661.8	3036.4	3432.7	3966.2	4592.0	4775.6
Net Generation	1793.1	3384.5	2539.8	2896.1	3294.2	3803.2	4389.3	4557.7
Final consumption	1194.1	2307.1	1594.5	2028.3	2398.6	2709.4	2804.7	3277.4
Billed consumption ['000 Taka]	417.7	2948.8	1635.9	2041.1	3231.7	3719.5	4115.6	5717.5
CONSUMPTION BY SECTOR								
Domestic	183.2	449.4	292.1	339.1	438.6	520.2	657.2	715.8
Commercial	152.2	267.4	329.2	270.8	235.9	251.4	249.9	278.1
Industrial	769.7	1430.7	1021.7	1339.1	1473.7	1712.0	1606.7	1562.5
Agriculture	31.8	42.9	38.0	29.6	37.4	53.4	56.2	51.1
Others	50.5	146.4	58.5	49.7	212.9	140.5	270.6	699.3
Total	1187.4	2372.9	1739.5	2208.3	2398.6	2677.6	2840.6	3306.8
Losses (Utility only)/a	706.0	1191.5	922.3	1008.1	1034.1	1288.6	1704.4	1493.4
as % of gross generation	37.2	33.5	34.6	33.2	30.1	32.5	37.1	31.1

/a Includes station auxiliary use.

Source: Bangladesh Power Development Board.

Table 8.8
 PETROLEUM PRODUCT DEMAND BY SECTOR AND PRODUCT, 1985/86
 ('000 metric tons)

Sector	Motor Gasoline (MS, HOBC)	Kerosene (SKO)	Jet Petrol (JP-1)	Diesel Oil	Fuel Oil	Total	Percent
(i) Agriculture	..	..	..	200	..	200	12.7
(ii) Electricity Power	..	23	..	98	257	378	24.0
(iii) Household	..	362	..	..	..	362	23.0
(iv) Industry	..	..	..	10	119	129	8.2
(v) Transport	61	..	76	356	1	494	31.3
Air	..	..	76	..	..	76	4.8
Rail	..	..	..	46	1	47	3.0
Road	61	..	..	212	..	273	17.3
Water	..	..	..	98	..	98	6.2
(vi) Bunkers (Foreign)	..	..	..	5	7	12	0.8
Total	61	385	76	669	384	1575	100.0

Source: Bangladesh Petroleum Corporation.

Table 8.9
RAILWAY STATISTICS, 1972/75-1984/85

	---MULTI-YEAR AVERAGES---			-----ANNUAL DATA-----				
	72/75	75/80	80/85	1980/81	1981/82	1982/83	1983/84	1984/85
Route length [km] /a	2874	2876	2888	2884	2884	2887	2892	2892
Broad gauge	964	966	976	974	974	974	978	978
Meter gauge	1910	1910	1912	1910	1910	1914	1914	1914
Narrow gauge	0	0	0	0	0	0	0	0
Locomotives, total	503	423	386	410	417	410	386	306
Diesel, total	171	178	276	240	253	302	299	269
Broad gauge	34	34	69	52	64	76	76	75
Meter gauge	138	143	208	188	189	226	223	213
Steam, total /b	331	247	109	170	164	108	87	18
Broad gauge	115	81	32	54	50	22	18	18
Meter gauge	216	165	77	116	114	86	69	0
Freight Wagons	50199	52142	53373	52800	53912	54148	53258	52748
Broad gauge	4221	4450	4182	4149	4302	4292	4086	4080
Meter gauge	11715	12204	12598	12568	12705	12684	12597	12434
Total units	15936	16754	16779	16717	17007	16976	16683	16514
Total 4-wheeler units	18327	18734	19814	19366	19898	20196	19892	19720
Freight Carried ['000 metric tons]	2877	3299	3029	2984	3230	2998	2939	2995
Rice	127	275	243	191	273	249	241	262
Paddy	67	196	130	141	236	94	104	75
Wheat	599	515	658	478	573	860	704	674
Raw jute	353	300	222	215	216	224	228	226
Jute goods	18	28	26	26	30	22	18	30
Sugarcane	141	385	320	360	364	299	365	215
Sugar	63	70	54	31	50	78	55	56
Salt	88	117	94	102	70	65	119	113
Fertilizer	64	297	349	338	367	323	296	419
Cement	89	109	126	155	86	83	175	130
Coal	119	157	57	85	81	49	40	29
Petroleum products /c	119	147	132	184	179	116	99	84
Total ton-km	631105	787758	809314	786655	844488	813876	778635	822917
Fuel Consumption [metric tons]								
Coal		16961	19313	23668	23400	16278	16331	16886
Diesel oil		12810	40982	35356	40395	39503	44656	44998
Furnace oil		24772	22646	49418	37026	18679	5919	2191

/a Total track mileage in 1978/79 was 4503 km.

/b Including 6 narrow gauge steam locomotives.

/c Excluding fuel for the railways and for the military.

Source: Bangladesh Railways; Bangladesh Bureau of Statistics.

Table 8.10
TRANSPORT STATISTICS, 1974/75-1984/85

	(Unit)	1974/75	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85
INLAND WATER TRANSPORT									
BIWTC Fleet									
Total	(No.)	705	633	591	591	586	555	544	533
Self-propelled barges		11	9	6	6	6	6	3	8
Inland & river barges /b		412	313	287	287	255	229	232	246
Inland tugs		33	28	28	29	29	29	27	25
Mainland tugs		18	26	24	23	23	23	21	19
Coasters /c		25	24	23	23	23	25	21	20
Country Boats									
Cargo	(No.)	87	92	92	94	96	98	100	102
Passenger		161	170	171	177	180	183	186	189
ROAD TRANSPORT STATISTICS									
Road Mileage, total /a	(miles)	2695	2927	3002	3536	4095	4618	4969	6495
high	(miles)	2343	2533	2608	2662	2686	2968	3188	3515
low	(miles)	352	394	394	874	1409	1650	1781	2980
Buses operating, private	(No.)	5223	5195	5747	6362	6383	7330	7528	7731
Trucks operating, private	(No.)	9457	11089	11473	11413	13263	14236	14620	15014
Bullock carts (est.)	('000)	87	135	137	138	139	141	142	144

/a Data cover only roads constructed and maintained by the Roads and Highways Department. "High" roads are roads with cement, concrete, bituminous concrete or bituminous surface; "low" roads are roads with stone, gravel, brick, or earth surface, but which are properly aligned and have drainage structures.

/b Including jute boats and flats.

/c Can travel up the main river routes.

Source: Bangladesh Bureau of Statistics.

Table 9.1
CONSUMER PRICE INIDICES, 1980/81-1985/86

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
DHAKA MIDDLE INCOME [1973/74 = 100]						
Food	244.69	288.15	312.77	350.47	387.89	429.46
Fuel & Lighting	293.08	376.71	461.27	466.39	502.64	539.30
Housing	348.64	374.66	402.19	416.81	453.74	506.62
Clothing	176.78	194.87	200.46	224.98	255.15	274.23
Miscellaneous	232.89	264.59	299.09	335.36	392.25	419.38
Overall	254.97	296.50	325.94	357.47	396.58	436.03
Percent increase	12.5	16.3	9.9	9.7	10.9	10.0
DHAKA GOVERNMENT EMPLOYEES [1969/70 = 100]						
Food	603.64	697.43	725.47	824.25	933.53	1024.32
Fuel & Lighting	657.47	817.75	883.19	894.14	1057.34	1210.31
Housing	879.59	933.17	1040.85	1057.00	1113.86	1268.60
Clothing	653.56	724.55	792.56	837.05	925.93	967.90
Miscellaneous	531.46	578.27	634.93	712.58	795.78	817.96
Overall	628.28	708.84	757.96	832.94	931.47	1014.33
Percent increase	12.0	12.8	6.9	9.9	11.8	8.9
CHITTAGONG INDUSTRIAL WORKERS [1969/70 = 100]						
Food	563.12	646.36	679.33	801.25	907.99	980.11
Clothing	574.83	687.01	766.32	929.86	1037.50	1082.19
Housing	783.94	897.52	1023.79	947.63	1066.91	1264.60
Miscellaneous	501.56	533.67	553.73	606.47	695.44	718.19
Overall	578.55	662.25	707.56	807.03	913.98	989.60
Percent increase	7.3	14.5	6.8	14.1	13.3	8.3
KHULNA INDUSTRIAL WORKERS [1969/70 = 100]						
Food	524.81	617.30	640.63	712.87	789.09	878.96
Clothing	535.06	582.48	626.05	736.45	867.51	942.56
Housing	720.40	781.28	734.74	781.90	862.94	1057.42
Miscellaneous	467.51	511.76	526.05	562.34	600.82	689.23
Overall	538.16	617.88	635.88	706.01	784.37	882.33
Percent increase	8.1	14.8	2.9	11.0	11.1	12.5
NARAYANGANJ INDUSTRIAL WORKERS [1969/70 = 100]						
Food	562.41	653.52	681.79	774.72	862.97	930.58
Clothing	653.95	816.38	769.49	809.38	913.53	1035.11
Housing	774.52	932.00	955.46	891.11	1078.96	1257.59
Miscellaneous	515.27	585.85	593.29	604.44	674.08	725.19
Overall	587.29	689.37	707.13	770.96	868.73	950.45
Percent increase	9.0	17.4	2.6	9.0	12.7	9.4
RURAL CONSUMER PRICE INDICES FOR SELECTED DISTRICTS [1973/74 = 100]						
Dhaka	218.0	261.0	282.0	315.0	356.0	369.0
Chittagong	217.0	265.0	286.0	344.0	380.0	391.0
Rajshahi	219.0	267.0	274.0	295.0	340.0	364.0
Khulna	204.0	252.0	260.0	284.0	320.0	333.0
Sylhet	224.0	275.0	290.0	329.0	354.0	375.0
Rangpur	203.0	250.0	276.0	305.0	368.0	381.0
Bangladesh [rural]	214.0	262.0	278.0	312.0	353.0	369.0
MEMORANDUM ITEMS: INDICES WITH 1980/85 AVERAGE = 100						
Dhaka Middle Income	78.1	90.9	99.9	109.6	121.5	133.6
Dhaka Government Employees	81.4	91.8	98.2	107.9	120.7	131.4
Chittagong Industrial Workers	78.8	90.2	96.4	110.0	124.5	134.9
Khulna Industrial Workers	82.0	94.1	96.9	107.5	119.5	134.4
Narayanganj Industrial Workers	82.5	96.8	99.3	108.3	122.0	133.5
Rural Bangladesh	75.4	92.3	97.9	109.9	124.6	129.9

Notes: Dhaka middle income index refers to families with 1973/74 incomes of Tk 300 to Tk 999.
Dhaka government employees index refers to non-gazetted employees with monthly salaries of Tk 100 to Tk 400 in 1969/70.

Source: Bangladesh Bureau of Statistics.

Table 9.2
NATURAL GAS AND PETROLEUM PRODUCT PRICES, 1980-1986

NATURAL GAS TITAS SYSTEM TK/MCF	Effective Dates												
	June 7, 1980	June 7, 1981	July 1, 1982	June 30, 1983	June 27, 1984	June 30, 1985	June 27, 1986						
BULK USERS													
Cost of Gas/MCF (ex-field), including excise duty /a	5.98 4.50	7.53 6.00	9.50 9.00	10.00 9.50	11.45 9.50	13.80 12.80	16.85 15.72						
OTHER USERS													
Cost of Gas/MCF (ex-field), including excise duty /a	6.48 5.00	15.48 14.00	18.00 17.50	22.65 21.65	22.65 21.65	28.77 27.77	40.05 37.15						
END USERS PRICES/MCF INCLUDING EXCISE DUTIES													
Bulk Consumers													
Power Generation	7.75	9.30	10.50	11.50	13.05	15.66	19.09						
Fertilizer Production	7.75	9.30	10.50	11.50	14.05	15.66	19.09						
Industrial Consumers	18.00	27.75	31.00	36.00	36.00	43.20	52.14						
Commercial Consumers	19.00	28.00	31.00	36.00	45.20	54.24	65.39						
Household Consumers													
Metered	18.00	20.00	27.00	34.00	34.00	40.80	44.88						
Unmetered/month													
- Stove (one burner)	22.00	25.00	35.00	45.00	45.00	60.00	66.00						
- Stove (two burners)	40.00	45.00	65.00	80.00	80.00	100.00	110.00						
- Additional burner (each)	14.00	16.00	27.00	34.00	34.00	41.00	45.00						
- Oven (each)	34.00	38.00	58.00	74.00	74.00	89.00	97.00						
- Additional oven (each)	17.00	19.00	29.00	37.00	37.00	45.00	49.00						
- Grill (each)	34.00	38.00	58.00	74.00	74.00	89.00	97.00						
- Additional grill (each)	17.00	19.00	29.00	37.00	37.00	45.00	49.00						
- Water heater up to 20 gal	68.00	76.00	117.00	147.00	147.00	177.00	194.00						
- Water heater above 20 gal	84.00	93.00	146.00	184.00	184.00	221.00	242.00						
- Dryer (each)	101.00	112.00	175.00	220.00	220.00	265.00	291.00						
- Refrigerator (each)	84.00	93.00	117.00	147.00	147.00	177.00	194.00						
- Gas light, garden/external use							45.00						
- Gas light, internal use							23.00						
Minimum Charges/Month													
Domestic (unmetered)	18.00	20.00	27.00	34.00	34.00	41.00	63.00						
Commercial	95.00	140.00	155.00	180.00	180.00	272.00	327.00						
PETROLEUM PRODUCTS /b TAKA/IMPERIAL GALLON													
	July 1980		May 1981		September 1981		July 1982		March 1983		July 1984	June 1986	
	Ex-Ref	Ex-depot	Ex-Ref	Ex-depot	Ex-Ref	Ex-depot	Ex-Ref	Ex-depot	Ex-Ref	Ex-depot	Ex-depot	Ex-Ref	Ex-depot
Premium Gasoline (with BOBC)	42.07	48.66	45.85	52.52	48.14	54.86	62.58	69.30	68.84	75.56	76.15	54.42	61.51
Regular Gasoline (MS)	40.40	46.37	42.16	48.36	44.27	50.52	57.55	63.80	60.43	66.68	67.19	52.32	58.55
Jet Fuel (JP-1)	26.72	28.31	29.43	31.25	30.90	32.75	40.17	42.02	40.17	42.02	42.64	36.14	39.14
Kerosene (SKO)	16.09	17.65	20.73	22.50	21.69	23.63	30.71	32.81	30.71	32.81	32.82	27.91	30.50
Diesel Oil (HSD)	20.23	22.50	20.02	22.50	20.98	23.63	30.00	32.81	30.00	32.81	32.82	27.91	30.50
Fuel Oil (FOHS)	11.81	13.00	15.12	16.68	15.88	17.51	22.71	24.54	22.71	24.54	24.55	19.28	21.37
Liquefied Petroleum Gas (LPG)	50.00	54.36	50.00	54.31	50.00	54.36	50.00	54.36	95.00	105.00	105.00	49.50	113.50

/a Price was raised to Tk 75/cylinder with effect from 12 August 1982.

/b Ex-refinery and ex-depot at Chittagong. In July, 1984 prices were fixed in liters with minor adjustments in ex-depot prices as shown. Ex-refinery prices were not changed.

Source: Titas Gas Company and Bangladesh Petroleum Corporation.

Table 9.3
ELECTICITY TARIFFS
OF THE BANGLADESH POWER DEVELOPMENT BOARD
(September 1985)

Consumer Group	Minimum Charge	Unit Rates /a
Low and Medium Voltage		
Domestic /b	-	- Monthly consumption up to 100 units 100 paisa/KWh - Monthly consumption 101 to 400 units 110 paisa/KWh - Monthly consumption over 400 units 275 paisa/KWh
Irrigation Pumping	Annual Charges: - Tk 250 per HP/year - Tk 1,000 (single phase) - Tk 3,000 (triple phase)	135 paisa/KWh
Industrial (up to 50 KW)		- Without time-of-day meter 190-200 paisa/KWh - With time-of-day meter - Off-peak hours 120 paisa/KWh - Peak hours 390 paisa/KWh
Ceremonial/Temporary Uses	- Tk 200 (single phase) - Tk 1,000 (triple phase)	450 paisa/KWh
Commercial	Tk 45 per KW of Contracted load.	- Monthly consumption up to 100 units 220 paisa/KWh - Monthly consumption over 100 units 295 paisa/KWh
High-Tension, Bulk		
Consumers above 50 KW (other than jute mills) (Industrial)	Tk 3,500 per month	- Without time-of-day meter 195 paisa/KWh - With time-of-day meter - Off-peak hours 190 paisa/KVAH - Peak hours 380 paisa/KVAH
Jute Mills above 50 KW	Tk 3,500 per month	165 paisa/KWh
Extra-High Voltage		
5 MVA or above (other than REB)	Tk 65 per KW per month	- Without time-of-day meter 175 paisa/KVAH - With time-of-day meter - Off-peak hours 165 paisa/KVAH - Peak hours 495 paisa/KVAH
REB/Pallibidyut Samity	Tk 50 per KW per month	95 paisa/KWh
Low and Medium Voltage/High Voltage Bulk Supply for Street Light and Water Pumps	Not applicable	170 paisa/KWh

100 paisa = 1 Taka

/a In addition, Government Electricity Duty of 5 paisa per KWh applies.

/b For hospitals, educational and charitable institutions, and religious establishments, the unit rate is 70 paisa/KWh for monthly consumption up to 1,000 units and 200 paisa/KWh for monthly consumption over 1,000 units, with a minimum charge of Tk 15 for single phase and Tk 90 for triple phase.

Source: Bangladesh Power Development Board.

Table 9.4
WHOLESALE PRICES OF CONSUMER GOODS IN URBAN AREAS, 1980/81-1985/86
(Taka per unit shown)

Items	Traditional Units	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
		-----	-----	-----	-----	-----	-----
Masur	maund	380.15	455.14	400.83	419.42	396.42	585.03
Khesari	maund	251.62	230.90	213.48	301.09	239.45	245.81
Potatoes, local (best quality)	maund	112.28	103.11	79.02	122.99	124.36	142.23
Rohu fish (large cut pieces)	maund			1118.96	1272.78	1435.26	1905.13
Chicken eggs, fresh	100	91.20		109.00	121.69	144.46	177.93
Chillies, dry (superior quality)	maund	1050.78	987.66	512.70	1152.06	1441.36	619.69
Turmeric (Haldi, best quality)	maund	456.30	476.17	554.08	1325.84	1574.16	1441.00
Mustard oil, local (best quality)	maund	1092.02	995.35	1004.69	1394.27	1463.53	1320.57
Ghee (cow)	maund			3026.92	3326.90	4218.38	5107.47
Coconut oil, imported (sup. quality)	maund	1082.56	1117.48	1006.50	1485.57	1884.91	1430.11
Vegetable oil (Pakvan)	35 lbs.	378.06	391.32	452.45	569.02	754.08	697.26
Tobacco leaf (Motihari, sup. quality)	maund	917.15	839.87	783.58	994.86	1111.54	1079.12
Betelnut (Tanti, whole, dry, sup. quality)	maund	1226.49	1200.59	973.45	1230.83	1801.39	2038.51
Betel leaf (medium size)	6400	291.38	395.81	478.49	461.55	544.76	529.69
Firewood, Gazari	100 maunds			3025.56	2908.09	3698.21	5341.73
Kerosene, white	4 gallons			140.25	135.72	136.65	136.13
Cigarettes (Capstan)	250	95.52	108.18	125.72	123.30	128.86	159.99
Matches (box of 40)	gross	28.90	34.36	43.09	38.75	40.80	64.52
Paper, 10 lbs. foolscap	ream	90.11	95.56	109.54	115.40	120.82	117.39
Cycle tyre, imported (Master Service)	dozen	783.89	736.85	1140.61	1473.69	1722.05	2027.50
Cycle tubes (Deshi)	dozen	268.26	262.20	256.93	257.03	345.91	413.78
Longcloth (medium quality)	40 yards			554.56	637.03	731.75	712.07
Metric Units							
Masur	kg	14.19	16.99	14.96	15.66	14.80	15.67
Khesari	kg	9.39	8.62	7.97	11.24	8.94	6.59
Potatoes, local (best quality)	kg	4.19	3.85	2.95	4.59	4.64	3.81
Rohu fish (large cut pieces)	kg	0.00	0.00	41.77	47.51	53.57	51.04
Chicken eggs, fresh	hundred	91.20	0.00	109.00	121.69	144.46	177.93
Chillies, dry (superior quality)	kg	39.22	36.87	19.14	43.00	53.80	16.60
Turmeric (Haldi, best quality)	kg	17.03	17.77	20.68	49.49	58.76	38.61
Mustard oil, local (best quality)	kg	40.76	37.15	37.50	52.04	54.63	35.38
Ghee (cow)	kg	0.00	0.00	112.98	124.18	157.46	136.84
Coconut oil, imported (sup. quality)	kg	40.41	41.71	37.57	55.45	70.36	39.66
Vegetable oil (Pakvan)	kg	23.81	24.65	28.50	35.84	47.50	43.92
Tobacco leaf (Motihari, sup. quality)	kg	33.97	31.35	29.25	37.13	41.49	28.91
Betelnut (Tanti, whole, dry, sup. quality)	kg	45.78	44.81	36.33	45.94	67.24	54.62
Betel leaf (medium size)	thousand	45.53	61.85	74.76	72.12	85.12	82.76
Firewood, Gazari	metric ton	0.00	0.00	1129.32	1085.47	1380.39	1431.10
Kerosene, white	liter	0.00	0.00	7.71	7.46	7.51	7.48
Cigarettes (Capstan)	thousand	382.08	432.72	502.88	493.20	515.44	639.96
Matches (box of 40)	thousand	200.69	238.61	299.24	269.10	283.33	448.10
Paper, 10 lbs. foolscap	thousand	180.22	191.12	219.08	230.80	241.64	234.78
Cycle tyre, imported (Master Service)	each	65.32	61.40	95.05	122.81	143.50	168.96
Cycle tubes (Deshi)	each	22.36	21.85	21.41	21.42	28.83	34.48
Longcloth (medium quality)	meter	0.00	0.00	15.16	17.42	20.01	19.47

Note: All prices shown represent simple averages of weekly average prices during the fiscal year for the urban centers covered.

Source: Bangladesh Bureau of Statistics.

Table 9.5
PUBLIC FOODGRAIN RATION QUOTAS AND ISSUE AND SALES PRICES, 1965-1986
[Tk/maund]
[Maund = 37.326 kg]

Effective Date	Rice		Wheat		Adult Cereal Quotas [seers/week] [seer = 2.057 lbs.]			Rice/ Wheat Ratio
	Wholesale Issue	Retail Sale	Wholesale Issue	Retail Sale	Total	Rice	Wheat	
Nov. 1, 1965 /a	25.40	26.40	17.62	18.80				
Jan. 1, 1970	29.62	30.80	19.62	20.80				
Jan. 11, 1971	29.00	30.00						
Jan. 15, 1973	28.82							
March 19, 1973					3.0	0.8	2.25	0.33
July 1, 1973	38.82	40.00	28.82	30.00				
Sep. 3, 1973	38.00		28.00					
May 27, 1974	58.00	60.00	48.00	50.00				
February 24, 1975					2.5	0.5	2.0	0.25
September 6, 1975					2.5	1.5	1.0	1.50
Dec. 20, 1975	68.00	70.00	53.20	55.00				
Feb. 7, 1976	87.00	90.00	67.00	70.00				
August 31, 1976					3.0	2.0	1.0	2.00
October 16, 1976					4.0	2.5	1.5	1.67
March 5, 1977					3.0	2.0	1.0	2.00
December 3, 1977					3.0	1.5	1.5	1.00
Dec. 31, 1977	97.00	100.00	77.00	80.00				
May 19, 1979	117.00	120.00	87.00	90.00				
May 3, 1980	137.00	140.00	107.00	110.00	3.0	1.0	2.0	0.50
Nov. 13, 1980	136.00	140.00	106.00	110.00				
January 3, 1981					2.5	0.75	1.75	0.43
Apr. 11, 1981 /b	151.20	155.20	112.00	116.00				
Dec. 12, 1981 /c	171.00	175.00	120.00	124.00	2.0	0.50	1.50	0.33
July 3, 1982 /d	191.00	195.00	130.00	134.00				
July 18, 1983 /h					2.0	0.50	1.50	0.33
Jan. 3, 1983 /e	209.00	215.00	139.00	145.00				
Dec. 31, 1984 /f	262.00	268.00	167.00	172.90				
Dec. 1, 1985	269.00	275.00	175.00	181.00				
June 15, 1986	283.00	289.00	186.00	192.00				
Dec. 29, 1986 /g					1.5	0	1.5	

/a For wheat, since April 15, 1961.

/b Since April 11, 1981, ex-godown/ex-mill issue prices payable by ration dealers have been differentiated slightly in accordance with the distance of the dealers' shops from the nearest MOF warehouse or mill, while retail prices have been maintained at a uniform level throughout the statutory rationing areas. As of January 3, 1983, the actual issue prices vary by up to Taka 0.50 per maund for rice, paddy and wheat.

/c For wheat, effective December 12, 1981, the issue price for wheat sold to flour mills and large employers was set at Tk 129 per maund.

/d For wheat, effective July 3, 1982, the issue price for wheat sold to flour mills and large employers was set at Tk 139 per maund.

/e For wheat, effective January 3, 1983, the issue price for wheat sold to flour mills and large employers was set at Tk 150 per maund.

/f For wheat, effective April 1, 1985.

/g Applicable for statutory rationing areas.

/h Effective on July 18, 1983, ration quotas are set in kilograms.

Notes: The wholesale issue price is the ex-godown/ex-mill price charged to ration dealers (and includes the cost of gunnies), while the retail sales price is the price charged to ration card holders buying their permissible quota at ration shops. The difference between wholesale issue price and retail sales price, thus, represents the official margin for the ration shop dealers.

Source: Ministry of Food.

Table 9.6
DAILY WAGES FOR UNSKILLED LABOUR, 1978/79-1985/86
(Tk/day)

	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
AGRICULTURE [WITHOUT FOOD]								
current	10.88	12.46	13.98	15.48	17.05	19.58	24.54	29.53
1973/74 prices	6.48	6.20	6.53	5.90	6.13	6.28	6.95	8.00
Index, 1973/74 = 100	97	93	98	88	92	94	104	120
FISHERY								
current	9.88	15.34	18.34	21.56	21.48	19.80	22.51	25.42
1973/74 prices	5.88	7.63	8.57	8.23	7.73	6.35	6.38	6.89
Index, 1973/74 = 100	0	112	164	157	148	121	122	132
SMALL SCALE RURAL INDUSTRY								
current	9.63	11.94	13.90	15.59	16.38	24.25	28.86	31.45
1973/74 prices	5.73	5.94	6.49	5.95	5.89	7.77	8.18	8.52
Index, 1973/74 = 100	139	118	129	118	117	154	163	170
COTTON TEXTILE WORKERS								
current	11.64	14.77	16.9	17.96	19.88	21.63	24.04	28.68
1973/74 prices	6.25	6.37	6.65	5.95	5.62	5.85	5.01	5.44
Index, 1973/74 = 100	113	115	120	107	102	106	91	99
JUTE TEXTILE WORKERS								
current	10.14	13.36	16.49	17.57	19.35	20.22	20.81	28.29
1973/74 prices	5.45	5.76	6.49	5.82	5.47	5.46	4.34	5.37
Index, 1973/74 = 100	72	76	85	77	72	72	57	71
MATCH INDUSTRY WORKERS								
current	11	12.58	13.8	16.4	18.82	20.12	20.57	22.01
1973/74 prices	5.91	5.42	5.43	5.43	5.43	5.44	4.29	4.18
Index, 1973/74 = 100	92	85	85	85	85	85	67	65
ENGINEERING INDUSTRY WORKERS								
current	11.71	13.33	15.39	18.22	20.33	22.78	26.00	36.43
1973/74 prices	6.3	5.75	6.06	6.03	5.74	6.16	5.42	6.91
Index, 1973/74 = 100	101	92	97	97	92	99	87	111
VEGETABLE OIL INDUSTRY WORKERS								
current	10.13	12.39	13.72	15.4	16.05	16.47	18.14	20.93
1973/74 prices	5.45	5.34	5.4	5.1	4.53	4.45	3.78	3.97
Index, 1973/74 = 100	99	97	98	92	82	81	69	72
CONSTRUCTION WORKERS								
current	14.34	17.21	19.29	21.74	23.3	24.56	26.36	33.32
1973/74 prices	7.7	7.42	7.59	7.2	6.58	6.64	5.49	6.32
Index, 1973/74 = 100	109	105	107	101	93	94	77	89
WAGE INDICES BY SECTOR								
NOMINAL								
General	346.25	432.90	492.09	566.16	598.11	684.53	734.07	895.20
Manufacturing	318.01	389.04	452.27	515.25	558.02	720.57	775.88	957.60
Construction	413.84	491.69	544.60	616.30	677.20	754.59	774.86	937.97
Agriculture	370.63	443.31	482.01	566.88	558.35	572.45	641.64	766.95
Fisheries	311.01	451.43	529.28	617.15	638.93	654.43	702.12	855.85
REAL [1969/70 = 100]								
General	75.74	82.45	86.62	86.35	87.50	89.91	85.79	95.07
Manufacturing	69.56	74.10	79.61	78.56	81.63	94.65	90.67	101.63
Construction	90.46	93.63	95.86	93.98	99.07	99.11	90.55	99.69
Agriculture	78.37	80.80	78.04	81.38	81.68	68.92	76.27	87.79
Fisheries	65.80	82.28	85.69	88.59	93.47	78.79	79.16	85.48

Source: Bangladesh Bureau of Statistics.

Table 9.7
WAGE DIFFERENTIALS, 1978/79-1985/86

	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
UNSKILLED INDUSTRIAL WORKERS : UNSKILLED AGRICULTURAL WORKERS								
Agriculture	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fishing	0.91	1.23	1.31	1.40	1.26	1.10	0.92	0.86
S.S. Industry	0.88	0.96	0.99	1.01	0.96	1.23	1.18	1.07
Cotton Textile	1.09	1.19	1.21	1.16	1.17	1.04	0.90	0.97
Jute Textile	0.99	1.07	1.18	1.14	1.13	1.01	0.86	0.96
Matches	0.93	1.00	0.99	1.06	1.11	1.01	0.84	0.75
Engineering	0.99	1.07	1.10	1.18	1.20	1.09	1.13	1.23
Vegetable Oil	0.91	0.99	0.99	0.99	0.94	0.90	0.75	0.71
Construction	1.26	1.39	1.38	1.41	1.36	1.25	1.07	1.13
SKILLED WORKER : UNSKILLED WORKER								
INDUSTRY								
Cotton textiles	1.28	1.27	1.31	1.35	1.33	1.30	1.31	1.40
Jute textile	1.35	1.27	1.20	1.24	1.29	1.28	1.30	1.36
Matches	1.26	1.22	1.23	1.34	1.43	1.35	1.35	1.39
Engineering	1.81	1.87	1.80	1.83	1.80	1.73	1.68	1.37
Vegetable oils	1.24	1.26	1.26	1.20	1.26	1.28	1.36	1.45
All Industries	1.40	1.38	1.36	1.40				
CONSTRUCTION	1.98	1.94	1.98	1.99	2.04	1.81	1.38	1.90
AGRICULTURE	1.18	1.17	1.17	1.23	1.30	1.38	1.40	1.52
FISHERY	1.34	1.30	1.26	1.28	1.31	1.45	1.64	1.69

Source: Bangladesh Bureau of Statistics.

Table 9.8
AGRICULTURAL WAGE RATES, 1980/81-1985/86
(Tk/day, without food)

Division/District	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Rajshahi	12.23	13.88	14.82	15.70	21.97	26.22
Dinajpur	10.50	11.83	14.00	14.33	22.50	25.00
Rangpur	14.80	15.17	14.33	16.83	24.00	26.25
Bogra	10.00	12.08	15.00	15.00	19.33	25.00
Rajshahi	14.00	15.67	14.92	14.42	19.00	24.83
Pabna	11.83	14.67	15.83	17.92	25.00	30.00
Khulna	13.57	13.93	14.73	18.37	22.47	28.04
Kushtia	11.17	10.92	11.58	18.67	19.17	28.33
Jessore	12.50	12.92	13.58	16.58	19.50	24.16
Khulna	15.00	15.17	15.58	15.58	22.00	30.00
Barisal	15.42	15.83	16.00	19.00	23.75	27.72
Patuakhali	13.75	14.83	16.92	22.00	27.92	30.00
Dhaka	13.80	15.11	16.58	19.27	21.68	27.45
Mymensingh /a	11.87	14.17	14.71	17.38	20.96	28.96
(Mymensingh)	12.50	13.50	15.00	18.75	20.67	33.33
(Kishoreganj)	11.33	14.83	14.42	16.00	21.25	24.58
Tangail	14.50	15.00	15.00	21.33	25.00	27.33
Dhaka	16.25	21.25	23.50	25.75	25.00	29.09
Faridpur	12.58	14.08	15.00	14.50	16.50	22.91
Chittagong	16.43	13.60	22.08	24.98	31.68	36.43
Sylhet	15.00	15.42	20.00	23.92	29.50	30.16
Comilla	15.00	17.08	18.75	25.42	30.08	32.27
Noakhali	16.42	19.42	22.75	24.75	33.33	37.50
Chittagong	18.50	20.25	24.25	21.25	33.83	42.08
Chittagong Hill Tracts	17.25	20.83	24.75	29.58	31.67	40.16
Country Average	14.01	15.38	17.05	19.58	24.45	29.53
REAL WAGE RATES						
(Tk/day, without food, 1973/74 prices)						
Rajshahi	5.83	5.34	5.39	5.25	6.25	7.11
Dinajpur	5.17	4.73	5.07	4.70	6.11	6.78
Rangpur	6.93	6.07	5.19	5.52	6.52	7.11
Bogra	4.57	4.52	5.47	5.08	5.69	6.78
Rajshahi	7.08	5.87	5.44	4.89	5.59	6.73
Pabna	5.40	5.49	5.77	6.07	7.35	8.13
Khulna	6.65	5.62	5.66	6.47	7.02	7.60
Kushtia	5.47	4.81	4.45	6.57	5.99	7.68
Jessore	6.13	5.13	5.22	5.84	6.09	6.55
Khulna	7.35	6.02	5.99	5.49	6.88	8.13
Barisal	7.56	6.28	6.15	6.69	7.42	7.51
Patuakhali	6.74	5.88	6.51	7.75	8.73	8.13
Dhaka	6.46	6.12	6.07	6.37	6.12	7.44
Mymensingh /a	5.73	5.17	5.32	5.95	5.81	7.85
Tangail	6.65	5.75	5.32	6.77	7.02	7.41
Dhaka	7.45	8.14	8.33	8.17	7.02	7.88
Faridpur	6.00	5.40	5.32	4.60	4.63	6.21
Chittagong	7.44	6.81	7.67	7.46	8.70	9.87
Sylhet	6.69	5.61	6.90	7.27	8.33	8.17
Comilla	6.69	6.36	6.46	7.73	8.50	8.75
Noakhali	7.33	6.60	7.84	7.52	9.42	10.16
Chittagong	8.52	7.64	8.48	6.18	8.90	11.40
Chittagong Hill Tracts	7.95	7.85	8.65	8.60	8.33	10.88
Country Average	6.53	5.90	6.13	6.34	6.93	8.00

/a Including Jamalpur.

Note: National, division, and district figures shown are unweighted averages of wage rates in constituent administrative units.

Source: Bangladesh Bureau of Statistics.

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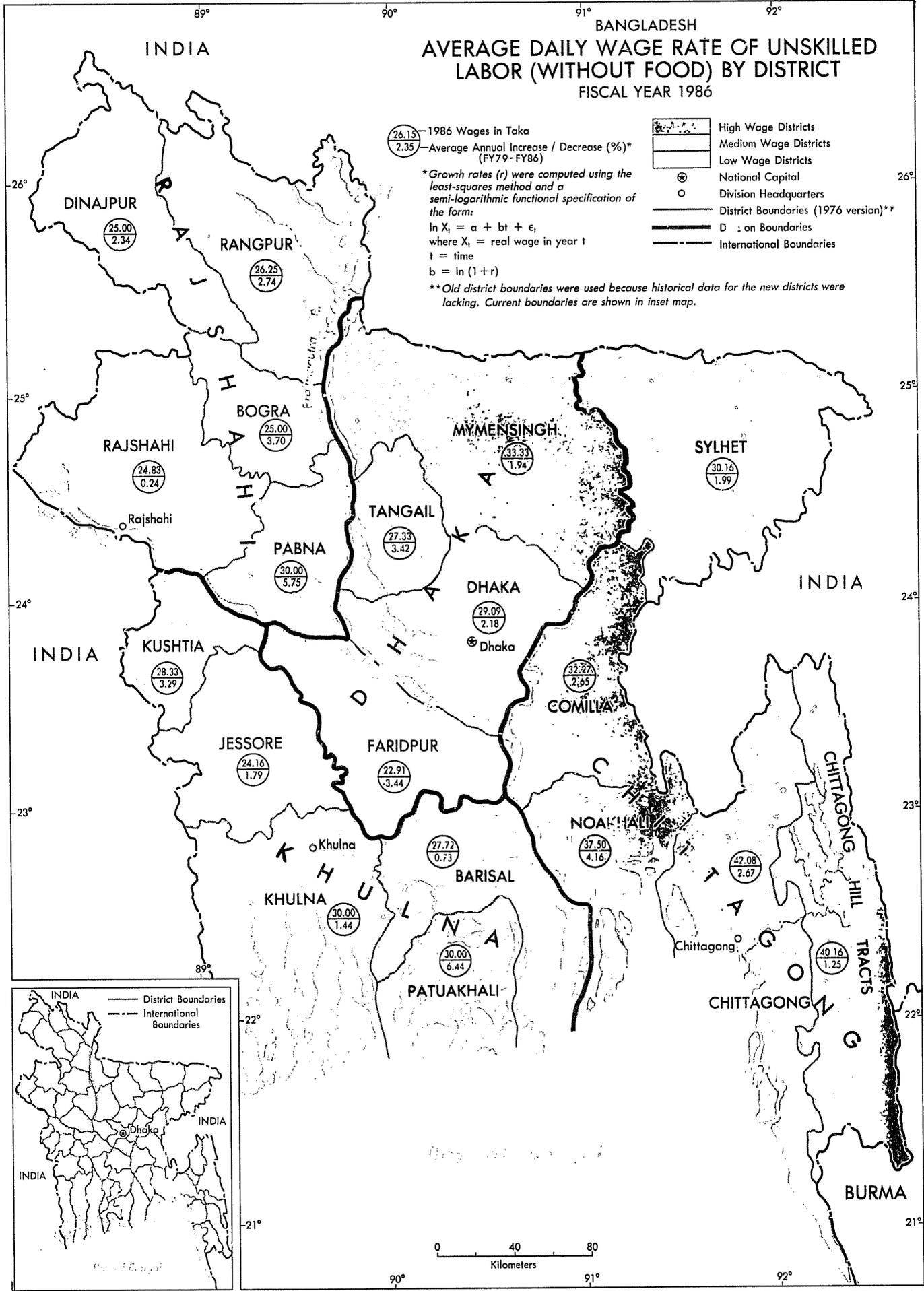
BANGLADESH AVERAGE DAILY WAGE RATE OF UNSKILLED LABOR (WITHOUT FOOD) BY DISTRICT FISCAL YEAR 1986

26.13 — 1986 Wages in Taka
2.35 — Average Annual Increase / Decrease (%)*
 (FY79 - FY86)

*Growth rates (r) were computed using the least-squares method and a semi-logarithmic functional specification of the form:
 $\ln X_t = a + bt + \epsilon_t$
 where X_t = real wage in year t
 t = time
 $b = \ln(1+r)$

**Old district boundaries were used because historical data for the new districts were lacking. Current boundaries are shown in inset map.

- High Wage Districts
- Medium Wage Districts
- Low Wage Districts
- National Capital
- Division Headquarters
- District Boundaries (1976 version)**
- Division Boundaries
- International Boundaries



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